Determination of MSL Decontamination Factors Due to Iodine Deposition

Row	A	B	C	D	E	F	H	I	J	K	M	N	O
2			Unbroken	Broken							Condenser	Condenser	Condenser
3			Inboard A	Inboard B	Inboard C	Inboard D	Outboard A	Outboard B	Outboard C	Outboard D	No Tube Credit	10% Tubes	100% Tubes
4	[1]Total Pipe Surface Area (ft^2)		512	608	608	512	2350	2089	2458	2397	9022.59	44070.19	359496.59
5	[1]Total Pipe Volume (ft^3)		258	306	306	258	1182	1051	1236	1206	54745.5	54745.5	54745.5
6	[1]Horizontal Total Pipe Surface Area (ft^2)		219	315	315	219	2252	1991	2360	2299	N/A	N/A	N/A
7	Horizontal Settling Pipe Surface Area (ft^2)		69.82	100.33	100.33	69.82	716.82	633.73	751.16	731.74	1346.08	18669.86	176584.16
8	[1]Horizontal Pipe Volume (ft^3)		110	159	159	110	1133	1001	1187	1156	54745.5	54745.5	54745.5
9	[2]Aerosol Settling Velocity (m/s)		1.170E-03	1.170E-03	1.170E-03	1.170E-03	1.170E-03	1.170E-03	1.170E-03	1.170E-03	1.170E-03	1.170E-03	1.170E-03
10	Aerosol Settling Velocity (ft/s)		3.839E-03	3.839E-03	3.839E-03	3.839E-03	3.839E-03	3.839E-03	3.839E-03	3.839E-03	3.839E-03	3.839E-03	3.839E-03
11	[5]Elemental Deposition Velocity 0-24hrs (m/sec)		5.574E-06	5.574E-06	5.574E-06	5.574E-06	5.574E-06	5.574E-06	5.574E-06	5.574E-06	2.288E-04	2.288E-04	2.288E-04
12	[5]Elemental Deposition Velocity 24-96hrs (m/sec)		1.248E-05	1.248E-05	1.248E-05	1.248E-05	1.248E-05	1.248E-05	1.248E-05	1.248E-05	2.288E-04	2.288E-04	2.288E-04
13	[5]Elemental Deposition Velocity 96-720hrs (m/sec)		7.945E-05	7.945E-05	7.945E-05	7.945E-05	7.945E-05	7.945E-05	7.945E-05	7.945E-05	2.288E-04	2.288E-04	2.288E-04
14	Elemental Deposition Velocity 0-24hrs (ft/sec)		1.829E-05	1.829E-05	1.829E-05	1.829E-05	1.829E-05	1.829E-05	1.829E-05	1.829E-05	7.507E-04	7.507E-04	7.507E-04
15	Elemental Deposition Velocity 24-96hrs (ft/sec)		4.095E-05	4.095E-05	4.095E-05	4.095E-05	4.095E-05	4.095E-05	4.095E-05	4.095E-05	7.507E-04	7.507E-04	7.507E-04
16	Elemental Deposition Velocity 96-720hrs (ft/sec)		2.607E-04	2.607E-04	2.607E-04	2.607E-04	2.607E-04	2.607E-04	2.607E-04	2.607E-04	7.507E-04	7.507E-04	7.507E-04
17	[5]Organic Deposition Velocity 0-24hrs (m/sec)		6.206E-09	6.206E-09	6.206E-09	6.206E-09	6.206E-09	6.206E-09	6.206E-09	6.206E-09	2.548E-07	2.548E-07	2.548E-07
18	[5]Organic Deposition Velocity 24-96hrs (m/sec)		1.390E-08	1.390E-08	1.390E-08	1.390E-08	1.390E-08	1.390E-08	1.390E-08	1.390E-08	2.548E-07	2.548E-07	2.548E-07
19	[5]Organic Deposition Velocity 96-720hrs (m/sec)		8.849E-08	8.849E-08	8.849E-08	8.849E-08	8.849E-08	8.849E-08	8.849E-08	8.849E-08	2.548E-07	2.548E-07	2.548E-07
20	Organic Deposition Velocity 0-24hrs (ft/sec)		2.037E-08	2.037E-08	2.037E-08	2.037E-08	2.037E-08	2.037E-08	2.037E-08	2.037E-08	8.361E-07	8.361E-07	8.361E-07
21	Organic Deposition Velocity 24-96hrs (ft/sec)		4.561E-08	4.561E-08	4.561E-08	4.561E-08	4.561E-08	4.561E-08	4.561E-08	4.561E-08	8.361E-07	8.361E-07	8.361E-07
22	Organic Deposition Velocity 96-720hrs (ft/sec)		2.903E-07	2.903E-07	2.903E-07	2.903E-07	2.903E-07	2.903E-07	2.903E-07	2.903E-07	8.361E-07	8.361E-07	8.361E-07
23	Uncorrected Flow Rate (scfh)		100	0	0	0	100	100	0	0	200	200	200
24	From Containment Flow Rate 0-2 hrs (cfm)		[illegible]	[illegible]	0.0000	0.0000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
25	From Containment Flow Rate 2-24 hrs (cfm)		0.9306	0.0000	0.0000	0.0000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
26	From Containment Flow Rate 24-720 hrs (cfm)		0.5127	0.0000	0.0000	0.0000	N/A	N/A	N/A	N/A	N/A	N/A	N/A
27	Pipe Flow Rate 0-24 hrs (cfm)		0.9306	0.0000	0.0000	0.0000	3.1881	3.1881	0.0000	0.0000	3.6616	3.6616	3.6616
28	Pipe Flow Rate 24-96 hrs (cfm)		0.5127	0.0000	0.0000	0.0000	1.5132	1.5132	0.0000	0.0000	2.0176	2.0176	2.0176
29	Pipe Flow Rate 96-720 hrs (cfm)		0.5127	0.0000	0.0000	0.0000	1.1479	1.1479	0.0000	0.0000	2.0176	2.0176	2.0176
30	Pipe Flow Rate 0-24 hrs (cfh)		55.834	0.000	0.000	0.000	191.288	191.288	0.000	0.000	219.697	219.697	219.697
31	Pipe Flow Rate 24-96 hrs (cfh)		30.764	0.000	0.000	0.000	90.790	90.790	0.000	0.000	121.053	121.053	121.053
32	Pipe Flow Rate 96-720 hrs (cfh)		30.764	0.000	0.000	0.000	68.875	68.875	0.000	0.000	121.053	121.053	121.053
33													
34	[3]Aerosol Settling Rate Constant (hr^{-1})		8.75E+00	8.75E+00	8.75E+00	8.75E+00	8.75E+00	8.75E+00	8.75E+00	8.75E+00	3.40E-01	4.76E+00	4.46E+01
35	[3]Elemental Deposition Rate Constant 0-24hr (hr^{-1})		1.31E-01	1.31E-01	1.31E-01	1.31E-01	1.31E-01	1.31E-01	1.31E-01	1.31E-01	4.45E-01	2.18E+00	1.77E+01
36	[3]Elemental Deposition Rate Constant 24-96hr (hr^{-1})		2.93E-01	2.93E-01	2.93E-01	2.93E-01	2.93E-01	2.93E-01	2.93E-01	2.93E-01	4.45E-01	2.18E+00	1.77E+01
37	[3]Elemental Deposition Rate Constant 96-720hr (hr^{-1})		1.87E+00	1.87E+00	1.87E+00	1.87E+00	1.87E+00	1.87E+00	1.87E+00	1.87E+00	4.45E-01	2.18E+00	1.77E+01
38	Elemental Deposition Rate 0-24hr (%/day)		314.17%	314.17%	314.17%	314.17%	314.17%	314.17%	314.17%	314.17%	1068.95%	5221.19%	42591.35%
39	Elemental Deposition Rate 24-96hr (%/day)		703.52%	703.52%	703.52%	703.52%	703.52%	703.52%	703.52%	703.52%	1068.95%	5221.19%	42591.35%
40	Elemental Deposition Rate 96-720hr (%/day)		4477.92%	4477.92%	4477.92%	4477.92%	4477.92%	4477.92%	4477.92%	4477.92%	1068.95%	5221.19%	42591.35%
41	[5]Elemental Resuspension Rate Constant 0-24hr (hr^{-1})		1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.48E-05	6.70E-06	6.70E-06	6.70E-06
42	[5]Elemental Resuspension Rate Constant 24-96hr (hr^{-1})		1.25E-05	1.25E-05	1.25E-05	1.25E-05	1.25E-05	1.25E-05	1.25E-05	1.25E-05	6.70E-06	6.70E-06	6.70E-06
43	Elemental Resuspension Rate Constant 96-720hr (hr^{-1})		8.40E-06	8.40E-06	8.40E-06	8.40E-06	8.40E-06	8.40E-06	8.40E-06	8.40E-06	6.70E-06	6.70E-06	6.70E-06
44	Elemental Resuspension Rate 0-24hr (%/day)		0.03558%	0.03558%	0.03558%	0.03558%	0.03558%	0.03558%	0.03558%	0.03558%	0.01609%	0.01609%	0.01609%
45	Elemental Resuspension Rate 24-96hr (%/day)		0.02995%	0.02995%	0.02995%	0.02995%	0.02995%	0.02995%	0.02995%	0.02995%	0.01609%	0.01609%	0.01609%
46	Elemental Resuspension Rate 96-720hr (%/day)		0.02017%	0.02017%	0.02017%	0.02017%	0.02017%	0.02017%	0.02017%	0.02017%	0.01609%	0.01609%	0.01609%
47	Elemental Surface Fixation Rate Constant 0-24hr (hr^{-1})		6.65E-06	6.65E-06	6.65E-06	6.65E-06	6.65E-06	6.65E-06	6.65E-06	6.65E-06	1.39E-06	1.39E-06	1.39E-06
48	lemental Surface Fixation Rate Constant 24-96hr (hr^{-1})		4.73E-06	4.73E-06	4.73E-06	4.73E-06	4.73E-06	4.73E-06	4.73E-06	4.73E-06	1.39E-06	1.39E-06	1.39E-06
49	mental Surface Fixation Rate Constant 96-720hr (hr^{-1})		2.17E-06	2.17E-06	2.17E-06	2.17E-06	2.17E-06	2.17E-06	2.17E-06	2.17E-06	1.39E-06	1.39E-06	1.39E-06
50	Elemental Surface Fixation Rate 0-24hr (%/day)		0.01596%	0.01596%	0.01596%	0.01596%	0.01596%	0.01596%	0.01596%	0.01596%	0.00333%	0.00333%	0.00333%
51	Elemental Surface Fixation Rate 24-96hr (%/day)		0.01136%	0.01136%	0.01136%	0.01136%	0.01136%	0.01136%	0.01136%	0.01136%	0.00333%	0.00333%	0.00333%
52	Elemental Surface Fixation Rate 96-720hr (%/day)		0.00520%	0.00520%	0.00520%	0.00520%	0.00520%	0.00520%	0.00520%	0.00520%	0.00333%	0.00333%	0.00333%
53	[3]Organic Deposition Rate Constant 0-24hr (hr^{-1})		1.46E-04	1.46E-04	1.46E-04	1.46E-04	1.46E-04	1.46E-04	1.46E-04	1.46E-04	4.98E-04	2.42E-03	1.98E-02
54	[3]Organic Deposition Rate Constant 24-96hr (hr^{-1})		3.26E-04	3.26E-04	3.26E-04	3.26E-04	3.26E-04	3.26E-04	3.26E-04	3.26E-04	4.98E-04	2.42E-03	1.98E-02
55	[3]Organic Deposition Rate Constant 96-720hr (hr^{-1})		2.08E-03	2.08E-03	2.08E-03	2.08E-03	2.08E-03	2.08E-03	2.08E-03	2.08E-03	4.98E-04	2.42E-03	1.98E-02
56													
57	[4]Aerosol Filter Efficiency (0-24 hrs)		[illegible]	0.00%	0.00%	0.00%	98.11%	97.86%	0.00%	0.00%	98.83%	99.92%	99.99%
58	[4]Aerosol Filter Efficiency (24-96 hrs)		96.91%	0.00%	0.00%	0.00%	99.09%	98.97%	0.00%	0.00%	99.35%	99.95%	100.00%
59	[4]Aerosol Filter Efficiency (96-720 hrs)		96.91%	0.00%	0.00%	0.00%	99.31%	99.22%	0.00%	0.00%	99.35%	99.95%	100.00%
60	[4]Elemental Filter Efficiency (0-24 hrs)		37.66%	0.00%	0.00%	0.00%	44.72%	41.83%	0.00%	0.00%	99.11%	99.82%	99.98%
61	[4]Elemental Filter Efficiency (24-96 hrs)		71.06%	0.00%	0.00%	0.00%	79.24%	77.23%	0.00%	0.00%	99.51%	99.90%	99.99%
62	[4]Elemental Filter Efficiency (96-720 hrs)		93.99%	0.00%	0.00%	0.00%	96.97%	96.61%	0.00%	0.00%	99.51%	99.90%	99.99%
63	[4]Organic Filter Efficiency (0-24 hrs)		0.07%	0.00%	0.00%	0.00%	0.09%	0.08%	0.00%	0.00%	11.00%	37.65%	83.12%
64	[4]Organic Filter Efficiency (24-96 hrs)		0.27%	0.00%	0.00%	0.00%	0.42%	0.38%	0.00%	0.00%	18.32%	52.29%	89.94%
65	[4]Organic Filter Efficiency (96-720 hrs)		1.71%	0.00%	0.00%	0.00%	3.44%	3.07%	0.00%	0.00%	18.32%	52.29%	89.94%
66	Aerosol DF (0-24 hrs)		18	1	1	1	53	47	1	1	86	1188	11108
67	Aerosol DF (24-96 hrs)		32	1	1	1	110	97	1	1	156	2155	20159
68	Aerosol DF (96-720 hrs)		32	1	1	1	145	128	1	1	155	2155	20159
69	Elemental DF (0-24 hrs)		2	1	1	1	2	2	1	1	112	543	4423
70	Elemental DF (24-96 hrs)		3	1	1	1	5	4	1	1	202	985	8027
71	Elemental DF (96-720 hrs)		17	1	1	1	33	29	1	1	202	985	8027
72	Organic DF (0-24 hrs)		1	1	1	1	1	1	1	1	1	2	6
73	Organic DF (24-96 hrs)		1	1	1	1	1	1	1	1	1	2	10
74	Organic DF (96-720 hrs)		1	1	1	1	1	1	1	1	1	2	10
75													
76	[7]Pipe Wall Temperature, 0-24hr (F)	550.00											
77	Pipe Wall Temperature, 0-24hr (K)	560.93											
78	[7]Pipe Wall Temperature, 24-96hr (F)	410.00											
79	Pipe Wall Temperature, 24-96hr (K)	483.15											
80	[7]Pipe Wall Temperature, 96-720hr (F)	200.00											
81	Pipe Wall Temperature, 96-720hr (K)	366.48											
82	Drywell Peak Temperature (F)	278.00											
83	[8]Condenser Temperature, constant (F)	120.00											
84	Condenser Temperature, constant (K)	322.04											
85	Standard Temperature, constant (F)	68											
86	[9]MSIV Test Pressure, constant (psig)	22											
87	[10]Standard Test Pressure, constant (psig)	44											
88	Atmospheric Pressure, constant (psia)	14.7											
89	Leak Rate Reduction Factor at 24 hours	0.551											
90	Drywell Volume (ft^3)	231,401											
91	Primary Containment Volume (ft^3)	379,071											

MSIV Leakage Pathway Combined Elemental Removal Efficiency

Row	Line A	Line B
60	99.6923%	99.4805%
61	99.9703%	99.8875%
62	99.9991%	99.9832%
63	11.1413%	11.0726%
64	18.8911%	18.6311%
65	22.4855%	20.8334%

Combined DF

Row	Line A	Line B
69	325	193
70	3369	889
71	111157	5984
72	1	1
73	1	1
74	1	1

References:

1. Piping Take-offs and Condenser Characterization (Pages B-9 and B -14)
2. USNRC Document AEB-98-03, 12/9/1998, Page A-3, Median Value
3. USNRC Document AEB-98-03, 12/9/1998, Page A-2, Formula 2
4. USNRC Document AEB-98-03, 12/9/1998, Page A-2, Formula 4
5. Cline, J.E. "MSIV Leakage Iodine Transport Analysis", 3/26/1991
6. NUREG/CR-6604, RADTRAD Manual, 4/1998; Supplement 1, 6/1999
7. See Attachment F of this analysis.
8. Typical conservative value for H.P. Condenser Volume.
9. LGS Technical Specification LCO 3.6.1.2.c
10. LGS Technical Specification SR 4.6.6.1.c.2

	A	B	C	D
1				
2			Unbroken	Broken
3			Inboard A	Inboard B
4	Pipe Surface Area (ft²)		='MS Piping Summary'!A65	='MS Piping Summary'!B65
5	Total Pipe Volume (ft³)		='MS Piping Summary'!A66	='MS Piping Summary'!B66
6	Pipe Surface Area (ft²)		='MS Piping Summary'!A55	='MS Piping Summary'!B55
7	Pipe Surface Area (ft²)		=('MS Piping Summary'!A$54/12)*('MS Piping Summary'!$A$2/12)	=('MS Piping Summary'!B$54/12)*('MS Piping Summary'!$A$2/12)
8	otal Pipe Volume (ft³)		='MS Piping Summary'!A56	='MS Piping Summary'!B56
9	Settling Velocity (m/s)		0.00117	0.00117
10	Settling Velocity (ft/s		=C$9/0.3048	=D$9/0.3048
11	elocity 0-24hrs (m/sec		=EXP((2809/$B$78)-12.5)/100	=EXP((2809/$B$78)-12.5)/100
12	locity 24-96hrs (m/sec		=EXP((2809/$B$80)-12.5)/100	=EXP((2809/$B$80)-12.5)/100
13	ocity 96-720hrs (m/sec		=EXP((2809/$B$82)-12.5)/100	=EXP((2809/$B$82)-12.5)/100
14	elocity 0-24hrs (ft/sec		=C11/0.3048	=D11/0.3048
15	locity 24-96hrs (ft/sec		=C12/0.3048	=D12/0.3048
16	ocity 96-720hrs (ft/sec		=C13/0.3048	=D13/0.3048
17	elocity 0-24hrs (m/sec		=EXP((2809/$B$78)-19.3)/100	=EXP((2809/$B$78)-19.3)/100
18	locity 24-96hrs (m/sec		=EXP((2809/$B$80)-19.3)/100	=EXP((2809/$B$80)-19.3)/100
19	ocity 96-720hrs (m/sec		=EXP((2809/$B$82)-19.3)/100	=EXP((2809/$B$82)-19.3)/100
20	elocity 0-24hrs (ft/sec		=C17/0.3048	=D17/0.3048
21	locity 24-96hrs (ft/sec		=C18/0.3048	=D18/0.3048
22	ocity 96-720hrs (ft/sec		=C19/0.3048	=D19/0.3048
23	ected Flow Rate (acfh)		100	0
24	low Rate 0-2 hrs (cfm		=(C$23*($B$92/$B$91)*($B$89/($B$87+$B$89))*(($B$83+460)/($B$86+460)))/60	=(D$23*($B$92/$B$91)*($B$89/($B$87+$B$89))*(($B$83+460)/($B$86+460)))/60
25	ow Rate 2-24 hrs (cfm		=(C$23*($B$89/($B$87+$B$89))*(($B$83+460)/($B$86+460)))/60	=(D$23*($B$89/($B$87+$B$89))*(($B$83+460)/($B$86+460)))/60
26	Rate 24-720 hrs (cfm		=C$25*$B$90	=D$25*0.5
27	ow Rate 0-24 hrs (cfm)		=(C$23*($B$89/($B$87+$B$89))*(($B$83+460)/($B$86+460)))/60	=(D$23*($B$89/($B$87+$B$89))*(($B$83+460)/($B$86+460)))/60
28	w Rate 24-96 hrs (cfm)		=C$27*$B$90	=D$27*$B$90
29	Rate 96-720 hrs (cfm)		=C$27*$B$90	=D$27*$B$90
30	ow Rate 0-24 hrs (cfh)		=C$27*60	=D$27*60
31	w Rate 24-96 hrs (cfh)		=C$29*60	=D$29*60
32	r Rate 96-720 hrs (cfh)		=C$29*60	=D$29*60
33				
34	ng Rate Constant (hr⁻¹)		=((C$10*C$7)/C$8)*3600	=((D$10*D$7)/D$8)*3600
35	Constant 0-24hr (hr⁻¹)		=((C14*C$4)/C$5)*3600	=((D14*D$4)/D$5)*3600
36	Constant 24-96hr (hr⁻¹)		=((C15*C$4)/C$5)*3600	=((D15*D$4)/D$5)*3600
37	onstant 96-720hr (hr⁻¹)		=((C16*C$4)/C$5)*3600	=((D16*D$4)/D$5)*3600
38	on Rate 0-24hr (%/day)		=C35*24	=D35*24
39	n Rate 24-96hr (%/day)		=C36*24	=D36*24
40	Rate 96-720hr (%/day)		=C37*24	=D37*24
41	Constant 0-24hr (hr⁻¹)		=((2.32+2)*10^-5)*EXP(-800/$B$78)	=((2.32+2)*10^-5)*EXP(-800/$B$78)
42	Constant 24-96hr (hr⁻¹)		=((2.32+2)*10^-5)*EXP(-800/$B$80)	=((2.32+2)*10^-5)*EXP(-800/$B$80)
43	onstant 96-720hr (hr⁻¹)		=((2.32+2)*10^-5)*EXP(-800/$B$82)	=((2.32+2)*10^-5)*EXP(-800/$B$82)
44	on Rate 0-24hr (%/day)		=C41*24	=D41*24
45	n Rate 24-96hr (%/day)		=C42*24	=D42*24
46	Rate 96-720hr (%/day)		=C43*24	=D43*24
47	Constant 0-24hr (hr⁻¹)		=((1.3-0.75)*10^-4)*EXP(-1185/$B$78)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$78)
48	Constant 24-96hr (hr⁻¹)		=((1.3-0.75)*10^-4)*EXP(-1185/$B$80)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$80)
49	onstant 96-720hr (hr⁻¹)		=((1.3-0.75)*10^-4)*EXP(-1185/$B$82)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$82)
50	on Rate 0-24hr (%/day)		=C47*24	=D47*24
51	n Rate 24-96hr (%/day)		=C48*24	=D48*24
52	Rate 96-720hr (%/day)		=C49*24	=D49*24
53	Constant 0-24hr (hr⁻¹)		=((C20*C$4)/C$5)*3600	=((D20*D$4)/D$5)*3600
54	Constant 24-96hr (hr⁻¹)		=((C21*C$4)/C$5)*3600	=((D21*D$4)/D$5)*3600
55	onstant 96-720hr (hr⁻¹)		=((C22*C$4)/C$5)*3600	=((D22*D$4)/D$5)*3600
56				
57	r Efficiency (0-24 hrs		=IF(C$23=0,0,1-(1/(1+((C$34*C$8)/C$30))))	=IF(D$23=0,0,1-(1/(1+((D$34*D$8)/D$30))))
58	r Efficiency (24-96 hrs		=IF(C$23=0,0,1-(1/(1+((C$34*C$8)/C$31))))	=IF(D$23=0,0,1-(1/(1+((D$34*D$8)/D$31))))
59	Efficiency (96-720 hrs		=IF(C$23=0,0,1-(1/(1+((C$34*C$8)/C$32))))	=IF(D$23=0,0,1-(1/(1+((D$34*D$8)/D$32))))
60	r Efficiency (0-24 hrs		=IF(C$23=0,0,1-(1/(1+((C35*C$5)/C$30))))	=IF(D$23=0,0,1-(1/(1+((D35*D$5)/D$30))))
61	r Efficiency (24-96 hrs		=IF(C$23=0,0,1-(1/(1+((C36*C$5)/C$31))))	=IF(D$23=0,0,1-(1/(1+((D36*D$5)/D$31))))
62	Efficiency (96-720 hrs		=IF(C$23=0,0,1-(1/(1+((C37*C$5)/C$32))))	=IF(D$23=0,0,1-(1/(1+((D37*D$5)/D$32))))
63	r Efficiency (0-24 hrs		=IF(C$23=0,0,1-(1/(1+((C53*C$5)/C$30))))	=IF(D$23=0,0,1-(1/(1+((D53*D$5)/D$30))))
64	r Efficiency (24-96 hrs		=IF(C$23=0,0,1-(1/(1+((C54*C$5)/C$31))))	=IF(D$23=0,0,1-(1/(1+((D54*D$5)/D$31))))
65	Efficiency (96-720 hrs		=IF(C$23=0,0,1-(1/(1+((C55*C$5)/C$32))))	=IF(D$23=0,0,1-(1/(1+((D55*D$5)/D$32))))
66	Aerosol DF (0-24 hrs)		=IF(C$23=0,1,(1+((C$34*C$8)/C$30)))	=IF(D$23=0,1,(1+((D$34*D$8)/D$30)))
67	Aerosol DF (24-96 hrs)		=IF(C$23=0,1,(1+((C$34*C$8)/C$31)))	=IF(D$23=0,1,(1+((D$34*D$8)/D$31)))
68	erosol DF (96-720 hrs)		=IF(C$23=0,1,(1+((C$34*C$8)/C$32)))	=IF(D$23=0,1,(1+((D$34*D$8)/D$32)))
69	lemental DF (0-24 hrs)		=IF(C$23=0,1,(1+((C35*C$5)/C$30)))	=IF(D$23=0,1,(1+((D35*D$5)/D$30)))
70	emental DF (24-96 hrs)		=IF(C$23=0,1,(1+((C36*C$5)/C$31)))	=IF(D$23=0,1,(1+((D36*D$5)/D$31)))
71	mental DF (96-720 hrs)		=IF(C$23=0,1,(1+((C37*C$5)/C$32)))	=IF(D$23=0,1,(1+((D37*D$5)/D$32)))
72	Organic DF (0-24 hrs)		=IF(C$23=0,1,(1+((C53*C$5)/C$30)))	=IF(D$23=0,1,(1+((D53*D$5)/D$30)))
73	Organic DF (24-96 hrs)		=IF(C$23=0,1,(1+((C54*C$5)/C$31)))	=IF(D$23=0,1,(1+((D54*D$5)/D$31)))
74	rganic DF (96-720 hrs)		=IF(C$23=0,1,(1+((C55*C$5)/C$32)))	=IF(D$23=0,1,(1+((D55*D$5)/D$32)))
75				
76				
77	emperature, 0-24hr (F)	550		
78	emperature, 0-24hr (K)	=(B77-32)*(5/9)+273.15		
79	mperature, 24-96hr (F)	410		
80	mperature, 24-96hr (K)	=(B79-32)*(5/9)+273.15		
81	perature, 96-720hr (F)	200		
82	perature, 96-720hr (K)	=(B81-32)*(5/9)+273.15		
83	Peak Temperature (F)	276		
84	perature, constant (F	120		
85	perature, constant (K	=(B84-32)*(5/9)+273.15		
86	perature, constant (F	68		
87	ssure, constant (psig	22		
88	ssure, constant (psig	44		
89	ssure, constant (psia	14.7		
90	ion Factor at 24 hours	0.561		
91	Drywell Volume (ft³)	=0.95*243580		
92	ntainment Volume (ft³)	=147670+$B$91		

	E	F	G
1			Determ
2			
3	Inboard C	Inboard D	
4	='MS Piping Summary'!C65	='MS Piping Summary'!D65	
5	='MS Piping Summary'!C66	='MS Piping Summary'!D66	
6	='MS Piping Summary'!C55	='MS Piping Summary'!D55	
7	=('MS Piping Summary'!C$54/12)*('MS Piping Summary'!$A$2/12)	=('MS Piping Summary'!D$54/12)*('MS Piping Summary'!$A$2/12)	
8	='MS Piping Summary'!C56	='MS Piping Summary'!D56	
9	0.00117	0.00117	
10	=E$9/0.3048	=F$9/0.3048	
11	=EXP((2809/$B$78)-12.5)/100	=EXP((2809/$B$78)-12.5)/100	
12	=EXP((2809/$B$80)-12.5)/100	=EXP((2809/$B$80)-12.5)/100	
13	=EXP((2809/$B$82)-12.5)/100	=EXP((2809/$B$82)-12.5)/100	
14	=E11/0.3048	=F11/0.3048	
15	=E12/0.3048	=F12/0.3048	
16	=E13/0.3048	=F13/0.3048	
17	=EXP((2809/$B$78)-19.3)/100	=EXP((2809/$B$78)-19.3)/100	
18	=EXP((2809/$B$80)-19.3)/100	=EXP((2809/$B$80)-19.3)/100	
19	=EXP((2809/$B$82)-19.3)/100	=EXP((2809/$B$82)-19.3)/100	
20	=E17/0.3048	=F17/0.3048	
21	=E18/0.3048	=F18/0.3048	
22	=E19/0.3048	=F19/0.3048	
23	0	0	
24	=(E$23*($B$92/$B$91)*($B$89/($B$87+$B$89))*((($B$83+460)/($B$86+460)))/60	=(F$23*($B$92/$B$91)*($B$89/($B$87+$B$89))*((($B$83+460)/($B$86+460)))/60	
25	=(E$23*($B$89/($B$87+$B$89))*((($B$83+460)/($B$86+460)))/60	=(F$23*($B$89/($B$87+$B$89))*((($B$83+460)/($B$86+460)))/60	
26	=E$25*$B$90	=F$25*0.5	
27	=(E$23*($B$89/($B$87+$B$89))*((($B$83+460)/($B$86+460)))/60	=(F$23*($B$89/($B$87+$B$89))*((($B$83+460)/($B$86+460)))/60	
28	=E$27*$B$90	=F$27*$B$90	
29	=E$27*$B$90	=F$27*$B$90	
30	=E$27*60	=F$27*60	
31	=E$29*60	=F$29*60	
32	=E$29*60	=F$29*60	
33			
34	=((E$10*E$7)/E$8)*3600	=((F$10*F$7)/F$8)*3600	
35	=((E14*E$4)/E$5)*3600	=((F14*F$4)/F$5)*3600	
36	=((E15*E$4)/E$5)*3600	=((F15*F$4)/F$5)*3600	
37	=((E16*E$4)/E$5)*3600	=((F16*F$4)/F$5)*3600	
38	=E35*24	=F35*24	
39	=E36*24	=F36*24	
40	=E37*24	=F37*24	
41	=((2.32+2)*10^-5)*EXP(-600/$B$78)	=((2.32+2)*10^-5)*EXP(-600/$B$78)	
42	=((2.32+2)*10^-5)*EXP(-600/$B$80)	=((2.32+2)*10^-5)*EXP(-600/$B$80)	
43	=((2.32+2)*10^-5)*EXP(-600/$B$82)	=((2.32+2)*10^-5)*EXP(-600/$B$82)	
44	=E41*24	=F41*24	
45	=E42*24	=F42*24	
46	=E43*24	=F43*24	
47	=((1.3-0.75)*10^-4)*EXP(-1185/$B$78)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$78)	
48	=((1.3-0.75)*10^-4)*EXP(-1185/$B$80)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$80)	
49	=((1.3-0.75)*10^-4)*EXP(-1185/$B$82)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$82)	
50	=E47*24	=F47*24	
51	=E48*24	=F48*24	
52	=E49*24	=F49*24	
53	=((E20*E$4)/E$5)*3600	=((F20*F$4)/F$5)*3600	
54	=((E21*E$4)/E$5)*3600	=((F21*F$4)/F$5)*3600	
55	=((E22*E$4)/E$5)*3600	=((F22*F$4)/F$5)*3600	
56			
57	=IF(E$23=0,0,1-(1/(1+((E$34*E$8)/E30))))	=IF(F$23=0,0,1-(1/(1+((F$34*F$8)/F30))))	
58	=IF(E$23=0,0,1-(1/(1+((E$34*E$8)/E31))))	=IF(F$23=0,0,1-(1/(1+((F$34*F$8)/F31))))	
59	=IF(E$23=0,0,1-(1/(1+((E$34*E$8)/E32))))	=IF(F$23=0,0,1-(1/(1+((F$34*F$8)/F32))))	
60	=IF(E$23=0,0,1-(1/(1+((E35*E$5)/E30))))	=IF(F$23=0,0,1-(1/(1+((F35*F$5)/F30))))	
61	=IF(E$23=0,0,1-(1/(1+((E36*E$5)/E31))))	=IF(F$23=0,0,1-(1/(1+((F36*F$5)/F31))))	
62	=IF(E$23=0,0,1-(1/(1+((E37*E$5)/E32))))	=IF(F$23=0,0,1-(1/(1+((F37*F$5)/F32))))	
63	=IF(E$23=0,0,1-(1/(1+((E53*E$5)/E30))))	=IF(F$23=0,0,1-(1/(1+((F53*F$5)/F30))))	
64	=IF(E$23=0,0,1-(1/(1+((E54*E$5)/E31))))	=IF(F$23=0,0,1-(1/(1+((F54*F$5)/F31))))	
65	=IF(E$23=0,0,1-(1/(1+((E55*E$5)/E32))))	=IF(F$23=0,0,1-(1/(1+((F55*F$5)/F32))))	
66	=IF(E$23=0,1,(1+((E$34*E$8)/E$30)))	=IF(F$23=0,1,(1+((F$34*F$8)/F$30)))	
67	=IF(E$23=0,1,(1+((E$34*E$8)/E$31)))	=IF(F$23=0,1,(1+((F$34*F$8)/F$31)))	
68	=IF(E$23=0,1,(1+((E$34*E$8)/E$32)))	=IF(F$23=0,1,(1+((F$34*F$8)/F$32)))	
69	=IF(E$23=0,1,(1+((E35*E$5)/E30)))	=IF(F$23=0,1,(1+((F35*F$5)/F30)))	
70	=IF(E$23=0,1,(1+((E36*E$5)/E31)))	=IF(F$23=0,1,(1+((F36*F$5)/F31)))	
71	=IF(E$23=0,1,(1+((E37*E$5)/E32)))	=IF(F$23=0,1,(1+((F37*F$5)/F32)))	
72	=IF(E$23=0,1,(1+((E53*E$5)/E30)))	=IF(F$23=0,1,(1+((F53*F$5)/F30)))	
73	=IF(E$23=0,1,(1+((E54*E$5)/E31)))	=IF(F$23=0,1,(1+((F54*F$5)/F31)))	
74	=IF(E$23=0,1,(1+((E55*E$5)/E32)))	=IF(F$23=0,1,(1+((F55*F$5)/F32)))	
75			
76			
77	References:		
78		1. Piping Take-offs and Condenser Characterization (Pages B-9 and B -14)	
79		2. USNRC Document AEB-98-03, 12/9/1998, Page A-3, Median Value	
80		3. USNRC Document AEB-98-03, 12/9/1998, Page A-2, Formula 2	
81		4. USNRC Document AEB-98-03, 12/9/1998, Page A-2, Formula 4	
82		5. Cline, J.E. "MSIV Leakage Iodine Transport Analysis", 3/26/1991	
83		6. See Attachment F of this analysis.	
84		7. Cline, J.E. 9/1990, as shown in Design Analysis LM-0646, Rev. 0, Attachment F (this Calc.)	
85		8. Typical conservative value for H.P. Condenser Volume.	
86		9. LGS Technical Specification LCO 3.6.1.2.c	
87		10. LGS Technical Specification SR 4.6.6.1.c.2	
88			
89			
90			
91			
92			

	H	I	J
1	ination of MSL Decontamination Factors Due to Iodine Deposition		
2			
3	Outboard A	Outboard B	Outboard C
4	='MS Piping Summary'!A68	='MS Piping Summary'!B68	='MS Piping Summary'!C68
5	='MS Piping Summary'!A69	='MS Piping Summary'!B69	='MS Piping Summary'!C69
6	='MS Piping Summary'!A58	='MS Piping Summary'!B58	='MS Piping Summary'!C58
7	='MS Piping Summary'!A$57/12)*('MS Piping Summary'!$A$2/12)	='MS Piping Summary'!B$57/12)*('MS Piping Summary'!$A$2/12)	='MS Piping Summary'!C$57/12)*('MS Piping Summary'!$A$2/12)
8	='MS Piping Summary'!A59	='MS Piping Summary'!B59	='MS Piping Summary'!C59
9	0.00117	0.00117	0.00117
10	=H$9/0.3048	=I$9/0.3048	=J$9/0.3048
11	=EXP((2809/$B$78)-12.5)/100	=EXP((2809/$B$78)-12.5)/100	=EXP((2809/$B$78)-12.5)/100
12	=EXP((2809/$B$80)-12.5)/100	=EXP((2809/$B$80)-12.5)/100	=EXP((2809/$B$80)-12.5)/100
13	=EXP((2809/$B$82)-12.5)/100	=EXP((2809/$B$82)-12.5)/100	=EXP((2809/$B$82)-12.5)/100
14	=H11/0.3048	=I11/0.3048	=J11/0.3048
15	=H12/0.3048	=I12/0.3048	=J12/0.3048
16	=H13/0.3048	=I13/0.3048	=J13/0.3048
17	=EXP((2809/$B$78)-19.3)/100	=EXP((2809/$B$78)-19.3)/100	=EXP((2809/$B$78)-19.3)/100
18	=EXP((2809/$B$80)-19.3)/100	=EXP((2809/$B$80)-19.3)/100	=EXP((2809/$B$80)-19.3)/100
19	=EXP((2809/$B$82)-19.3)/100	=EXP((2809/$B$82)-19.3)/100	=EXP((2809/$B$82)-19.3)/100
20	=H17/0.3048	=I17/0.3048	=J17/0.3048
21	=H18/0.3048	=I18/0.3048	=J18/0.3048
22	=H19/0.3048	=I19/0.3048	=J19/0.3048
23	100	100	0
24	N/A	N/A	N/A
25	N/A	N/A	N/A
26	N/A	N/A	N/A
27	=(H$23*(($B$77+460)/($B$86+460)))/60	=(I$23*(($B$77+460)/($B$86+460)))/60	=(J$23*(($B$77+460)/($B$86+460)))/60
28	=((H$23*(($B$79+460)/($B$86+460)))/60)*$B$90	=((I$23*(($B$79+460)/($B$86+460)))/60)*$B$90	=((J$23*(($B$79+460)/($B$86+460)))/60)*$B$90
29	=((H$23*(($B$81+460)/($B$86+460)))/60)*$B$90	=((I$23*(($B$81+460)/($B$86+460)))/60)*$B$90	=((J$23*(($B$81+460)/($B$86+460)))/60)*$B$90
30	=H$27*60	=I$27*60	=J$27*60
31	=H$28*60	=I$28*60	=J$28*60
32	=H$29*60	=I$29*60	=J$29*60
33			
34	=((H$10*H$7)/H$8)*3600	=((I$10*I$7)/I$8)*3600	=((J$10*J$7)/J$8)*3600
35	=((H14*H$4)/H$5)*3600	=((I14*I$4)/I$5)*3600	=((J14*J$4)/J$5)*3600
36	=((H15*H$4)/H$5)*3600	=((I15*I$4)/I$5)*3600	=((J15*J$4)/J$5)*3600
37	=((H16*H$4)/H$5)*3600	=((I16*I$4)/I$5)*3600	=((J16*J$4)/J$5)*3600
38	=H35*24	=I35*24	=J35*24
39	=H36*24	=I36*24	=J36*24
40	=H37*24	=I37*24	=J37*24
41	=((2.32+2)*10^-5)*EXP(-600/$B$78)	=((2.32+2)*10^-5)*EXP(-600/$B$78)	=((2.32+2)*10^-5)*EXP(-600/$B$78)
42	=((2.32+2)*10^-5)*EXP(-600/$B$80)	=((2.32+2)*10^-5)*EXP(-600/$B$80)	=((2.32+2)*10^-5)*EXP(-600/$B$80)
43	=((2.32+2)*10^-5)*EXP(-600/$B$82)	=((2.32+2)*10^-5)*EXP(-600/$B$82)	=((2.32+2)*10^-5)*EXP(-600/$B$82)
44	=H41*24	=I41*24	=J41*24
45	=H42*24	=I42*24	=J42*24
46	=H43*24	=I43*24	=J43*24
47	=((1.3-0.75)*10^-4)*EXP(-1185/$B$78)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$78)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$78)
48	=((1.3-0.75)*10^-4)*EXP(-1185/$B$80)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$80)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$80)
49	=((1.3-0.75)*10^-4)*EXP(-1185/$B$82)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$82)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$82)
50	=H47*24	=I47*24	=J47*24
51	=H48*24	=I48*24	=J48*24
52	=H49*24	=I49*24	=J49*24
53	=((H20*H$4)/H$5)*3600	=((I20*I$4)/I$5)*3600	=((J20*J$4)/J$5)*3600
54	=((H21*H$4)/H$5)*3600	=((I21*I$4)/I$5)*3600	=((J21*J$4)/J$5)*3600
55	=((H22*H$4)/H$5)*3600	=((I22*I$4)/I$5)*3600	=((J22*J$4)/J$5)*3600
56			
57	=IF(H$23=0,0,1-(1/(1+[(H$34*H$8)/H30))))	=IF(I$23=0,0,1-(1/(1+((I$34*I$8)/I30))))	=IF(J$23=0,0,1-(1/(1+((J$34*J$8)/J30))))
58	=IF(H$23=0,0,1-(1/(1+((H$34*H$8)/H31))))	=IF(I$23=0,0,1-(1/(1+((I$34*I$8)/I31))))	=IF(J$23=0,0,1-(1/(1+((J$34*J$8)/J31))))
59	=IF(H$23=0,0,1-(1/(1+((H$34*H$8)/H32))))	=IF(I$23=0,0,1-(1/(1+((I$34*I$8)/I32))))	=IF(J$23=0,0,1-(1/(1+((J$34*J$8)/J32))))
60	=IF(H$23=0,0,1-(1/(1+((H35*H$5)/H30))))	=IF(I$23=0,0,1-(1/(1+((I35*I$5)/I30))))	=IF(J$23=0,0,1-(1/(1+((J35*J$5)/J30))))
61	=IF(H$23=0,0,1-(1/(1+((H36*H$5)/H31))))	=IF(I$23=0,0,1-(1/(1+((I36*I$5)/I31))))	=IF(J$23=0,0,1-(1/(1+((J36*J$5)/J31))))
62	=IF(H$23=0,0,1-(1/(1+((H37*H$5)/H32))))	=IF(I$23=0,0,1-(1/(1+((I37*I$5)/I32))))	=IF(J$23=0,0,1-(1/(1+((J37*J$5)/J32))))
63	=IF(H$23=0,0,1-(1/(1+((H53*H$5)/H30))))	=IF(I$23=0,0,1-(1/(1+((I53*I$5)/I30))))	=IF(J$23=0,0,1-(1/(1+((J53*J$5)/J30))))
64	=IF(H$23=0,0,1-(1/(1+((H54*H$5)/H31))))	=IF(I$23=0,0,1-(1/(1+((I54*I$5)/I31))))	=IF(J$23=0,0,1-(1/(1+((J54*J$5)/J31))))
65	=IF(H$23=0,0,1-(1/(1+((H55*H$5)/H32))))	=IF(I$23=0,0,1-(1/(1+((I55*I$5)/I32))))	=IF(J$23=0,0,1-(1/(1+((J55*J$5)/J32))))
66	=IF(H$23=0,1,(1+((H$34*H$8)/H$30)))	=IF(I$23=0,1,(1+((I$34*I$8)/I$30)))	=IF(J$23=0,1,(1+((J$34*J$8)/J$30)))
67	=IF(H$23=0,1,(1+((H$34*H$8)/H$31)))	=IF(I$23=0,1,(1+((I$34*I$8)/I$31)))	=IF(J$23=0,1,(1+((J$34*J$8)/J$31)))
68	=IF(H$23=0,1,(1+((H$34*H$8)/H$32)))	=IF(I$23=0,1,(1+((I$34*I$8)/I$32)))	=IF(J$23=0,1,(1+((J$34*J$8)/J$32)))
69	=IF(H$23=0,1,(1+((H35*H$5)/H30)))	=IF(I$23=0,1,(1+((I35*I$5)/I30)))	=IF(J$23=0,1,(1+((J35*J$5)/J30)))
70	=IF(H$23=0,1,(1+((H36*H$5)/H31)))	=IF(I$23=0,1,(1+((I36*I$5)/I31)))	=IF(J$23=0,1,(1+((J36*J$5)/J31)))
71	=IF(H$23=0,1,(1+((H37*H$5)/H32)))	=IF(I$23=0,1,(1+((I37*I$5)/I32)))	=IF(J$23=0,1,(1+((J37*J$5)/J32)))
72	=IF(H$23=0,1,(1+((H53*H$5)/H30)))	=IF(I$23=0,1,(1+((I53*I$5)/I30)))	=IF(J$23=0,1,(1+((J53*J$5)/J30)))
73	=IF(H$23=0,1,(1+((H54*H$5)/H31)))	=IF(I$23=0,1,(1+((I54*I$5)/I31)))	=IF(J$23=0,1,(1+((J54*J$5)/J31)))
74	=IF(H$23=0,1,(1+((H55*H$5)/H32)))	=IF(I$23=0,1,(1+((I55*I$5)/I32)))	=IF(J$23=0,1,(1+((J55*J$5)/J32)))
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	K	L	M	N	O	P
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2			Condenser	Condenser	Condenser	
3	Outboard D		No Tube Credit	10% Tubes	100% Tubes	
4	='MS Piping Summary'!D68		=9022.59	=9022.59+(0.1*350476)	=9022.59+350476	
5	='MS Piping Summary'!D69		54745.5	54745.5	54745.5	
6	='MS Piping Summary'!D56		N/A	N/A	N/A	
7	=('MS Piping Summary'!D$57/12)*('MS Piping Summary'!$A$2/12)		='Condenser Dimensions'!C38	=M7+(0.1*350478)/2	=M7+'Condenser Dimensions'!E47/2	
8	='MS Piping Summary'!D59		54745.5	54745.5	54745.5	
9	0.00117		0.00117	0.00117	0.00117	
10	=K$9/0.3048		=M$9/0.3048	=N$9/0.3048	=O$9/0.3048	
11	=EXP((2809/$B$78)-12.5)/100		=EXP((2809/$B$85)-12.5)/100	=EXP((2809/$B$85)-12.5)/100	=EXP((2809/$B$85)-12.5)/100	
12	=EXP((2809/$B$80)-12.5)/100		=EXP((2809/$B$85)-12.5)/100	=EXP((2809/$B$85)-12.5)/100	=EXP((2809/$B$85)-12.5)/100	
13	=EXP((2809/$B$82)-12.5)/100		=EXP((2809/$B$85)-12.5)/100	=EXP((2809/$B$85)-12.5)/100	=EXP((2809/$B$85)-12.5)/100	
14	=K11/0.3048		=M11/0.3048	=N11/0.3048	=O11/0.3048	
15	=K12/0.3048		=M12/0.3048	=N12/0.3048	=O12/0.3048	
16	=K13/0.3048		=M13/0.3048	=N13/0.3048	=O13/0.3048	
17	=EXP((2809/$B$78)-19.3)/100		=EXP((2809/$B$85)-19.3)/100	=EXP((2809/$B$85)-19.3)/100	=EXP((2809/$B$85)-19.3)/100	
18	=EXP((2809/$B$80)-19.3)/100		=EXP((2809/$B$85)-19.3)/100	=EXP((2809/$B$85)-19.3)/100	=EXP((2809/$B$85)-19.3)/100	
19	=EXP((2809/$B$82)-19.3)/100		=EXP((2809/$B$85)-19.3)/100	=EXP((2809/$B$85)-19.3)/100	=EXP((2809/$B$85)-19.3)/100	
20	=K17/0.3048		=M17/0.3048	=N17/0.3048	=O17/0.3048	
21	=K18/0.3048		=M18/0.3048	=N18/0.3048	=O18/0.3048	
22	=K19/0.3048		=M19/0.3048	=N19/0.3048	=O19/0.3048	
23	0		200	=$H23+$I23+$J23+$K23	=$H23+$I23+$J23+$K23	
24	N/A		N/A	N/A	N/A	
25	N/A		N/A	N/A	N/A	
26	N/A		N/A	N/A	N/A	
27	=(K$23*(($B$77+460)/($B$86+460)))/60		=(M23*(($B$84+460)/($B$86+460)))/60	=(N23*(($B$84+460)/($B$86+460)))/60	=(O23*(($B$84+460)/($B$86+460)))/60	
28	=((K$23*(($B$79+460)/($B$86+460)))/60)*$B$90		=M$27*$B$90	=N$27*$B$90	=O$27*$B$90	
29	=((K$23*(($B$81+460)/($B$86+460)))/60)*$B$90		=M$27*$B$90	=N$27*$B$90	=O$27*$B$90	
30	=K$27*60		=M27*60	=N27*60	=O27*60	
31	=K$28*60		=M28*60	=N28*60	=O28*60	
32	=K$29*60		=M29*60	=N29*60	=O29*60	
33						
34	=((K$10*K$7)/K$8)*3600		=((M$10*M$7)/M$8)*3600	=((N$10*N$7)/N$8)*3600	=((O$10*O$7)/O$8)*3600	
35	=((K14*K$4)/K$5)*3600		=((M14*M$4)/M$5)*3600	=((N14*N$4)/N$5)*3600	=((O14*O$4)/O$5)*3600	
36	=((K15*K$4)/K$5)*3600		=((M15*M$4)/M$5)*3600	=((N15*N$4)/N$5)*3600	=((O15*O$4)/O$5)*3600	
37	=((K16*K$4)/K$5)*3600		=((M16*M$4)/M$5)*3600	=((N16*N$4)/N$5)*3600	=((O16*O$4)/O$5)*3600	
38	=K35*24		=M35*24	=N35*24	=O35*24	
39	=K36*24		=M36*24	=N36*24	=O36*24	
40	=K37*24		=M37*24	=N37*24	=O37*24	
41	=((2.32+2)*10^-5)*EXP(-800/$B$78)		=((2.32+2)*10^-5)*EXP(-800/$B$85)	=((2.32+2)*10^-5)*EXP(-800/$B$85)	=((2.32+2)*10^-5)*EXP(-800/$B$85)	
42	=((2.32+2)*10^-5)*EXP(-800/$B$80)		=((2.32+2)*10^-5)*EXP(-800/$B$85)	=((2.32+2)*10^-5)*EXP(-800/$B$85)	=((2.32+2)*10^-5)*EXP(-800/$B$85)	
43	=((2.32+2)*10^-5)*EXP(-800/$B$82)		=((2.32+2)*10^-5)*EXP(-800/$B$85)	=((2.32+2)*10^-5)*EXP(-800/$B$85)	=((2.32+2)*10^-5)*EXP(-800/$B$85)	
44	=K41*24		=M41*24	=N41*24	=O41*24	
45	=K42*24		=M42*24	=N42*24	=O42*24	
46	=K43*24		=M43*24	=N43*24	=O43*24	
47	=((1.3-0.75)*10^-4)*EXP(-1185/$B$78)		=((1.3-0.75)*10^-4)*EXP(-1185/$B$85)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$85)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$85)	
48	=((1.3-0.75)*10^-4)*EXP(-1185/$B$80)		=((1.3-0.75)*10^-4)*EXP(-1185/$B$85)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$85)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$85)	
49	=((1.3-0.75)*10^-4)*EXP(-1185/$B$82)		=((1.3-0.75)*10^-4)*EXP(-1185/$B$85)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$85)	=((1.3-0.75)*10^-4)*EXP(-1185/$B$85)	
50	=K47*24		=M47*24	=N47*24	=O47*24	
51	=K48*24		=M48*24	=N48*24	=O48*24	
52	=K49*24		=M49*24	=N49*24	=O49*24	
53	=((K20*K$4)/K$5)*3600		=((M20*M$4)/M$5)*3600	=((N20*N$4)/N$5)*3600	=((O20*O$4)/O$5)*3600	
54	=((K21*K$4)/K$5)*3600		=((M21*M$4)/M$5)*3600	=((N21*N$4)/N$5)*3600	=((O21*O$4)/O$5)*3600	
55	=((K22*K$4)/K$5)*3600		=((M22*M$4)/M$5)*3600	=((N22*N$4)/N$5)*3600	=((O22*O$4)/O$5)*3600	
56						
57	=IF(K$23=0,0,1-(1/(1+((K$34*K$8)/K30))))		=IF(M$23=0,0,1-(1/(1+((M$34*M$8)/M30))))	=IF(N$23=0,0,1-(1/(1+((N$34*N$8)/N30))))	=IF(O$23=0,0,1-(1/(1+((O$34*O$8)/O30))))	
58	=IF(K$23=0,0,1-(1/(1+((K$34*K$8)/K31))))		=IF(M$23=0,0,1-(1/(1+((M$34*M$8)/M31))))	=IF(N$23=0,0,1-(1/(1+((N$34*N$8)/N31))))	=IF(O$23=0,0,1-(1/(1+((O$34*O$8)/O31))))	
59	=IF(K$23=0,0,1-(1/(1+((K$34*K$8)/K32))))		=IF(M$23=0,0,1-(1/(1+((M$34*M$8)/M32))))	=IF(N$23=0,0,1-(1/(1+((N$34*N$8)/N32))))	=IF(O$23=0,0,1-(1/(1+((O$34*O$8)/O32))))	
60	=IF(K$23=0,0,1-(1/(1+((K35*K$5)/K30))))		=IF(M$23=0,0,1-(1/(1+((M35*M$5)/M30))))	=IF(N$23=0,0,1-(1/(1+((N35*N$5)/N30))))	=IF(O$23=0,0,1-(1/(1+((O35*O$5)/O30))))	
61	=IF(K$23=0,0,1-(1/(1+((K36*K$5)/K31))))		=IF(M$23=0,0,1-(1/(1+((M36*M$5)/M31))))	=IF(N$23=0,0,1-(1/(1+((N36*N$5)/N31))))	=IF(O$23=0,0,1-(1/(1+((O36*O$5)/O31))))	
62	=IF(K$23=0,0,1-(1/(1+((K37*K$5)/K32))))		=IF(M$23=0,0,1-(1/(1+((M37*M$5)/M32))))	=IF(N$23=0,0,1-(1/(1+((N37*N$5)/N32))))	=IF(O$23=0,0,1-(1/(1+((O37*O$5)/O32))))	
63	=IF(K$23=0,0,1-(1/(1+((K53*K$5)/K30))))		=IF(M$23=0,0,1-(1/(1+((M53*M$5)/M30))))	=IF(N$23=0,0,1-(1/(1+((N53*N$5)/N30))))	=IF(O$23=0,0,1-(1/(1+((O53*O$5)/O30))))	
64	=IF(K$23=0,0,1-(1/(1+((K54*K$5)/K31))))		=IF(M$23=0,0,1-(1/(1+((M54*M$5)/M31))))	=IF(N$23=0,0,1-(1/(1+((N54*N$5)/N31))))	=IF(O$23=0,0,1-(1/(1+((O54*O$5)/O31))))	
65	=IF(K$23=0,0,1-(1/(1+((K55*K$5)/K32))))		=IF(M$23=0,0,1-(1/(1+((M55*M$5)/M32))))	=IF(N$23=0,0,1-(1/(1+((N55*N$5)/N32))))	=IF(O$23=0,0,1-(1/(1+((O55*O$5)/O32))))	
66	=IF(K$23=0,1,(1+((K$34*K$8)/K$30)))		=IF(M$23=0,1,(1+((M$34*M$8)/M$30)))	=IF(N$23=0,1,(1+((N$34*N$8)/N$30)))	=IF(O$23=0,1,(1+((O$34*O$8)/O$30)))	
67	=IF(K$23=0,1,(1+((K$34*K$8)/K$31)))		=IF(M$23=0,1,(1+((M$34*M$8)/M$31)))	=IF(N$23=0,1,(1+((N$34*N$8)/N$31)))	=IF(O$23=0,1,(1+((O$34*O$8)/O$31)))	
68	=IF(K$23=0,1,(1+((K$34*K$8)/K$32)))		=IF(M$23=0,1,(1+((M$34*M$8)/M$32)))	=IF(N$23=0,1,(1+((N$34*N$8)/N$32)))	=IF(O$23=0,1,(1+((O$34*O$8)/O$32)))	
69	=IF(K$23=0,1,(1+((K35*K$5)/K30)))		=IF(M$23=0,1,(1+((M35*M$5)/M30)))	=IF(N$23=0,1,(1+((N35*N$5)/N30)))	=IF(O$23=0,1,(1+((O35*O$5)/O30)))	
70	=IF(K$23=0,1,(1+((K36*K$5)/K31)))		=IF(M$23=0,1,(1+((M36*M$5)/M31)))	=IF(N$23=0,1,(1+((N36*N$5)/N31)))	=IF(O$23=0,1,(1+((O36*O$5)/O31)))	
71	=IF(K$23=0,1,(1+((K37*K$5)/K32)))		=IF(M$23=0,1,(1+((M37*M$5)/M32)))	=IF(N$23=0,1,(1+((N37*N$5)/N32)))	=IF(O$23=0,1,(1+((O37*O$5)/O32)))	
72	=IF(K$23=0,1,(1+((K53*K$5)/K30)))		=IF(M$23=0,1,(1+((M53*M$5)/M30)))	=IF(N$23=0,1,(1+((N53*N$5)/N30)))	=IF(O$23=0,1,(1+((O53*O$5)/O30)))	
73	=IF(K$23=0,1,(1+((K54*K$5)/K31)))		=IF(M$23=0,1,(1+((M54*M$5)/M31)))	=IF(N$23=0,1,(1+((N54*N$5)/N31)))	=IF(O$23=0,1,(1+((O54*O$5)/O31)))	
74	=IF(K$23=0,1,(1+((K55*K$5)/K32)))		=IF(M$23=0,1,(1+((M55*M$5)/M32)))	=IF(N$23=0,1,(1+((N55*N$5)/N32)))	=IF(O$23=0,1,(1+((O55*O$5)/O32)))	
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56	MSIV Leakage Pathway Combined Elemental Removal Efficiency	
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59		
60	=1-(1-C60)*(1-H60)*(1-$M60)	=1-(1-D60)*(1-I60)*(1-$M60)
61	=1-(1-C61)*(1-H61)*(1-$M61)	=1-(1-D61)*(1-I61)*(1-$M61)
62	=1-(1-C62)*(1-H62)*(1-$M62)	=1-(1-D62)*(1-I62)*(1-$M62)
63	=1-(1-C63)*(1-H63)*(1-$M63)	=1-(1-D63)*(1-I63)*(1-$M63)
64	=1-(1-C64)*(1-H64)*(1-$M64)	=1-(1-D64)*(1-I64)*(1-$M64)
65	=1-(1-C65)*(1-H65)*(1-$M65)	=1-(1-D65)*(1-I65)*(1-$M65)
66		
67	Combined DF	
68	Line A	Line B
69	=1/(1-Q60)	=1/(1-R60)
70	=1/(1-Q61)	=1/(1-R61)
71	=1/(1-Q62)	=1/(1-R62)
72	=1/(1-Q63)	=1/(1-R63)
73	=1/(1-Q64)	=1/(1-R64)
74	=1/(1-Q65)	=1/(1-R65)
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LGS Main Steam Piping Removal Efficiency Based on the NRC AEB-98-03 Monte Carlo Settling Velocity Distribution

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
5		Lower	Upper		Settling	Settling		Removal Efficiency			Line A		Removal Efficiency			Line B					Line A	
6	Probability	Probability	Probability		Velocity	Velocity		Line A	Line A	Line A thru	Net Release		Line B	Line B	Line B thru	Net Release					Released Settling Velocity Probability Distribution	Cumulative Probability
7	Group	Bound	Bound		(m/sec)	(ft/sec)		Inboard	Outboard	Condenser	Fraction		Inboard	Outboard	Condenser	Fraction						
8	1	0.00%	0.01%		1.170E-04	3.839E-04		63.34%	83.81%	89.44%	6.27E-07		0.00%	82.07%	89.44%	1.89E-06		99.3733%	98.1063%		0.440%	0.44%
9	2	0.01%	0.30%		1.331E-04	4.366E-04		66.26%	85.49%	90.59%	1.34E-05		0.00%	83.89%	90.59%	4.39E-05		99.5396%	98.4846%		9.372%	9.81%
10	3	0.30%	1.00%		1.661E-04	5.451E-04		71.05%	88.03%	92.32%	1.86E-05		0.00%	86.67%	92.32%	7.17E-05		99.7339%	98.9764%		13.077%	22.89%
11	4	1.00%	3.00%		1.965E-04	6.447E-04		74.37%	89.69%	93.43%	3.47E-05		0.00%	88.49%	93.43%	1.51E-04		99.8264%	99.2438%		24.378%	47.27%
12	5	3.00%	5.00%		2.509E-04	8.231E-04		78.75%	91.74%	94.78%	1.83E-05		0.00%	90.76%	94.78%	9.65E-05		99.9084%	99.5174%		12.868%	60.14%
13	6	5.00%	8.00%		2.967E-04	9.733E-04		81.42%	92.92%	95.55%	1.76E-05		0.00%	92.07%	95.55%	1.06E-04		99.9415%	99.6470%		12.326%	72.46%
14	7	8.00%	10.00%		3.589E-04	1.178E-03		84.13%	94.08%	96.29%	6.97E-06		0.00%	93.35%	96.29%	4.93E-05		99.9652%	99.7536%		4.891%	77.35%
15	8	10.00%	15.00%		3.995E-04	1.311E-03		85.51%	94.65%	96.66%	1.30E-05		0.00%	93.99%	96.66%	1.01E-04		99.9741%	99.7990%		9.105%	86.46%
16	9	15.00%	20.00%		4.971E-04	1.631E-03		88.01%	95.65%	97.30%	7.05E-06		0.00%	95.11%	97.30%	6.61E-05		99.9859%	99.8678%		4.948%	91.40%
17	10	20.00%	25.00%		6.015E-04	1.973E-03		89.88%	96.38%	97.75%	4.11E-06		0.00%	95.92%	97.75%	4.58E-05		99.9918%	99.9085%		2.887%	94.29%
18	11	25.00%	30.00%		7.104E-04	2.331E-03		91.30%	96.92%	98.09%	2.56E-06		0.00%	96.53%	98.09%	3.31E-05		99.9949%	99.9337%		1.796%	96.09%
19	12	30.00%	35.00%		8.229E-04	2.700E-03		92.40%	97.33%	98.35%	1.68E-06		0.00%	96.99%	98.35%	2.49E-05		99.9966%	99.9503%		1.178%	97.27%
20	13	35.00%	40.00%		9.510E-04	3.120E-03		93.35%	97.68%	98.57%	1.10E-06		0.00%	97.38%	98.57%	1.87E-05		99.9978%	99.9625%		0.775%	98.04%
21	14	40.00%	45.00%		1.093E-03	3.585E-03		94.17%	97.97%	98.75%	7.38E-07		0.00%	97.71%	98.75%	1.43E-05		99.9985%	99.9715%		0.518%	98.56%
22	15	45.00%	50.00%		1.235E-03	4.053E-03		94.80%	98.20%	98.89%	5.16E-07		0.00%	97.97%	98.89%	1.12E-05		99.9990%	99.9776%		0.362%	98.92%
23	16	50.00%	60.00%		1.383E-03	4.538E-03		95.33%	98.39%	99.01%	7.42E-07		0.00%	98.19%	99.01%	1.79E-05		99.9993%	99.9821%		0.521%	99.44%
24	17	60.00%	70.00%		1.689E-03	5.542E-03		96.15%	98.68%	99.19%	4.13E-07		0.00%	98.51%	99.19%	1.21E-05		99.9996%	99.9879%		0.290%	99.73%
25	18	70.00%	80.00%		2.099E-03	6.887E-03		96.88%	98.94%	99.35%	2.18E-07		0.00%	98.80%	99.35%	7.87E-06		99.9998%	99.9921%		0.153%	99.89%
26	19	80.00%	90.00%		2.606E-03	8.549E-03		97.47%	99.14%	99.47%	1.15E-07		0.00%	99.03%	99.47%	5.12E-06		99.9999%	99.9949%		0.081%	99.97%
27	20	90.00%	100.00%		3.478E-03	1.141E-02		98.09%	99.35%	99.60%	4.88E-08		0.00%	99.27%	99.60%	2.89E-06		100.0000%	99.9971%		0.034%	100.00%
28									TOTAL		1.42E-04			TOTAL		8.81E-04					1.00E+00	
29																						
30								Line A Effective Removal Efficiency			99.986%		e B Effective Removal Efficiency			99.912%						

	A	B	C	D	E	F	G	H
1								
2								
3								
4								
5		Lower	Upper		Settling	Settling		
6	ability	robability	robability		Velocity	Velocity		Line A
7	group	Bound	Bound		(m/sec)	(ft/sec)		Inboard
8	1	0	0.0001		0.000117	=E8/0.3048		=1-(1/(1+((((($F8*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
9	2	0.0001	0.003		0.000133081520609853	=E9/0.3048		=1-(1/(1+((((($F9*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
10	3	0.003	0.01		0.000166148245494175	=E10/0.3048		=1-(1/(1+((((($F10*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
11	4	0.01	0.03		0.000196502227772591	=E11/0.3048		=1-(1/(1+((((($F11*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
12	5	0.03	0.05		0.000250891316056278	=E12/0.3048		=1-(1/(1+((((($F12*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
13	6	0.05	0.08		0.000299662738031939	=E13/0.3048		=1-(1/(1+((((($F13*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
14	7	0.08	0.1		0.000358939926944301	=E14/0.3048		=1-(1/(1+((((($F14*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
15	8	0.1	0.15		0.000399477567485597	=E15/0.3048		=1-(1/(1+((((($F15*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
16	9	0.15	0.2		0.000497103736800292	=E16/0.3048		=1-(1/(1+((((($F16*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
17	10	0.2	0.25		0.000601518740129469	=E17/0.3048		=1-(1/(1+((((($F17*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
18	11	0.25	0.3		0.000710385385958295	=E18/0.3048		=1-(1/(1+((((($F18*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
19	12	0.3	0.35		0.000822937226009122	=E19/0.3048		=1-(1/(1+((((($F19*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
20	13	0.35	0.4		0.000950984320404363	=E20/0.3048		=1-(1/(1+((((($F20*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
21	14	0.4	0.45		0.001092712542810 89	=E21/0.3048		=1-(1/(1+((((($F21*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
22	15	0.45	0.5		0.001235276481135 1	=E22/0.3048		=1-(1/(1+((((($F22*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
23	16	0.5	0.6		0.001363066391861 77	=E23/0.3048		=1-(1/(1+((((($F23*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
24	17	0.6	0.7		0.001689083046058 82	=E24/0.3048		=1-(1/(1+((((($F24*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
25	18	0.7	0.8		0.002099254958559 78	=E25/0.3048		=1-(1/(1+((((($F25*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
26	19	0.8	0.9		0.002605768607308 75	=E26/0.3048		=1-(1/(1+((((($F26*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
27	20	0.9	1		0.003478060385254 62	=E27/0.3048		=1-(1/(1+((((($F27*"DF Determination"!$C$7)/"DF Determination"!$C$8)*3600)*"DF Determination"!$C$8)/"DF Determination"!$C$30)))
28								
29								
30								

	I	J	K	L
1	**LGS Main Steam Piping Removal Efficiency Based on the NRC AEB-98-03 Monte Carlo Settling Velocity Distribution**			
2				
3				
4				
5	**Removal Efficiency**		**Line A**	
6	**Line A**	**Line A thru**	**Net Release**	
7	**Outboard**	**Condenser**	**Fraction**	
8	=1-(1/(1+((((($F8*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F8*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C8-$B8)*(1-I8)*(1-J8)	
9	=1-(1/(1+((((($F9*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F9*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C9-$B9)*(1-I9)*(1-J9)	
10	=1-(1/(1+((((($F10*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F10*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C10-$B10)*(1-I10)*(1-J10)	
11	=1-(1/(1+((((($F11*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F11*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C11-$B11)*(1-I11)*(1-J11)	
12	=1-(1/(1+((((($F12*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F12*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C12-$B12)*(1-I12)*(1-J12)	
13	=1-(1/(1+((((($F13*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F13*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C13-$B13)*(1-I13)*(1-J13)	
14	=1-(1/(1+((((($F14*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F14*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C14-$B14)*(1-I14)*(1-J14)	
15	=1-(1/(1+((((($F15*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F15*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C15-$B15)*(1-I15)*(1-J15)	
16	=1-(1/(1+((((($F16*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F16*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C16-$B16)*(1-I16)*(1-J16)	
17	=1-(1/(1+((((($F17*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F17*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C17-$B17)*(1-I17)*(1-J17)	
18	=1-(1/(1+((((($F18*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F18*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C18-$B18)*(1-I18)*(1-J18)	
19	=1-(1/(1+((((($F19*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F19*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C19-$B19)*(1-I19)*(1-J19)	
20	=1-(1/(1+((((($F20*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F20*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C20-$B20)*(1-I20)*(1-J20)	
21	=1-(1/(1+((((($F21*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F21*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C21-$B21)*(1-I21)*(1-J21)	
22	=1-(1/(1+((((($F22*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F22*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C22-$B22)*(1-I22)*(1-J22)	
23	=1-(1/(1+((((($F23*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F23*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C23-$B23)*(1-I23)*(1-J23)	
24	=1-(1/(1+((((($F24*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F24*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C24-$B24)*(1-I24)*(1-J24)	
25	=1-(1/(1+((((($F25*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F25*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C25-$B25)*(1-I25)*(1-J25)	
26	=1-(1/(1+((((($F26*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F26*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C26-$B26)*(1-I26)*(1-J26)	
27	=1-(1/(1+((((($F27*"DF Determination"!$H$7)/"DF Determination"!$H$8)*3600)*"DF Determination"!$H$8)/"DF Determination"!$H$30)))	=1-(1/(1+((((($F27*"DF Determination"!$M$7)/"DF Determination"!$M$8)*3600)*"DF Determination"!$M$8)/"DF Determination"!$M$30)))	=($C27-$B27)*(1-I27)*(1-J27)	
28		**TOTAL**	=SUM(K9:K27)	
29				
30			**Line A Effective Removal Efficiency**	=1-K28

	M	N
1		
2		
3		
4		
5		Removal Efficiency
6	Line B	Line B
7	Inboard	Outboard
8	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F8*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F8*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
9	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F9*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F9*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
10	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F10*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F10*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
11	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F11*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F11*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
12	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F12*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F12*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
13	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F13*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F13*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
14	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F14*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F14*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
15	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F15*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F15*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
16	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F16*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F16*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
17	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F17*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F17*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
18	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F18*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F18*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
19	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F19*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F19*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
20	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F20*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F20*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
21	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F21*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F21*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
22	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F22*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F22*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
23	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F23*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F23*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
24	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F24*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F24*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
25	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F25*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F25*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
26	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F26*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F26*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
27	=IF('DF Determination'!$D$23=0,0,1-(1/(1+((((($F27*'DF Determination'!$D$7)/'DF Determination'!$D$8)*3600)*'DF Determination'!$D$8)/'DF Determination'!$D$30))))	=1-(1/(1+((((($F27*'DF Determination'!$I$7)/'DF Determination'!$I$8)*3600)*'DF Determination'!$I$8)/'DF Determination'!$I$30))))
28		TOTAL
29		
30		Line B Effective Removal Efficiency

	O	P	Q	R	S	T	U	V
1								
2								
3								
4								
5		Line B					Line A	
6	Line B thru	Not Release					Velocity	Cumulative
7	Condenser	Fraction					Probability Distribution	Probability
8	=1-(1/(1+((((($F8*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C8-$B8)*(1-M8)*(1-N8)*(1-O8)		=1-(1-H8)*(1-I8)*(1-J8)	=1-(1-M8)*(1-N8)*(1-O8)		=K8/$K$26	=V7+U8
9	=1-(1/(1+((((($F9*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C9-$B9)*(1-M9)*(1-N9)*(1-O9)		=1-(1-H9)*(1-I9)*(1-J9)	=1-(1-M9)*(1-N9)*(1-O9)		=K9/$K$26	=V8+U9
10	=1-(1/(1+((((($F10*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C10-$B10)*(1-M10)*(1-N10)*(1-O10)		=1-(1-H10)*(1-I10)*(1-J10)	=1-(1-M10)*(1-N10)*(1-O10)		=K10/$K$26	=V9+U10
11	=1-(1/(1+((((($F11*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C11-$B11)*(1-M11)*(1-N11)*(1-O11)		=1-(1-H11)*(1-I11)*(1-J11)	=1-(1-M11)*(1-N11)*(1-O11)		=K11/$K$26	=V10+U11
12	=1-(1/(1+((((($F12*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C12-$B12)*(1-M12)*(1-N12)*(1-O12)		=1-(1-H12)*(1-I12)*(1-J12)	=1-(1-M12)*(1-N12)*(1-O12)		=K12/$K$26	=V11+U12
13	=1-(1/(1+((((($F13*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C13-$B13)*(1-M13)*(1-N13)*(1-O13)		=1-(1-H13)*(1-I13)*(1-J13)	=1-(1-M13)*(1-N13)*(1-O13)		=K13/$K$26	=V12+U13
14	=1-(1/(1+((((($F14*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C14-$B14)*(1-M14)*(1-N14)*(1-O14)		=1-(1-H14)*(1-I14)*(1-J14)	=1-(1-M14)*(1-N14)*(1-O14)		=K14/$K$26	=V13+U14
15	=1-(1/(1+((((($F15*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C15-$B15)*(1-M15)*(1-N15)*(1-O15)		=1-(1-H15)*(1-I15)*(1-J15)	=1-(1-M15)*(1-N15)*(1-O15)		=K15/$K$26	=V14+U15
16	=1-(1/(1+((((($F16*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C16-$B16)*(1-M16)*(1-N16)*(1-O16)		=1-(1-H16)*(1-I16)*(1-J16)	=1-(1-M16)*(1-N16)*(1-O16)		=K16/$K$26	=V15+U16
17	=1-(1/(1+((((($F17*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C17-$B17)*(1-M17)*(1-N17)*(1-O17)		=1-(1-H17)*(1-I17)*(1-J17)	=1-(1-M17)*(1-N17)*(1-O17)		=K17/$K$26	=V16+U17
18	=1-(1/(1+((((($F18*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C18-$B18)*(1-M18)*(1-N18)*(1-O18)		=1-(1-H18)*(1-I18)*(1-J18)	=1-(1-M18)*(1-N18)*(1-O18)		=K18/$K$26	=V17+U18
19	=1-(1/(1+((((($F19*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C19-$B19)*(1-M19)*(1-N19)*(1-O19)		=1-(1-H19)*(1-I19)*(1-J19)	=1-(1-M19)*(1-N19)*(1-O19)		=K19/$K$26	=V18+U19
20	=1-(1/(1+((((($F20*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C20-$B20)*(1-M20)*(1-N20)*(1-O20)		=1-(1-H20)*(1-I20)*(1-J20)	=1-(1-M20)*(1-N20)*(1-O20)		=K20/$K$26	=V19+U20
21	=1-(1/(1+((((($F21*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C21-$B21)*(1-M21)*(1-N21)*(1-O21)		=1-(1-H21)*(1-I21)*(1-J21)	=1-(1-M21)*(1-N21)*(1-O21)		=K21/$K$26	=V20+U21
22	=1-(1/(1+((((($F22*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C22-$B22)*(1-M22)*(1-N22)*(1-O22)		=1-(1-H22)*(1-I22)*(1-J22)	=1-(1-M22)*(1-N22)*(1-O22)		=K22/$K$26	=V21+U22
23	=1-(1/(1+((((($F23*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C23-$B23)*(1-M23)*(1-N23)*(1-O23)		=1-(1-H23)*(1-I23)*(1-J23)	=1-(1-M23)*(1-N23)*(1-O23)		=K23/$K$26	=V22+U23
24	=1-(1/(1+((((($F24*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C24-$B24)*(1-M24)*(1-N24)*(1-O24)		=1-(1-H24)*(1-I24)*(1-J24)	=1-(1-M24)*(1-N24)*(1-O24)		=K24/$K$26	=V23+U24
25	=1-(1/(1+((((($F25*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C25-$B25)*(1-M25)*(1-N25)*(1-O25)		=1-(1-H25)*(1-I25)*(1-J25)	=1-(1-M25)*(1-N25)*(1-O25)		=K25/$K$26	=V24+U25
26	=1-(1/(1+((((($F26*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C26-$B26)*(1-M26)*(1-N26)*(1-O26)		=1-(1-H26)*(1-I26)*(1-J26)	=1-(1-M26)*(1-N26)*(1-O26)		=K26/$K$26	=V25+U26
27	=1-(1/(1+((((($F27*'DF Determination'!$M57)/'DF Determination'!$M58)*3600)*'DF Determination'!$M58)/'DF Determination'!$M530))))	=($C27-$B27)*(1-M27)*(1-N27)*(1-O27)		=1-(1-H27)*(1-I27)*(1-J27)	=1-(1-M27)*(1-N27)*(1-O27)		=K27/$K$26	=V26+U27
28		=SUM(P8:P27)					=SUM(U8:U27)	
29								
30		=1-P28						

LGS Condenser Characterization

High Pressure Condenser

Base Section (Rectangular Volume)

33.96	Height (ft.)
29.00	Length (East - West Direction) (ft.)
46.42	Width (North - South Direction) (ft.)
45710.75	Volume (ft^3)

Flue Section (Trapezoidal Volume)

18.67	Height (vertical) (ft.)
29.00	Length (East - West Direction) (ft.)
23.67	Top Width (North - South Direction) (ft.)
46.42	Bottom Width (North - South Direction) (ft.)
21.86	Slant Length (ft)
18969.22	Volume (ft^3)

Top Section (Rectangular Volume)

6.00	Height (ft.)
29.00	Length (East - West Direction) (ft.)
23.67	Width (North - South Direction) (ft.)
4118.00	Volume (ft^3)
4.33	Water Level (ft.)
1346.08	Condenser Base Area (ft^2)
5833.03	Contained Water Volume (ft^3)
350,696	Condenser Tube Surface Area (ft^2)
1,190,720	Calculated Length of Tubes (ft.)
8,219.44	Volume Displaced by Tubes (ft^3)
1,346.08	Settling Area (floor only)
9022.59	Deposition Area (floor plus Walls)

Shell Volume (ft^3)	88,797.97
Volume Above Hotwell (ft^3)	82,964.94
Free Air Volume (ft3)	54,745.50
Tube Lengths	48
Condenser Tube O.D. (ft.)	0.09375
Total Condenser Tube Surface Area (ft^2)	920,000
Tube Surface Area (ft^2), by shell	350,476
Calculated Total Length of Tubes (ft.)	3,123,681
Calculated Total Volume Displaced by Tubes (ft^3)	21,562.50

Intermediate Pressure Condenser

Base Section (Rectangular Volume)

33.96	Height (ft.)
29.00	Length (East - West Direction) (ft.)
40.42	Width (North - South Direction) (ft.)
39802.00	Volume (ft^3)

Flue Section (Trapezoidal Volume)

18.67	Height (vertical) (ft.)
29.00	Length (East - West Direction) (ft.)
23.67	Top Width (North - South Direction) (ft.)
40.42	Bottom Width (North - South Direction) (ft.)
20.46	Slant Length (ft)
17345.22	Volume (ft^3)

Top Section (Rectangular Volume)

6.00	Height (ft.)
29.00	Length (East - West Direction) (ft.)
23.67	Width (North - South Direction) (ft.)
4118.00	Volume (ft^3)
4.33	Water Level (ft.)
1172.08	Condenser Base Area (ft^2)
5079.03	Contained Water Volume (ft^3)
306,666	Condenser Tube Surface Area (ft^2)
1,041,225	Calculated Length of Tubes (ft.)
7,187.48	Volume Displaced by Tubes (ft^3)
1,172.08	Settling Area (floor only)
8299.89	Deposition Area (floor plus Walls)

Shell Volume (ft^3)	61,265.22
Volume Above Hotwell (ft^3)	56,186.19
Free Air Volume (ft3)	48,998.71
Tube Lengths	42
Tube Surface Area (ft^2), by shell	306,667

Low Pressure Condenser

Base Section (Rectangular Volume)

33.96	Height (ft.)
29.00	Length (East - West Direction) (ft.)
34.42	Width (North - South Direction) (ft.)
33893.25	Volume (ft^3)

Flue Section (Trapezoidal Volume)

18.67	Height (vertical) (ft.)
29.00	Length (East - West Direction) (ft.)
23.67	Top Width (North - South Direction) (ft.)
34.42	Bottom Width (North - South Direction) (ft.)
19.43	Slant Length (ft)
15721.22	Volume (ft^3)

Top Section (Rectangular Volume)

6.00	Height (ft.)
29.00	Length (East - West Direction) (ft.)
23.67	Width (North - South Direction) (ft.)
4118.00	Volume (ft^3)
4.33	Water Level (ft.)
996.08	Condenser Base Area (ft^2)
4325.03	Contained Water Volume (ft^3)
262,638	Condenser Tube Surface Area (ft^2)
891,736	Calculated Length of Tubes (ft.)
6,155.58	Volume Displaced by Tubes (ft^3)
996.08	Settling Area (floor only)
7596.40	Deposition Area (floor plus Walls)

Shell Volume (ft^3)	53,732.47
Volume Above Hotwell (ft^3)	49,407.44
Free Air Volume (ft3)	43,251.86
Tube Lengths	36
Tube Surface Area (ft^2), by shell	262,857

Total Shell Volume (ft3)	183,796
Total Volume Above Hotwell (ft3)	168,559
Total Free Air Volume (ft^3)	146,996

References:

1. LGS Dwg. No. 90-1097-5-100, Rev. F
2. LGS Dwg. No. 90-1097-5-101, Rev. E
3. LGS Dwg. No. 90-1097-5-102, Rev. E
4. LGS Dwg. No. 90-1097-5-112, Rev. K
5. LGS DBD No. L-S-21, Rev. 10, "Condensate & Condenser System"

	A	B	C	D
1				
2				
3		Hig		
4				
5			**Base Section (Rectangular Volume)**	
6				
7			=(24+(9/12))+(9+(2.5/12))	Height (ft.)
8			29	Length (East - Wes
9			=(23+(2.5/12))+(23+(2.5/12))	Width (North - Sout
10			=C7*C8*C9	Volume (ft^3)
11				
12				
13			**Flue Section (Trapazoidal Volume)**	
14				
15			=18+(8/12)	Height (vertical) (ft.
16			=C8	Length (East - Wes
17			=23+(8/12)	Top Width (North -
18			=C9	Bottom Width (Nort
19			=SQRT(C15^2+((C18-C17)/2)^2)	Slant Length (ft)
20			=(C17*C15*C16)+(((C18-C17)/2)*C15*C16)	Volume (ft^3)
21				
22				
23			**Top Section (Rectangular Volume)**	
24				
25			6	Height (ft.)
26			=C8	Length (East - Wes
27			=23+(8/12)	Width (North - Sout
28			=C25*C26*C27	Volume (ft^3)
29				
30			=(208+(2.5/12))-(203+(10.5/12))	Water Level (ft.)
31			=C8*C9	Condenser Base A
32			=C30*C31	Contained Water V
33				
34			350696	Condenser Tube S
35			=C34/($E$45*PI())	Calculated Length
36			=C35*(PI()*($E$45/2)^2)	Volume Displaced
37				
38			=C8*C9	Settling Area (floor
39			=C38+((C7-C30)*2*(C9+C8))+C19*(2*C16)+C15*(C17+C18)+(2*C25*C26+2*C25*C27)	Deposition Area (ft
40				
41			Shell Volume (ft^3)	=C10+C20+C28
42			Volume Above Hotwell (ft^3)	=D41-C32
43			Free Air Volume (ft3)	=D42-C36
44			Tube Lengths	48
45				ner Tube O.D. (ft.)
46				e Surface Area (ft^2)
47				Area (ft^2), by shell
48				ength of Tubes (ft.)
49				ced by Tubes (ft^3)
50				
51				
52				
53				
54				
55				

	E	F	G	H	I	J
1						
2						
3				In		
4						
5					**Base Section (Rectangular Volume)**	
6						
7					=(24+(9/12))+(9+(2.5/12))	Height (ft.)
8					29	Length (East - We
9					=(20+(2.5/12))+(20+(2.5/12))	Width (North - Sou
10					=I7*I8*I9	Volume (ft^3)
11						
12						
13					**Flue Section (Trapezoidal Volume)**	
14						
15					=18+(8/12)	Height (vertical) (f
16					=I8	Length (East - We
17					=23+(8/12)	Top Width (North -
18					=I9	Bottom Width (No
19					=SQRT(I15^2+((I18-I17)/2)^2)	Slant Length (ft)
20					=(I17*I15*I16)+(((I18-I17)/2)*I15*I16)	Volume (ft^3)
21						
22						
23					**Top Section (Rectangular Volume)**	
24						
25					6	Height (ft.)
26					=I8	Length (East - We
27					=23+(8/12)	Width (North - Sou
28					=I25*I26*I27	Volume (ft^3)
29						
30					=(208+(2.5/12))-(203+(10.5/12))	Water Level (ft.)
31					=I8*I9	Condenser Base
32					=I30*I31	Contained Water
33						
34					306666	Condenser Tube
35					=I34/($E$45*PI())	Calculated Length
36					=I35*(PI()*($E$45/2)^2)	Volume Displaced
37						
38					=I8*I9	Settling Area (floo
39					=I38+(((I7-I30)*2*(I9+I8))+I19*(2*I16)+I15*(I17+I18)+(2*I25*I26+2*I25*I27)	Deposition Area (
40						
41					Shell Volume (ft^3)	=I10+I20+I28
42					Volume Above Hotwell (ft^3)	=J41-I32
43					Free Air Volume (ft3)	=J42-I36
44					Tube Lengths	42
45	0.09375					
46	=C34+I34+O34					
47	=D44*$E$46/($D44+$J44+$P44)					Area (ft^2), by shell
48	=E46/(E45*PI())					
49	=E48*(PI()*(E45/2)^2)					
50						
51					Total Shell Volume (ft3)	=D41+J41+F
52					Total Volume Above Hotwell (ft3)	=SUM(D42,J
53					**Total Free Air Volume (ft^3)**	=D42+J42+F
54						
55						

	K	L	M	N	O	P	Q
1							
2							
3				L			
4							
5					**Base Section (Rectangular Volume)**		
6							
7					=(24+(9/12))+(9+(2.5/12))	Height (ft.)	
8					29	Length (East - We	
9					=(17+(2.5/12))+(17+(2.5/12))	Width (North - Sou	
10					=O7*O8*O9	Volume (ft^3)	
11							
12							
13					**Flue Section (Trapezoidal Volume)**		
14							
15					=18+(8/12)	Height (vertical) (ft	
16					=O6	Length (East - We	
17					=23+(8/12)	Top Width (North -	
18					=O9	Bottom Width (Nor	
19					=SQRT(O15^2+((O18-O17)/2)^2)	Slant Length (ft)	
20					=(O17*O15*O16)+(((O18-O17)/2)*O15*O16)	Volume (ft^3)	
21							
22							
23					**Top Section (Rectangular Volume)**		
24							
25					6	Height (ft.)	
26					=O6	Length (East - We	
27					=23+(8/12)	Width (North - Sou	
28					=O25*O26*O27	Volume (ft^3)	
29							
30					=(208+(2.5/12))-(203+(10.5/12))	Water Level (ft.)	
31					=O6*O9	Condenser Base A	
32					=O30*O31	Contained Water V	
33							
34					262638	Condenser Tube S	
35					=O34/($E$45*PI())	Calculated Length	
36					=O35*(PI()*($E$45/2)^2)	Volume Displaced	
37							
38					=O6*O9	Settling Area (floor	
39					=O38+((O7-O30)*2*(O9+O6))+O19*(2*O16)+O15*(O17+O18)+(2*O25*O26+2*O25*O27)	Deposition Area (ft	
40							
41					Shell Volume (ft^3)	=O10+O20+O28	
42					Volume Above Hotwell (ft^3)	=P41-O32	
43					Free Air Volume (ft3)	=P42-O36	
44					Tube Lengths	36	
45							
46							
47	=J44*$E$46/($D44+$J44+$P44)					Area (ft^2), by shell	=P44*$E$46/($D44+$J44+$P44)
48							
49							
50						References:	
51						1.	LGS Dwg. No. 90-1097-5-100, Rev
52						2.	LGS Dwg. No. 90-1097-5-101, Rev
53						3.	LGS Dwg. No. 90-1097-5-102, Rev
54						4.	LGS Dwg. No. 90-1097-5-112, Rev
55						5.	LGS DBD No. L-S-21, Rev. 10, "C Condenser System"

	A	B	C	D	E	F	G	H	I	J	K
1	Main Steam Piping Summary Unit 1										
2	24.14	Main Steam 26 inch pipe ID			LGS Spec. P-300, Rev. 44, "Piping Materials & Instrum. Piping Standards"						
3											
4	TOTAL MS PIPING										
5	A	B	C	D							
6	5435.75	5122.09	5822.59	5524.75	26 inch piping (inches)						
7	2863	2698	3066	2910	26 inch piping inside surface area (sq. ft.)						
8	1440	1357	1542	1463	26 inch piping inside volume (cu. ft.)						
9	2863	2698	3066	2910	Total inside surface area (sq. ft.)						
10	1440	1357	1542	1463	Total inside volume (cu. ft.)						
11											
12											
13	2863	2698	3066	2910	Total inside surface area (sq. ft.)						
14	1440	1357	1542	1463	Total inside volume (cu. ft.)						
15											
16	HORIZONTAL MS PIPING ONLY										
17	A	B	C	D							
18	4692.50	4378.84	5079.34	4781.50	26 inch piping (inches)						
19	2471	2306	2675	2518	26 inch piping inside surface area (sq. ft.)						
20	1243	1160	1345	1266	26 inch piping inside volume (cu. ft.)						
21											
22											
23	2471	2306	2675	2518	Total inside surface area (sq. ft.)						
24	1243	1160	1345	1266	Total inside volume (cu. ft.)						
25											
26											
27											
28											
29											
30	Horizontal Totals										
31											
32	4276.00	3780.34	4480.84	4365.00	26 inch Outboard Piping, length (inches)						
33	2252	1991	2360	2299	Total Outboard Pipe Surface Area Credit (sq. ft.)						
34	1133	1001	1187	1156	Total Outboard Pipe Volume Credit (cu. ft.)						
35											
36	416.50	598.50	598.50	416.50	26 inch Inboard Piping, length (inches)						
37	219	315	315	219	Total Inboard Pipe Surface Area Credit (sq. ft.)						
38	110	159	159	110	Total Inboard Pipe Volume Credit (cu. ft.)						
39											
40											
41	Totals										
42											
43	4462.75	3967.09	4667.59	4551.75	26 inch Outboard Piping, length (inches)						
44	2350	2089	2458	2397	Total Outboard Pipe Surface Area Credit (sq. ft.)						
45	1182	1051	1236	1206	Total Outboard Pipe Volume Credit (cu. ft.)						
46											
47	973.00	1155.00	1155.00	973.00	26 inch Inboard Piping, length (inches)						
48	512	608	608	512	Total Inboard Pipe Surface Area Credit (sq. ft.)						
49	258	306	306	258	Total Inboard Pipe Volume Credit (cu. ft.)						
50											
51											
52	Nodalization (Horizontals)										
53											
54	416.50	598.50	598.50	416.50	Node 1 Length (inches)						
55	219	315	315	219	Node 1 Surface Area (sq. ft.)						
56	110	159	159	110	Node 1 Volume (cu. ft.)						
57	4276.00	3780.34	4480.84	4365.00	Node 2 Length (inches)						
58	2252	1991	2360	2299	Node 2 Surface Area (sq. ft.)						
59	1133	1001	1187	1156	Node 2 Volume (cu. ft.)						
60											
61											
62	Nodalization (Totals)										
63											
64	973.00	1155.00	1155.00	973.00	Node 1 Length (inches)						
65	512	608.28	608	512	Node 1 Surface Area (sq. ft.)						
66	258	305.92	306	258	Node 1 Volume (cu. ft.)						
67	4462.75	3967.09	4667.59	4551.75	Node 2 Length (inches)						
68	2350	2089	2458	2397	Node 2 Surface Area (sq. ft.)						
69	1182	1051	1236	1206	Node 2 Volume (cu. ft.)						

	A	B	C	D	E	F	G	H	I	J
1	**Main Steam Line A**									
2	NOZZLE No	DWG No	PIPE DIA	LENGTH (IN)	COMMENTS					
3	TIE-IN									
4		EBB-103-1	26"							
5				236.000	HORZ PIPE LENGTH OUT OF REACTOR VESSEL					
6				186.750	VERT PIPE LENGTH FROM ELEVATION 274' 8 3/4" TO ELEV 259' 2"					
7				228.000	HORZ PIPE AT ELEV 259' 2" TO ELEV 259' 1"					
8				2423.000	HORZ PIPE AT ELEV 259' 1" TO ELEV 257' 4 1/2"					
9				921.000	HORZ PIPE AT ELEV 257' 41/2" TO ELEV 256' 6"					
10				240.500	HORZ PIPE AT ELEV 256' 6" UP TO STOP VALVE MSV-2					
11			SubTotal	4235.250						
12		M-226	26"							
13		6.5in. per 1mm		227.500	HORZ PIPE LENGTH BETWEEN INBOARD AND OUTBOARD VALVES AT ELEV 274' 9"					
14			SubTotal	227.500						
15										
16		M-215	26"							
17		7in. per 1mm		72.000	HORZ PIPE LENGTH COMING DIRECTLY OUT OF THE REACTOR VESSEL AT ELEV 321' 1 1/2"					
18				556.500	VERT PIPE LENGTH FROM ELEVATION 321' 1 1/2" TO ELEV 274' 9"					
19		M-226	26"							
20		6.5in. per 1mm		279.500	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE					
21				65.000	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE - INBOARD VALVE					
22			SubTotal	973.000						
23						Vertical	Horizontal			
24				TOTAL		Segments	Only			
25				5435.750	Total Inches	743.250	4692.500			
26				452.979	Total Feet	61.938	391.042			
27										
28										
29										
30	SP-EBB-105	2"								
31			46.625	VERT PIPE LENGTH FROM ELEV 274' 9" TO 270' 10"						
32			42.000	HORZ PIPE FROM ELEV 270' 10" TO 270' 9 9/16"						
33		SubTotal	88.625							

	A	B	C	D	E	F	G	H	I	J
1	**Main Steam Line B**									
2	**NOZZLE No**	**DWG No**	**PIPE DIA**	**LENGTH (IN)**	**COMMENTS**					
3	**TIE-IN**									
4		EBB-104-1	26"							
5				236.000	HORZ PIPE LENGTH FROM OUTBOARD VALVE					
6				186.750	VERT PIPE LENGTH FROM ELEVATION 274' 8 3/4" TO ELEV 259' 2"					
7				276.000	HORZ PIPE AT ELEV 259' 2" TO ELEV 259' 1"					
8				2025.000	HORZ PIPE AT ELEV 259' 1" TO ELEV 257' 4 1/2"					
9				795.000	HORZ PIPE AT ELEV 257' 41/2" TO ELEV 256' 6"					
10				192.500	HORZ PIPE AT ELEV 256' 6" UP TO STOP VALVE MSV-2					
11			**SubTotal**	3711.250						
12		M-217	26"							
13		6.25in. Per 1mm		255.840	HORZ PIPE LENGTH BETWEEN INBOARD AND OUTBOARD VALVES AT ELEV 274' 9"					
14			**SubTotal**	255.840						
15										
16		M-215	26"							
17		7in. per 1mm		72.000	HORZ PIPE LENGTH COMING DIRECTLY OUT OF THE REACTOR VESSEL AT ELEV 321' 1 1/2"					
18				556.500	VERT PIPE LENGTH FROM ELEVATION 321' 1 1/2" TO ELEV 274' 9"					
19		M-226	26"							
20		6.5in. per 1mm		136.500	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE - FIRST BEND					
21				325.000	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE - SECOND BEND					
22				65.000	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE - INBOARD VALVE					
23			**SubTotal**	1155.000						
24						Vertical	**Horizontal**			
25				**TOTAL**		Segments	**Only**			
26				5122.090	Total Inches	743.250	**4378.840**			
27				426.841	Total Feet	61.938	**364.903**			
28										
29										
30	EBB-105-E1	2"								
31			19.000	VERT PIPE FROM ELEV 274' 9" TO 272"						
32			9.875	HORZ PIPE AT ELEV 272'						
33			15.000	VERT PIPE FROM ELEV 272' TO 271' 1 1/2"						
34			9.500	HORZ PIPE AT ELEV 271' 1 1/2"						
35			128.000	HORZ PIPE AT ELEV 271' 1"						
36			78.500	HORZ PIPE AT ELEV 270' 11 3/4"						
37			93.000	HORZ PIPE AT ELEV 270' 10"						
38		**SubTotal**	309.000							

	A	B	C	D	E	F	G	H
1		**Main Steam Line C**						
2	**NOZZLE No**	**DWG No**	**PIPE DIA**	**LENGTH (IN)**	**COMMENTS**			
3	**TIE-IN**							
4		EBB-101-1	26"					
5				236.000	HORZ PIPE LENGTH FROM OUTBOARD VALVE AT ELEV 274' 9"			
6				186.750	VERT PIPE LENGTH FROM ELEVATION 274' 8 3/4" TO ELEV 259' 2"			
7				132.000	HORZ PIPE AT ELEV 259' 2" TO ELEV 259' 1"			
8				2346.000	HORZ PIPE AT ELEV 259' 1" TO ELEV 257' 4 1/2"			
9				1173.000	HORZ PIPE AT ELEV 257' 41/2" TO ELEV 256' 6"			
10				338.000	HORZ PIPE AT ELEV 256' 6" UP TO STOP VALVE MSV-2			
11			**SubTotal**	4411.750				
12		M-217	26"					
13		6.25in. Per 1mm		255.840	HORZ PIPE LENGTH BETWEEN INBOARD AND OUTBOARD VALVES AT ELEV 274' 9"			
14			**SubTotal**	255.840				
15								
16		M-215	26"					
17		7in. per 1mm		72.000	HORZ PIPE LENGTH COMING DIRECTLY OUT OF THE REACTOR VESSEL AT ELEV 321' 1 1/2"			
18				556.500	VERT PIPE LENGTH FROM ELEVATION 321' 1 1/2" TO ELEV 274' 9"			
19		M-226	26"					
20		6.5in. per 1mm		136.500	HORZ PIPE AT ELEV 274' 9" TO ISOLATION VALVE - FIRST BEND			
21				325.000	HORZ PIPE AT ELEV 274' 9" TO ISOLATION VALVE - SECOND BEND			
22				65.000	HORZ PIPE AT ELEV 274' 9" TO ISOLATION VALVE - INBOARD VALVE			
23			**SubTotal**	1155.000				
24						Vertical	**Horizontal**	
25				**TOTAL**		Segments	**Only**	
26				5822.590	Total Inches	743.250	**5079.340**	
27				485.216	Total Feet	61.938	**423.278**	
28								
29	SP-EBB-105	2"						
30			46.500	VERT PIPE LENGTH FROM ELEV 274' 9" TO 270' 9 1/2"				
31			42.000	HORZ PIPE AT ELEV 270' 9 1/2" TO 270' 9 9/16"				
32		**SubTotal**	88.500					

	A	B	C	D	E	F	G	H	I	J	K
1	**Main Steam Line D**										
2	NOZZLE No	DWG No	PIPE DIA	LENGTH (IN)	COMMENTS						
3	TIE-IN										
4		EBB-102-1	26"								
5				236.000	HORZ PIPE LENGTH OUT OF REACTOR VESSEL AT ELEV 274' 9"						
6				186.750	VERT PIPE LENGTH FROM ELEVATION 274' 8 3/4" TO ELEV 259' 2"						
7				180.000	HORZ PIPE AT ELEV 259' 2" TO ELEV 259' 1"						
8				2386.000	HORZ PIPE AT ELEV 259' 1" TO ELEV 257' 4 1/2"						
9				1047.000	HORZ PIPE AT ELEV 257' 4 1/2" TO ELEV 256' 6"						
10				288.500	HORZ PIPE AT ELEV 256' 6" UP TO STOP VALVE MSV-2						
11			SubTotal	4324.250							
12		M-226	26"								
13		6.5in. per 1mm		227.500	HORZ PIPE LENGTH BETWEEN INBOARD AND OUTBOARD VALVES AT ELEV 274' 9"						
14			SubTotal	227.500							
15											
16		M-215	26"								
17		7in. per 1mm		72.000	HORZ PIPE LENGTH COMING DIRECTLY OUT OF THE REACTOR VESSEL AT ELEV 321' 1 1/2"						
18				556.500	VERT PIPE LENGTH FROM ELEVATION 321' 1 1/2" TO ELEV 274' 9"						
19		M-226	26"								
20		6.5in. per 1mm		279.500	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE						
21				65.000	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE - INBOARD VALVE						
22			SubTotal	973.000							
23						Vertical	Horizontal				
24				TOTAL		Segments	Only				
25				5524.750	Total Inches	743.250	4781.500				
26				460.396	Total Feet	61.938	398.458				
27											
28	SP-EBB-105	2"									
29			45.750	VERT PIPE LENGTH FROM ELEV 274' 9" TO 270' 10"							
30			41.000	HORZ PIPE FROM ELEV 270' 10" TO 270' 9 9/16"							
31		SubTotal	86.750								

	A
1	Main Steam Piping Summary Unit 1
2	24.14
3	
4	**TOTAL MS PIPING**
5	A
6	='MSL A (Dwg. No. EBB-103)'!D25
7	=A6*PI()*$A$2/144
8	=A6*PI()*($A$2/2)^2/1728
9	=A7
10	=A8
11	
12	
13	=A9
14	=A10
15	
16	**HORIZONTAL MS PIPING ONLY**
17	A
18	='MSL A (Dwg. No. EBB-103)'!G25
19	=A18*PI()*$A$2/144
20	=A18*PI()*($A$2/2)^2/1728
21	
22	
23	=A19
24	=A20
25	
26	
27	
28	
29	
30	Horizontal Totals
31	
32	
33	=A32*PI()*$A$2/144
34	=A32*PI()*($A$2/2)^2/1728
35	
36	='MSL A (Dwg. No. EBB-103)'!D17+'MSL A (Dwg. No. EBB-103)'!D20+'MSL A (Dwg. No. EBB-103)'!D21
37	=A36*PI()*$A$2/144
38	=A36*PI()*($A$2/2)^2/1728
39	
40	
41	Totals
42	
43	='MSL A (Dwg. No. EBB-103)'!D11+'MSL A (Dwg. No. EBB-103)'!D14
44	=A43*PI()*$A$2/144
45	=A43*PI()*($A$2/2)^2/1728
46	
47	='MSL A (Dwg. No. EBB-103)'!D22
48	=A47*PI()*$A$2/144
49	=A47*PI()*($A$2/2)^2/1728
50	
51	
52	Nodalization (Horizontals)
53	
54	=A36
55	=A37
56	=A38
57	=A32
58	=A33
59	=A34
60	
61	
62	Nodalization (Totals)
63	
64	=A47
65	=A48
66	=A49
67	=A43
68	=A44
69	=A45

	B
1	
2	Main Steam 26 inch pipe ID
3	
4	
5	B
6	='MSL B (Dwg. No. EBB-104)'!D26
7	=B6*PI()*$A$2/144
8	=B6*PI()*($A$2/2)^2/1728
9	=B7
10	=B8
11	
12	
13	=B9
14	=B10
15	
16	
17	B
18	='MSL B (Dwg. No. EBB-104)'!G26
19	=B18*PI()*$A$2/144
20	=B18*PI()*($A$2/2)^2/1728
21	
22	
23	=B19
24	=B20
25	
26	
27	
28	
29	
30	
31	
32	='MSL B (Dwg. No. EBB-104)'!D13+SUM('MSL B (Dwg. No. EBB-104)'!D7:D10)+'MSL B (Dwg. No. EBB-104)'!D5
33	=B32*PI()*$A$2/144
34	=B32*PI()*($A$2/2)^2/1728
35	
36	='MSL B (Dwg. No. EBB-104)'!D17+'MSL B (Dwg. No. EBB-104)'!D20+'MSL B (Dwg. No. EBB-104)'!D21+'MSL B (Dwg. No. EBB-104)'!D22
37	=B36*PI()*$A$2/144
38	=B36*PI()*($A$2/2)^2/1728
39	
40	
41	
42	
43	='MSL B (Dwg. No. EBB-104)'!D11+'MSL B (Dwg. No. EBB-104)'!D14
44	=B43*PI()*$A$2/144
45	=B43*PI()*($A$2/2)^2/1728
46	
47	='MSL B (Dwg. No. EBB-104)'!D23
48	=B47*PI()*$A$2/144
49	=B47*PI()*($A$2/2)^2/1728
50	
51	
52	
53	
54	=B36
55	=B37
56	=B38
57	=B32
58	=B33
59	=B34
60	
61	
62	
63	
64	=B47
65	=B48
66	=B49
67	=B43
68	=B44
69	=B45

	C
1	
2	
3	
4	
5	C
6	='MSL C (Dwg. No. EBB-101)'!D26
7	=C6*PI()*$A$2/144
8	=C6*PI()*($A$2/2)^2/1728
9	=C7
10	=C8
11	
12	
13	=C9
14	=C10
15	
16	
17	C
18	='MSL C (Dwg. No. EBB-101)'!G26
19	=C18*PI()*$A$2/144
20	=C18*PI()*($A$2/2)^2/1728
21	
22	
23	=C19
24	=C20
25	
26	
27	
28	
29	
30	
31	
32	='MSL C (Dwg. No. EBB-101)'!D13+SUM('MSL C (Dwg. No. EBB-101)'!D7:D10)+'MSL C (Dwg. No. EBB-101)'!D5
33	=C32*PI()*$A$2/144
34	=C32*PI()*($A$2/2)^2/1728
35	
36	='MSL C (Dwg. No. EBB-101)'!D17+'MSL C (Dwg. No. EBB-101)'!D20+'MSL C (Dwg. No. EBB-101)'!D21+'MSL C (Dwg. No. EBB-101)'!D22
37	=C36*PI()*$A$2/144
38	=C36*PI()*($A$2/2)^2/1728
39	
40	
41	
42	
43	='MSL C (Dwg. No. EBB-101)'!D11+'MSL C (Dwg. No. EBB-101)'!D14
44	=C43*PI()*$A$2/144
45	=C43*PI()*($A$2/2)^2/1728
46	
47	='MSL C (Dwg. No. EBB-101)'!D23
48	=C47*PI()*$A$2/144
49	=C47*PI()*($A$2/2)^2/1728
50	
51	
52	
53	
54	=C36
55	=C37
56	=C38
57	=C32
58	=C33
59	=C34
60	
61	
62	
63	
64	=C47
65	=C48
66	=C49
67	=C43
68	=C44
69	=C45

	D
1	
2	
3	
4	
5	D
6	='MSL D (Dwg. No. EBB-102)'!D25
7	=D6*PI()*$A$2/144
8	=D6*PI()*($A$2/2)^2/1728
9	=D7
10	=D8
11	
12	
13	=D9
14	=D10
15	
16	
17	D
18	='MSL D (Dwg. No. EBB-102)'!G25
19	=D18*PI()*$A$2/144
20	=D18*PI()*($A$2/2)^2/1728
21	
22	
23	=D19
24	=D20
25	
26	
27	
28	
29	
30	
31	
32	='MSL D (Dwg. No. EBB-102)'!D13+SUM('MSL D (Dwg. No. EBB-102)'!D7:D10)+'MSL D (Dwg. No. EBB-102)'!D5
33	=D32*PI()*$A$2/144
34	=D32*PI()*($A$2/2)^2/1728
35	
36	='MSL D (Dwg. No. EBB-102)'!D17+'MSL D (Dwg. No. EBB-102)'!D20+'MSL D (Dwg. No. EBB-102)'!D21
37	=D36*PI()*$A$2/144
38	=D36*PI()*($A$2/2)^2/1728
39	
40	
41	
42	
43	='MSL D (Dwg. No. EBB-102)'!D11+'MSL D (Dwg. No. EBB-102)'!D14
44	=D43*PI()*$A$2/144
45	=D43*PI()*($A$2/2)^2/1728
46	
47	='MSL D (Dwg. No. EBB-102)'!D22
48	=D47*PI()*$A$2/144
49	=D47*PI()*($A$2/2)^2/1728
50	
51	
52	
53	
54	=D36
55	=D37
56	=D38
57	=D32
58	=D33
59	=D34
60	
61	
62	
63	
64	=D47
65	=D48
66	=D49
67	=D43
68	=D44
69	=D45

	E	F	G
1			
2	LGS Spec. P-300, Rev. 44, "Piping Materials & Instrum. Piping Standa		
3			
4			
5			
6	26 inch piping (inches)		
7	26 inch piping inside surface area (sq. ft.)		
8	26 inch piping inside volume (cu. ft.)		
9	Total inside surface area (sq. ft.)		
10	Total inside volume (cu. ft.)		
11			
12			
13	Total inside surface area (sq. ft.)		
14	Total inside volume (cu. ft.)		
15			
16			
17			
18	26 inch piping (inches)		
19	26 inch piping inside surface area (sq. ft.)		
20	26 inch piping inside volume (cu. ft.)		
21			
22			
23	Total inside surface area (sq. ft.)		
24	Total inside volume (cu. ft.)		
25			
26			
27			
28			
29			
30			
31			
32	26 inch Outboard Piping, length (inches)		
33	**Total Outboard Pipe Surface Area Credit (sq. ft.)**		
34	**Total Outboard Pipe Volume Credit (cu. ft.)**		
35			
36	26 inch Inboard Piping, length (inches)		
37	**Total Inboard Pipe Surface Area Credit (sq. ft.)**		
38	**Total Inboard Pipe Volume Credit (cu. ft.)**		
39			
40			
41			
42			
43	26 inch Outboard Piping, length (inches)		
44	**Total Outboard Pipe Surface Area Credit (sq. ft.)**		
45	**Total Outboard Pipe Volume Credit (cu. ft.)**		
46			
47	26 inch Inboard Piping, length (inches)		
48	**Total Inboard Pipe Surface Area Credit (sq. ft.)**		
49	**Total Inboard Pipe Volume Credit (cu. ft.)**		
50			
51			
52			
53			
54	**Node 1 Length (inches)**		
55	**Node 1 Surface Area (sq. ft.)**		
56	**Node 1 Volume (cu. ft.)**		
57	**Node 2 Length (inches)**		
58	**Node 2 Surface Area (sq. ft.)**		
59	**Node 2 Volume (cu. ft.)**		
60			
61			
62			
63			
64	**Node 1 Length (inches)**		
65	**Node 1 Surface Area (sq. ft.)**		
66	**Node 1 Volume (cu. ft.)**		
67	**Node 2 Length (inches)**		
68	**Node 2 Surface Area (sq. ft.)**		
69	**Node 2 Volume (cu. ft.)**		

	A	B	C	D	E	F	G
1		**Main Steam Line A**					
2	NOZZLE No	DWG No	PIPE DIA	LENGTH (IN)	COMMENTS		
3	TIE-IN						
4		EBB-103-1	26"				
5				236	HORZ PIPE LENGTH OUT OF REACTOR VESSEL		
6				186.75	VERT PIPE LENGTH FROM ELEVATION 274' 8 3/4" TO ELEV 25		
7				228	HORZ PIPE AT ELEV 259' 2" TO ELEV 259' 1"		
8				2423	HORZ PIPE AT ELEV 259' 1" TO ELEV 257' 4 1/2"		
9				921	HORZ PIPE AT ELEV 257' 41/2" TO ELEV 256' 6"		
10				240.5	HORZ PIPE AT ELEV 256' 6" UP TO STOP VALVE MSV-2		
11			SubTotal	=SUM(D5:D10)			
12		M-226	26"				
13		6.5in. per 1mm		227.5	HORZ PIPE LENGTH BETWEEN INBOARD AND OUTBOARD V		
14			SubTotal	=SUM(D13)			
15							
16		M-215	26"				
17		7in. per 1mm		72	HORZ PIPE LENGTH COMING DIRECTLY OUT OF THE REAC		
18				556.5	VERT PIPE LENGTH FROM ELEVATION 321' 1 1/2" TO ELEV 2		
19		M-226	26"				
20		6.5in. per 1mm		279.5	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE		
21				65	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE - INBOAR		
22			SubTotal	=SUM(D17:D21)			
23						Vertical	Horizontal
24				TOTAL		Segments	Only
25				=D11+D14+D22	Total Inches	=D6+D18	=D25-F25
26				=D25/12	Total Feet	=F25/12	=D26-F26
27							
28							
29							
30	SP-EBB-105-E3	2"					
31			46.625	VERT PIPE LENGTH FROM ELE			
32			42	HORZ PIPE FROM ELEV 270' 1			
33		SubTotal	=SUM(C31:C32)				

	A	B	C	D	E	F	G
1		**Main Steam Line B**					
2	**NOZZLE No**	**DWG No**	**PIPE DIA**	**LENGTH (IN)**	**COMMENTS**		
3	**TIE-IN**						
4		EBB-104-1	26"				
5				236	HORZ PIPE LENGTH FROM OUTBOARD VALVE		
6				186.75	VERT PIPE LENGTH FROM ELEVATION 274' 8 3/4" TO ELEV 25		
7				276	HORZ PIPE AT ELEV 259' 2" TO ELEV 259' 1"		
8				2025	HORZ PIPE AT ELEV 259' 1" TO ELEV 257' 4 1/2"		
9				795	HORZ PIPE AT ELEV 257' 4 1/2" TO ELEV 256' 6"		
10				192.5	HORZ PIPE AT ELEV 256' 6" UP TO STOP VALVE MSV-2		
11			**SubTotal**	=SUM(D5:D10)			
12		M-217	26"				
13		6.25in. Per 1mm		255.84	HORZ PIPE LENGTH BETWEEN INBOARD AND OUTBOARD V		
14			**SubTotal**	=SUM(D13)			
15							
16		M-215	26"				
17		7in. per 1mm		72	HORZ PIPE LENGTH COMING DIRECTLY OUT OF THE REAC		
18				556.5	VERT PIPE LENGTH FROM ELEVATION 321' 1 1/2" TO ELEV 2		
19		M-226	26"				
20		6.5in. per 1mm		136.5	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE - FIRST B		
21				325	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE - SECONI		
22				65	HORZ PIPE AT ELEV 274' 5" TO ISOLATION VALVE - INBOAR		
23			**SubTotal**	=SUM(D17:D22)			
24						Vertical	**Horizontal**
25				**TOTAL**		Segments	**Only**
26				=D11+D14+D23	Total Inches	=D6+D18	**=D26-F26**
27				=D26/12	Total Feet	=F26/12	**=D27-F27**
28							
29							
30	EBB-105-E1	2"					
31			19	VERT PIPE FROM ELEV 274' 9"			
32			9.875	HORZ PIPE AT ELEV 272'			
33			15	VERT PIPE FROM ELEV 272' TC			
34			9.5	HORZ PIPE AT ELEV 271' 1 1/2"			
35			128	HORZ PIPE AT ELEV 271' 1"			
36			78.5	HORZ PIPE AT ELEV 270' 11 3/4'			
37			93	HORZ PIPE AT ELEV 270' 10"			
38		**SubTotal**	=SUM(C34:C37)				

	A	B	C	D	E	F	G	H
1			**Main Steam Line C**					
2	**NOZZLE No**	**DWG No**	**PIPE DIA**	**LENGTH (IN)**	**COMMENTS**			
3	**TIE-IN**							
4		EBB-101-1	26"					
5				236	HORZ PIPE LENGTH FROM OUTBOARD V			
6				186.75	VERT PIPE LENGTH FROM ELEVATION 2			
7				132	HORZ PIPE AT ELEV 259' 2" TO ELEV 259			
8				2346	HORZ PIPE AT ELEV 259' 1" TO ELEV 257			
9				1173	HORZ PIPE AT ELEV 257' 41/2" TO ELEV 2			
10				338	HORZ PIPE AT ELEV 256' 6" UP TO STOP			
11			**SubTotal**	=SUM(D5:D10)				
12		M-217	26"					
13		6.25in. Per 1mm		255.84	HORZ PIPE LENGTH BETWEEN INBOARD			
14			**SubTotal**	=SUM(D13)				
15								
16		M-215	26"					
17		7in. per 1mm		72	HORZ PIPE LENGTH COMING DIRECTLY			
18				556.5	VERT PIPE LENGTH FROM ELEVATION 3			
19		M-226	26"					
20		6.5in. per 1mm		136.5	HORZ PIPE AT ELEV 274' 9" TO ISOLATIO			
21				325	HORZ PIPE AT ELEV 274' 9" TO ISOLATIO			
22				65	HORZ PIPE AT ELEV 274' 9" TO ISOLATIO			
23			**SubTotal**	=SUM(D17:D22)				
24						Vertical	**Horizontal**	
25				**TOTAL**		Segments	**Only**	
26				=D11+D14+D23	Total Inches	=D6+D18	**=D26-F26**	
27				=D26/12	Total Feet	=F26/12	**=D27-F27**	
28								
29	SP-EBB-105-E1	2"						
30			46.5	VERT PIPE LENGTH FROM ELE				
31			42	HORZ PIPE AT ELEV 270' 9 1/2"				
32		**SubTotal**	=SUM(C30:C31)					

	A	B	C	D	E	F	G
1			**Main Steam Line D**				
2	**NOZZLE No**	**DWG No**	**PIPE DIA**	**LENGTH (IN)**	**COMMENTS**		
3	**TIE-IN**						
4		EBB-102-1	26"				
5				236	HORZ PIPE LENGTH OUT OF R		
6				186.75	VERT PIPE LENGTH FROM ELE		
7				180	HORZ PIPE AT ELEV 259' 2" TO		
8				2386	HORZ PIPE AT ELEV 259' 1" TO		
9				1047	HORZ PIPE AT ELEV 257' 4 1/2"		
10				288.5	HORZ PIPE AT ELEV 256' 6" UP		
11			**SubTotal**	=SUM(D5:D10)			
12		M-226	26"				
13		6.5in. per 1mm		227.5	HORZ PIPE LENGTH BETWEEN		
14			**SubTotal**	=SUM(D13)			
15							
16		M-215	26"				
17		7in. per 1mm		72	HORZ PIPE LENGTH COMING D		
18				556.5	VERT PIPE LENGTH FROM ELE		
19		M-226	26"				
20		6.5in. per 1mm		279.5	HORZ PIPE AT ELEV 274' 5" TO		
21				65	HORZ PIPE AT ELEV 274' 5" TO		
22			**SubTotal**	=SUM(D17:D21)			
23						Vertical	**Horizontal**
24				**TOTAL**		Segments	**Only**
25				=D11+D14+D22	Total Inches	=D6+D18	**=D25-F25**
26				=D25/12	Total Feet	=F25/12	**=D26-F26**
27							
28	SP-EBB-105-E3	2"					
29			45.75	VERT PIPE LENGTH FROM ELEV 274' 9" TO 27			
30			41	HORZ PIPE FROM ELEV 270' 10" TO 270' 9 9/16			
31		**SubTotal**	=SUM(C29:C30)				

1. Purpose

The purpose of this attachment is to reassess gamma shine from sources external to the the control room, in some cases using alternative source terms to assess contained radioactivity.

2. Historical Analysis Consideration

The dominant radiation source outside of the control room is a Unit 1 vertical run of 14 inch NPS core spray piping that is located 18 inches from the Unit 1Reactor Enclosure / Control Room wall. This wall is 36 inch thick concrete. The historically determined dose contribution in the control room from this pipe, and other lesser piping contributors, is 4.2 rem whole body. The following changes in analyses reduce this dose contribution.

- The core spray fluid is ECCS water. AST source terms are more favorable because of the reduction in assumed fractions of core iodine released to the suppression pool from 50% to 30%. This is offset only partially by increases in certain other non-halogen, non-noble gas isotopes.
- Doses are evaluated with credit for Control Room occupancy per RG. 1.183 of 1.0 for the first day, 0.6 for the next 3 days, and 0.4 for the following 26 days.
- Dose assessment is performed using the point-kernel method as implemented in MicroShield 5.05.

This same approach is applied to certain RHR piping that can cause control room operator exposure.

3. Dose Evaluations

Dose evaluations are either quantitative, or qualitative where negligible contributions are expected.

3.1. Core Spray Piping and RHR Piping in the Vicinity of Control Room Walls

3.1.1. Piping Contribution to CR Doses

ECCS piping between Elevation 253' and Elevation 283' of the reactor enclosure was evaluated for its potential to cause significant control room operator doses, when they contain design basis accident activity. The floor elevation of the control room is 269'. In each case, the piping size and wall thickness, distances, and available shielding were reviewed. The worst case piping is a portion of the Unit 1 core spray pipe GBB-112 pipe described above. The other Unit 1 core spray pipe on this elevation is well away and would make an insignificant dose contribution. Unit 1 core spray piping bounds Unit 2 conditions.

The RHR piping between Elevations 253' and Elevation 283' that would expose the same position in the control room are portions of GBB-118 (18"NPS), GBB-119 (18" NPS) and a small portion of GBB-105 (18" NPS). These pipes are modeled in 4 segments, as follows:

- A 34 foot horizontal segment of GBB-118 at Elevation 273'6" is modeled. A similar segment of GBB-119 is directly behind this segment and is effectively shielded by the front piping, and is not considered.

- An 8 foot segment of GBB-118 from Elevation 273'6" to Elevation 281'6" is modeled. Again a segment of GBB-119 is directly behind this pipe and is considered shielded.
- A 28'6" segment of comprised of GBB-118 and GBB-105 from Elevation 253'0" to Elevation 281'6" is modeled.
- A 20'6" segment of GBB-119 from Elevation 253'0" to Elevation 273'6" is modeled because it can be "seen" from the point in the control room nearest the CS pipe.

3.1.2. Source Terms

The steps required to perform this analysis are:

1. Run RADTRAD with RG 1.183, Table 1 non-noble gas release fractions and timing, with activity released directly to the suppression pool.
2. Have RADTRAD calculate the compartment activity as a function of time. Select a number of time steps and spacing such that source integration can be performed linearly by multiplying the step duration times the average activity over the step based on the activity at the start and end. A total of 53 time steps are used, and linear integration is conservative.
3. Develop and run a program to extract results from the RADTRAD output, output a tabulation of the RADTRAD calculated activities for verification, and then to perform the integration.
4. Use a spreadsheet to take the integrated sources through 1 day, 4 days, and 30 days, and apply occupancy factors and unit conversions to create a MicroShield suitable time integrated source file. *{For example, if a source in uCi/cc is input into MicroShield then doses rates are calculated (e.g. mR/hr). The integrated source input is in uCi - hr /cc. The result is a dose (e.g. in mR).}*
5. Evaluate the need for inclusion of isotopes other than the basic 60 included in standard AST "*.nif" files. This is done by:
   a. Using the End of Cycle (EOC) ORIGEN-2 core source term originally used for the AST source term development. Decay steps are added to obtain activity as a function of time, with the impacts of decay and daughter ingrowth.
   b. Time integration of all 800+ fission products, with occupancy credit.
   c. Apply the time dependent elemental release fractions runs to the core activity to obtain integrated sources in ECCS fluid.
   d. Sorting the data to identify the important isotopes by source term.
   e. Selection of additional isotopes for evaluation. Conservatively, a total of 110 isotopes were selected for a set of MicroShield runs.
   f. Note that some adjustment was necessary for isotopes whose parents were in a group with higher release fractions than the daughters. The adjusted values are shown.
6. Run MicroShield using the above source file to determine Control Room operator doses, with design basis Control Room occupancy at 1 foot from the wall at a position on a line perpendicular from the pipe centerline. Additional runs are made for RHR piping located at ~55 to 60 feet from the 1 ft inside the control room dose point perpendicular to the center of the CS piping in a position where they could also contribute to doses at that location.

3.1.3. Results of Dose Assessment for ECCS Piping to Control Room, as well as the Reactor Enclosure Cloud discussed later in this analysis

Pipe Segments	Integrated 30 day CR Operator Dose (rem EDE) Resulting for ECCS Pipe Gamma Shine
CS Pipe Segment (20 ft)	1.478
GBB-118 Horizontal 34 ft Segment	0.106
GBB-118 Vertical 8 ft Segment	0.041
GBB-118+GBB105 Vertical 28.5 ft Segment	0.020
GBB-119 Vertical 20.5 ft Segment	0.016
Reactor Enclosure Cloud	0.039
Total	**1.70**

3.2. RERS, SGTS, and CREFAS Filter Shine

1. RERS Filters: As shown on drawing M-0105, Sheet 1, these filters are located in the Reactor Enclosure at Elevation 331. It is shielded from the Control Room by the Drywell and Spent Fuel Pools, several floors, and the Reactor Enclosure wall. In this position, these filters do not contribute any significant dose to control room operators.
2. SGTS Filters: These filters are located approximately 60 feet above the control room and have a total of 4.5 feet of concrete between the filters and control room personnel. Furthermore, flows to the SGTS Filters have been pre-filtered by the RERS filters, which minimizes filter loading compared to a typical BWR. Therefore, the SGTS filters do not contribute any significant dose to control room operators.
3. CREFAS Filters: These filters are located approximately 30 feet above the control room and have a total of 3.5 feet of concrete shielding between the filters and control room personnel. CREFAS filters will have significantly less activity than SGTS filters and dose contributions will be negligible.

3.3. Reactor Enclosure Cloud Shine

The 3 feet of shielding provided by the reactor enclosure / control room wall provides ample protection for Control Room Operators from Reactor Enclosure airborne activity. Although this is a much less significant source than ECCS piping, the cloud dose is evaluated in a manner similar to ECCS piping. That is, RADTRAD is used to establish the time dependent activity in the Reactor Enclosure using the "Detailed Output" feature. The RADTRAD outputs (PC and ECCS Leakage) are post-processed to extract this data and perform a time integrated source determination. This source is adjusted to reflect design basis control room occupancies. The resulting source of concern is that which would be between 253' and 283' Elevations, since the control room is at the 269' elevation. The drywell takes up approximately 25% of this volume, and provides a large obstacle to viewing portions of this airborne activity at the peak dose location in the vicinity of the core spray pipe. However, for conservatism and simplicity, no credit is taken for the shielding or activity displacement by the drywell or any other contained structures and equipment between these elevations. MicroShield is used to calculated Control Room Doses from this cloud. The dose point is positioned at the mid-point of the Reactor Enclosure vertical dimension and the horizontal east-west source dimension. This is more conservative than the location of an operator in the control room in the vicinity of the core spray pipe. The activity is assumed uniformly mixed in the Reactor Enclosure, though most penetrations and ECCS equipment are at lower elevations.

3.4. *External Cloud Shine*

The LGS control room has no exterior walls or overlying structures that are less than 2 feet of concrete. Therefore, the allowance RADTRAD cloud dose model that applies a Geometry Factor to the effects of an infinite cloud as addressed in Federal Guidance Report 12 is considered sufficient.

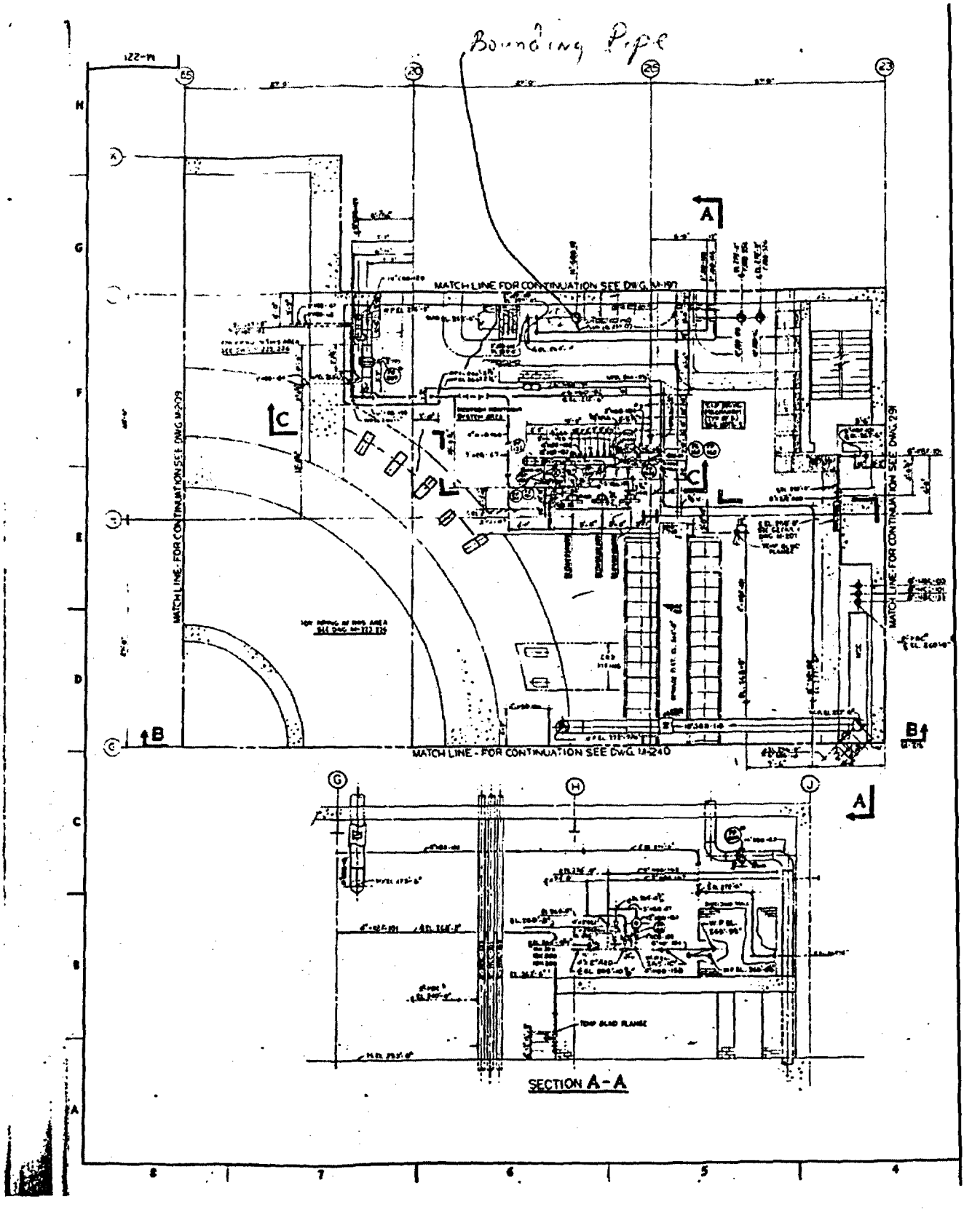
4. Attachment C Contents

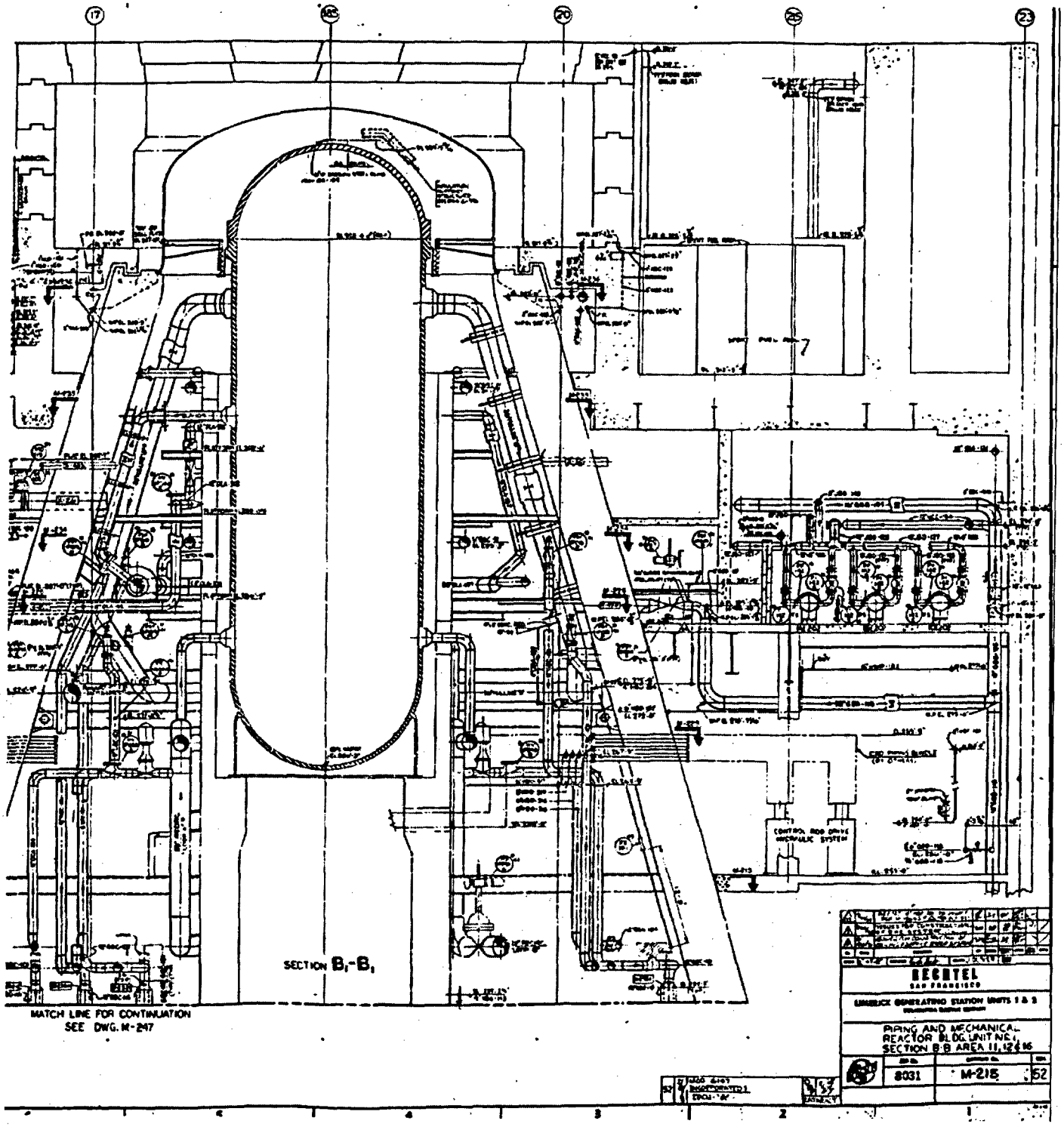
1. This Summary
2. Figures showing source pipes with respect to control room walls.
3. RADTRAD Run with associated Nuclide Inventory File to determine activity in ECCS fluid
4. Source Code Listing for Computer Program to extract data from RADTRAD Run and perform integration
5. Output from above showing extracted data and integrated results (Raw Data).
6. Spreadsheet that takes integrated data and incorporates occupancy credit for 1-4 and 4-30 day periods (Occupancy Adjusted Data), with Formula Version.
7. Source Term Development for ECCS Piping Gamma Shine – Introduction and Evaluation Spreadsheet of Additional Isotopes for Thickly Shielded Sources
8. MicroShield Runs Calculating doses as a function of distance from the CS Line through the CR wall.
9. MicroShield Runs for RHR Pipe.
10. A MicroShield Run for the Reactor Enclosure Cloud Source
11. The RADTRAD Runs used to determine Reactor Enclosure activity versus time.
12. The Spreadsheet containing the Extracted time integrated Cloud Source data and that adjusts it for control room occupancy, and derives concentrations that are used in Item 10 above.

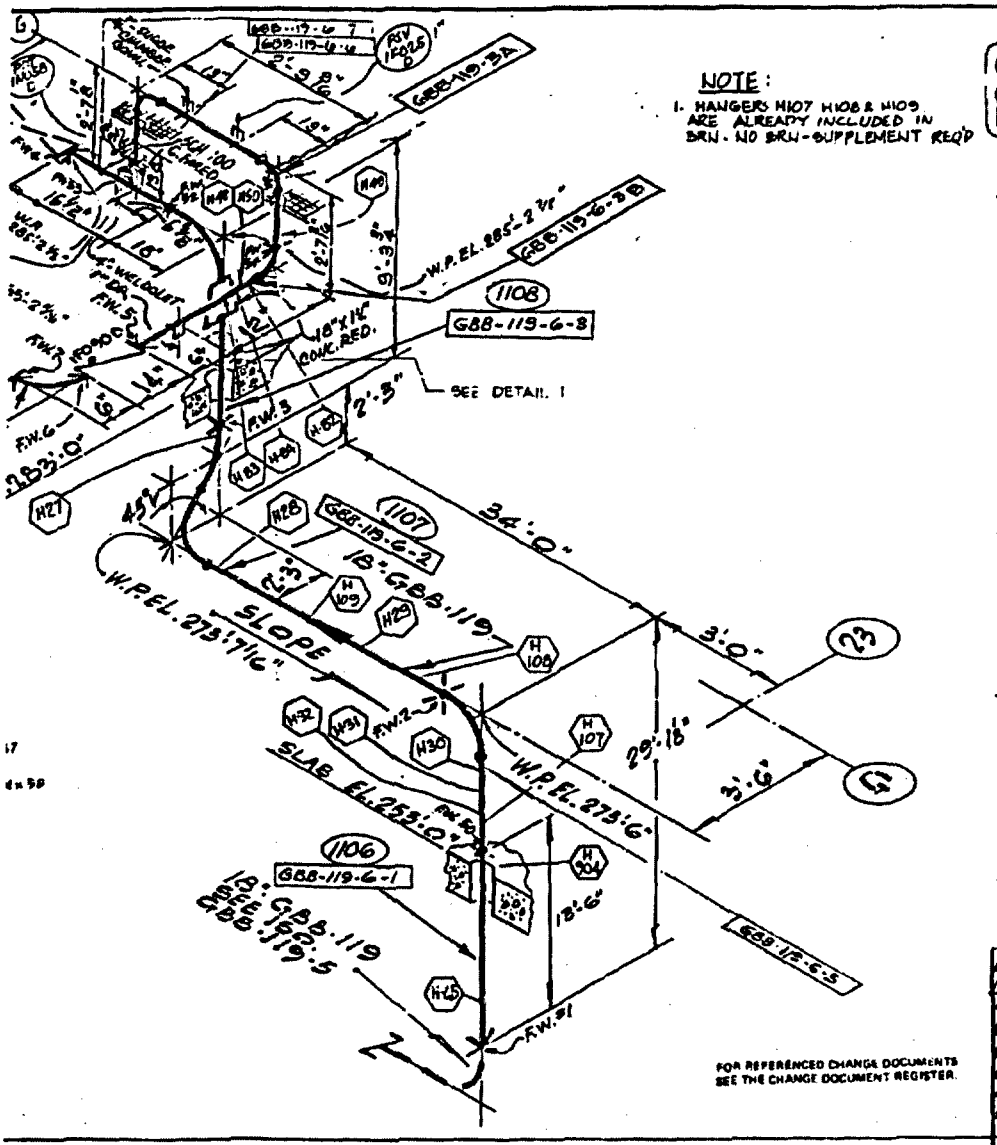
5. Attachment C References

Drawings Used in Take-offs, and for Determination of Piping Potentially Impacting the Control Room at the bounding location:

1. LGS Drawing M-0215, Rev. 52, Piping and Mechanical Reactor Bldg. Unit No 1, Section B-B Area 11, 12, & 16
2. LGS Drawing M-0221, Rev. 32, Piping and Mechanical Reactor Bldg. Unit No 1, Plan at Elevation 253'0" Area 12
3. LGS Drawing GBB-118-3, Rev. 15, Isometric – Reactor Bld'g Residual Heat Removal – Unit 1
4. LGS Drawing GBB-119-6, Rev. 16, Isometric – Reactor Encl Residual Heat Removal – Unit 1
5. LGS Drawing C-132, Rev. 26, Reactor Building Unit 1 Floor Plan Elevation 253'0" Area 12
6. LGS Drawing M-0214, Rev. 75, Piping and Mechanical Reactor Bldg. Unit No 1, Section A-A Area 15 & 16
7. LGS Drawing M-0216, Rev. 83, Piping and Mechanical Reactor Bldg. Unit No 1, Section C-C Areas 11 & 15
8. LGS Drawing M-0209, Rev. 21, Piping and Mechanical Reactor Bldg. Unit No 1, Plan at Elevation 253'0" Area 11
9. LGS Drawing M-0230, Rev. 24, Piping and Mechanical Reactor Bldg. Unit No 1, Plan at Elevation 253'0" Area 15
10. LGS Drawing M-0240, Rev. 29, Piping and Mechanical Reactor Bldg. Unit No 1, Plan at Elevation 253'0" Area 16
11. LGS Drawing GBB-112-3, Rev. 30, Isometric – Reactor Bldg. Core Spray Cooling – Unit 1
12. LGS Drawing GBB-113-3, Rev. 22, Isometric – Reactor Bldg. Core Spray Cooling – Unit 1


Bonding Pipe
MATCH LINE FOR CONTINUATION SEE DWG. M-197
MATCH LINE - FOR CONTINUATION SEE DWG. M-209
MATCH LINE - FOR CONTINUATION SEE DWG. 291
MATCH LINE - FOR CONTINUATION SEE DWG. M-240
SECTION A-A


SECTION B1-B1
MATCH LINE FOR CONTINUATION
SEE DWG. M-247
BECHTEL
SAN FRANCISCO
LIMERICK GENERATING STATION UNITS 1 & 2
PIPING AND MECHANICAL
REACTOR BLDG. UNIT NO. 1
SECTION B-B AREA 11,12 & 16
8031
M-215
52



NOTE:

1. HANGERS H107 H108 & H109 ARE ALREADY INCLUDED IN BRN. NO BRN-SUPPLEMENT REQ'D

CCN REV 0
CALC. NO PI-10-66

92 Lin. Ft.

N

REV 14 NOTE:
ADDED HGR H904 & H-65
REVISED VALVE NO'S 1F090D (WAS 1F090A) 1F089D (WAS 1F089A)
REVISED LOCATIONS OF HGR'S H-65, H-66

REV. 15 NOTE:
ADDED DETAIL 1. INCORP FSK SHT. 2 REV. 4

REV. 16 NOTE:
ADDED HANGER H107, H108, & H109. SEE NOTE 1.

REV. 10 NOTE:
INCORP. FSK. REV. 0, (ADDED SPOOL 13B)

REV. 11 NOTE:
REVISED DIMS TO AGREE WITH INSTALLED RATION 3'-8 3/4" WAS 3'-10 3/4", 16 1/2" WAS 13 1/2" FIELD TO ADD EXTRA 3" LENGTH TO 16 1/2" D FOR FIELD CUT TO FIT. REF. FME 3136 DOC. 052572. ADDED DIM, 14 3/16".

REV. 12 NOTE:
REV. W.P. ELEVATIONS PER FCR M-6247 F. ⚠ ADDED STRESS ISO NOTE

REV. 13 NOTE:
ADDED HGRS H-82, 83, & 84 INC FSK SHT 1 REV 2 & SHT 2 REV 2.

REFERENCE DWGS.

M-51 P.&I.D.
M-239 PIPING PLAN AREA
M-240 " " "
M-241 " " "
SK-M-1524 AIB STRESS ISO " REV.

4	7/14/	SEE REV 15 NOTE	JL	WP	KK	
3	6/29/	SEE REV 15 NOTE	JLC			
2	3/31/	SEE REV 14 NOTE	AD			
1	7/14/	SEE REV. 16 NOTE	UMC	WP		
0	5/17/	SEE REV. 10 NOTE	JB			
2	7/14/	SEE REV. 2 NOTE	WS			
1	7/22/	[illegible]	JOO			
0	7/26/	ISSUED FOR FABRICATION	JB			
No.	DATE	REVISIONS	BY	CHKD	REVIEW DATE	APPD

SCALE NONE | DESIGNED | DRAWN AB | REVIEW DATE

BECHTEL
SAN FRANCISCO

LIMERICK GENERATING STATION
UNITS 1 & 2
PHILADELPHIA ELECTRIC COMPANY

ISOMETRIC-REACTOR ENC
RESIDUAL HEAT REMOVAL-UN

8031 | GBB-119-6

FOR REFERENCED CHANGE DOCUMENTS SEE THE CHANGE DOCUMENT REGISTER.

PIPING AT SITE

Fabricated By:
SOUTHWEST FABRICATING AND WELDING COMPANY

SPOOL SH. 1106-1109F

16X

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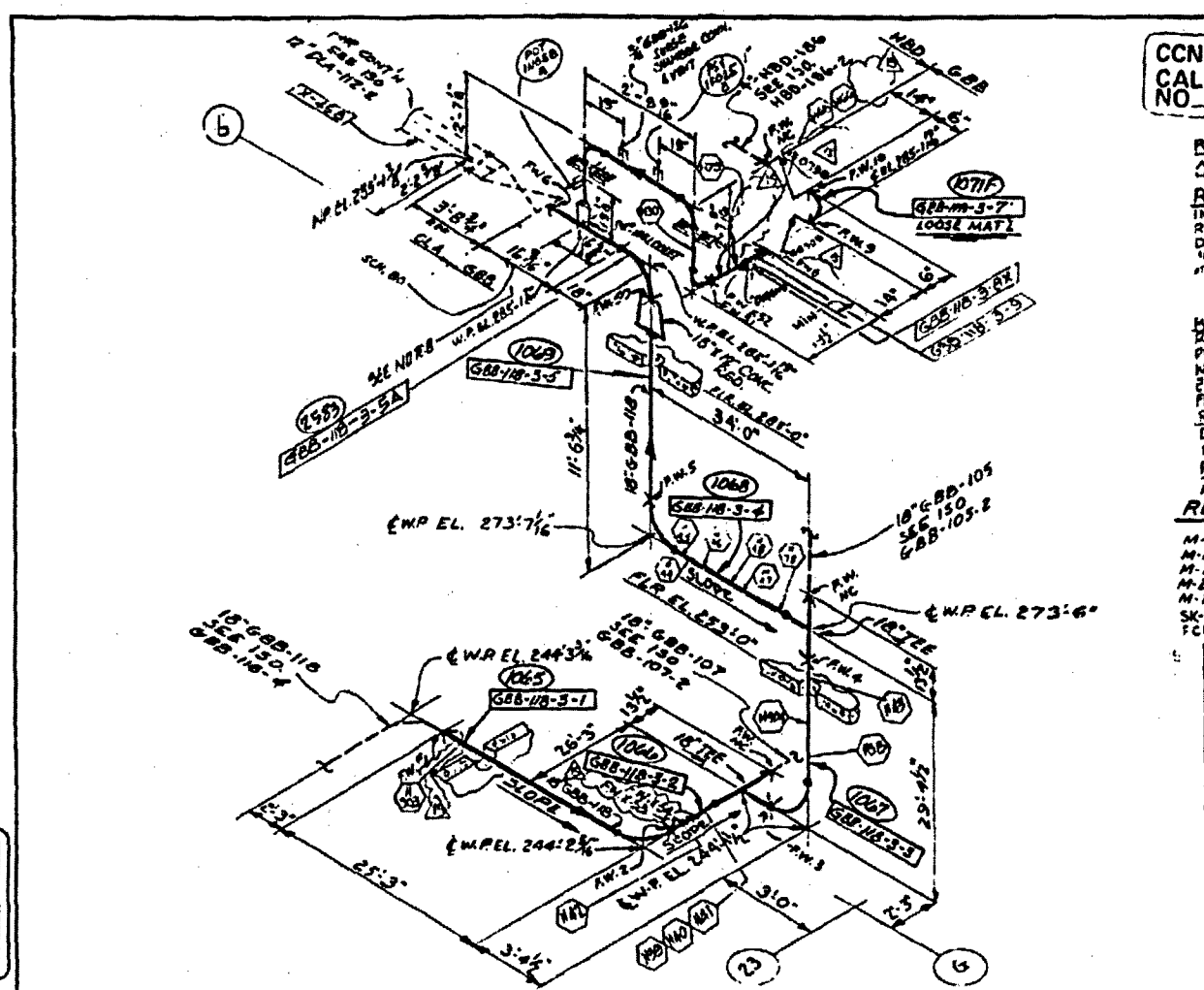
Signed _____ Date _____ Camera Type _____
Camera Operator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145 L.F.
N
REV. 14 NOTE:
REV. 15 NOTE:
REV. 8 NOTE:
REV. 10 NOTE:
REV. 12 NOTE:
REFERENCE DWG'S:
M-51 SH 1&2 P&ID
M-220 PIPING PLAN-AREA 12
M-221 " " " 12
M-222 " " " 13
M-239 " " " 16
SK-M-1523 A10 STRESS 150
FOR M15, 15F
SPOOL SH 1065-1071F & 2583
BECHTEL
SAN FRANCISCO
LIMERICK GENERATING STATION
UNITS 1 & 2
PHILADELPHIA ELECTRIC COMPANY
ISOMETRIC - REACTOR BLD'G
RESIDUAL HEAT REMOVAL-UNIT 1
8031
GBB-118-3
15
CCN REV. 0
CALC. NO. PI-10-646
CCN REV. 1
CALC. NO. PI-33-51

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#####################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  3/13/2003  at 15:24:18
#####################################################################

#####################################################################
                        File information
#####################################################################

Plant file           = D:\PBAPS\Pbaps LOCA\RADTRAD\lgscs.psf
Inventory file       = d:\pbaps\pbaps loca\radtrad\lgs core spray pipe source evaluation.nif
Release file         = c:\program files\radtrad3.03\defaults\bwr_dba.rft
Dose Conversion file = c:\program files\radtrad3.03\defaults\fgr11&12.inp



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    #    #  #       #        #  ##    #  #    #  #    #    #
    #    #  #       #        #  # #   #  #    #  #    #    #
    #####    ####   ####     #  #  #  #  #####   #    #    #
    #            #  #        #  #   # #  #       #    #    #
    #            #  #        #  #    ##  #       #    #    #
    #        ####   #        #  #     #  #        ####     #


Radtrad 3.03 4/15/2001
LGS Core Spray Pipe Source Evaluation
Nuclide Inventory File:
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Plant Power Level:
 3.5280E+03
Compartments:
  4
Compartment 1:
ECCS Fluid (Torus)
  3
 1.3870E+05
  0
  0
  0
  0
  0
Compartment 2:
Reactor Building
  3
 1.0000E+00
  0
  0
  0
  0
  0
Compartment 3:
Environment
  2
 0.0000E+00
  0
  0
  0
  0
  0
Compartment 4:
Control Room
  1
 1.7600E+05
  0
  0
  0
  0
  0
Pathways:
  5
Pathway 1:
ECCS Fluid to Reactor Building
```

```
  1
  2
  2
Pathway 2:
Filtered Environment to Control Room
  3
  4
  2
Pathway 3:
Control Room to  Environment
  4
  3
  2
Pathway 4:
Unfiltered Environment to Control Room
  3
  4
  2
Pathway 5:
Reactor Building to  Environment
  2
  3
  2
End of Plant Model File
Scenario Description Name:

Plant Model Filename:

Source Term:
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  1   1.0000E+00
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c:\program files\radtrad3.03\defaults\bwr_dba.rft
  0.0000E+00
  1
  9.5000E-01   4.8500E-02   1.5000E-03   1.0000E+00
Overlying Pool:
  0
  0.0000E+00
  0
  0
  0
  0
Compartments:
  4
Compartment 1:
  1
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 2:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 3:
  0
  1
  0
  0
  0
  0
  0
  0
  0
```

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Compartment 4:
  0
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  0
  0
  0
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  0
Pathways:
  5
Pathway 1:
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  0
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  1
  3
  0.0000E+00   1.0000E-05   0.0000E+00   0.0000E+00   0.0000E+00
  2.4000E+01   1.0000E-05   0.0000E+00   0.0000E+00   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 2:
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   3.0000E+03   9.9000E+01   9.0000E+01   9.0000E+01
  5.0000E-01   3.0000E+03   9.9000E+01   9.0000E+01   9.0000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 3:
  0
  0
  0
  0
  0
  1
  2
  0.0000E+00   4.6000E+03   1.0000E+02   1.0000E+02   1.0000E+02
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 4:
  0
  0
  0
  0
  0
  1
  2
  0.0000E+00   1.6000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
```

```
  0
  0
  0
Pathway 5:
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   1.0000E+05   0.0000E+00   0.0000E+00   0.0000E+00
  2.5000E-01   1.0000E+05   0.0000E+00   0.0000E+00   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Dose Locations:
  3
Location 1:
EAB
  3
  1
  4
  0.0000E+00   4.2500E-04
  2.5000E-01   5.3000E-05
  7.5000E-01   8.8900E-06
  6.0000E+00   0.0000E+00
  1
  4
  0.0000E+00   3.4700E-04
  8.0000E+00   1.7500E-04
  2.4000E+01   2.3200E-04
  7.2000E+02   0.0000E+00
  0
Location 2:
LPZ
  3
  1
  8
  0.0000E+00   4.8100E-05
  2.5000E-01   1.7500E-05
  7.5000E-01   8.8700E-06
  2.0000E+00   3.9400E-06
  8.0000E+00   2.6200E-06
  2.4000E+01   1.0900E-06
  9.6000E+01   3.0600E-07
  7.2000E+02   0.0000E+00
  1
  4
  0.0000E+00   3.4700E-04
  8.0000E+00   1.7500E-04
  2.4000E+01   2.3200E-04
  7.2000E+02   0.0000E+00
  0
Location 3:
Control Room
  4
  0
  1
  2
  0.0000E+00   3.4700E-04
  7.2000E+02   0.0000E+00
  1
  4
  0.0000E+00   1.0000E+00
  2.4000E+01   6.0000E-01
  9.6000E+01   4.0000E-01
  7.2000E+02   0.0000E+00
Effective Volume Location:
  1
  7
```

```
  0.0000E+00   1.1800E-03
  2.5000E-01   2.7200E-06
  2.0000E+00   1.0000E-09
  8.0000E+00   1.0000E-09
  2.4000E+01   1.4600E-08
  9.6000E+01   4.2100E-09
  7.2000E+02   0.0000E+00
Simulation Parameters:
  6
  0.0000E+00   2.5000E-01
  2.0000E+00   5.0000E-01
  8.0000E+00   2.0000E+00
  2.4000E+01   6.0000E+00
  9.6000E+01   4.8000E+01
  7.2000E+02   0.0000E+00
Output Filename:
D:\PBAPS\Pbaps LOCA\RADTRAD\lgscs.o1
  1
  2
  1
  1
  1
End of Scenario File
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  3/13/2003  at 15:24:18
#######################################################################

#######################################################################
                      Plant Description
#######################################################################

Number of Nuclides =  60

Inventory Power =   1.0000E+00 MWth
Plant Power Level =   3.5280E+03 MWth

Number of compartments    =   4

Compartment information

Compartment number  1  (Source term fraction =   1.0000E+00
)
Name: ECCS Fluid (Torus)
Compartment volume =   1.3870E+05 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  1
   Exit Pathway Number    1: ECCS Fluid to Reactor Building

Compartment number  2
Name: Reactor Building
Compartment volume =   1.0000E+00 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  2
   Inlet Pathway Number   1: ECCS Fluid to Reactor Building
   Exit Pathway Number    5: Reactor Building to  Environment

Compartment number  3
Name: Environment
Compartment type is Environment
Pathways into and out of compartment  3
   Inlet Pathway Number   3: Control Room to  Environment
   Inlet Pathway Number   5: Reactor Building to  Environment
   Exit Pathway Number    2: Filtered Environment to Control Room
   Exit Pathway Number    4: Unfiltered Environment to Control Room

Compartment number  4
Name: Control Room
Compartment volume =   1.7600E+05 (Cubic feet)
Compartment type is Control Room
Pathways into and out of compartment  4
   Inlet Pathway Number   2: Filtered Environment to Control Room
   Inlet Pathway Number   4: Unfiltered Environment to Control Room
   Exit Pathway Number    3: Control Room to  Environment

Total number of pathways =   5
```

```
#####################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  3/13/2003  at 15:24:18
#####################################################################
```

```
 ####   #    #  #####  #####   #    #  #####
#    # #    #    #    #    #  #    #    #
#    # #    #    #    #    #  #    #    #
#    # #    #    #    #####   #    #    #
#    # #    #    #    #       #    #    #
#    # #    #    #    #       #    #    #
 ####    ####     #    #        ####     #
```

```
#################################################################
          Dose, Detailed model and Detailed Inventory Output
#################################################################
```

Detailed model information at time (H) = 0.2500

EAB Doses:

Time (h) = 0.2500	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.4105E-06	2.9065E-04	1.3991E-05
Accumulated dose (rem)	1.4105E-06	2.9065E-04	1.3991E-05

LPZ Doses:

Time (h) = 0.2500	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.5963E-07	3.2895E-05	1.5835E-06
Accumulated dose (rem)	1.5963E-07	3.2895E-05	1.5835E-06

Control Room Doses:

Time (h) = 0.2500	Whole Body	Thyroid	TEDE
Delta dose (rem)	8.8670E-09	3.6407E-05	1.5812E-06
Accumulated dose (rem)	8.8670E-09	3.6407E-05	1.5812E-06

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 0.2500	Ci	kg	Atoms	Decay
Rb-86	5.7467E+03	7.0626E-05	4.9456E+20	1.2998E+17
I-131	2.3679E+06	1.9100E-02	8.7802E+22	5.3568E+19
I-132	3.2530E+06	3.1515E-04	1.4378E+21	7.5099E+19
I-133	4.8597E+06	4.2900E-03	1.9425E+22	1.1027E+20
I-134	4.4623E+06	1.6727E-04	7.5174E+20	1.0949E+20
I-135	4.4609E+06	1.2702E-03	5.6663E+21	1.0196E+20
Xe-133	6.5135E+03	3.4797E-05	1.5756E+20	6.2608E+16
Xe-135	7.2791E+04	2.8504E-05	1.2715E+20	7.0284E+17
Cs-134	6.4209E+05	4.9627E-01	2.2303E+24	1.4521E+19
Cs-136	1.7868E+05	2.4380E-03	1.0796E+22	4.0418E+18
Cs-137	4.0025E+05	4.6016E+00	2.0227E+25	9.0516E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 0.2500	Atmosphere	Sump	
Noble gases (atoms)	2.8471E+20	0.0000E+00	
Elemental I (atoms)	5.5815E+21	0.0000E+00	
Organic I (atoms)	1.7262E+20	0.0000E+00	
Aerosols (kg)	5.1242E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.4780E-04
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.0774E-03
Total I (Ci)			1.9404E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 0.2500	Filtered	Transported
Noble gases (atoms)	0.0000E+00	7.4277E+10
Elemental I (atoms)	0.0000E+00	3.0266E+12
Organic I (atoms)	0.0000E+00	9.3607E+10
Aerosols (kg)	0.0000E+00	2.7709E-09

Detailed model information at time (H) = 0.5000

EAB Doses:

Time (h) = 0.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.8776E-07	1.0834E-04	5.1780E-06
Accumulated dose (rem)	1.8982E-06	3.9899E-04	1.9169E-05

LPZ Doses:

Time (h) = 0.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.6105E-07	3.5773E-05	1.7097E-06
Accumulated dose (rem)	3.2069E-07	6.8667E-05	3.2932E-06

Control Room Doses:

Time (h) = 0.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.8793E-08	8.2560E-05	3.5849E-06
Accumulated dose (rem)	2.7660E-08	1.1897E-04	5.1661E-06

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 0.5000	Ci	kg	Atoms	Decay
Rb-86	1.1489E+04	1.4120E-04	9.8873E+20	4.5140E+17
I-131	4.7318E+06	3.8167E-02	1.7546E+23	1.8598E+20
I-132	6.2688E+06	6.0732E-04	2.7707E+21	2.5462E+20
I-133	9.6388E+06	8.5088E-03	3.8527E+22	3.8093E+20
I-134	7.3239E+06	2.7454E-04	1.2338E+21	3.3430E+20
I-135	8.6909E+06	2.4747E-03	1.1039E+22	3.4803E+20
Xe-133	2.5928E+04	1.3852E-04	6.2719E+20	5.5773E+17
Xe-135	2.8465E+05	1.1146E-04	4.9723E+20	6.1784E+18
Cs-134	1.2842E+06	9.9253E-01	4.4606E+24	5.0442E+19
Cs-136	3.5717E+05	4.8733E-03	2.1579E+22	1.4035E+19
Cs-137	8.0050E+05	9.2031E+00	4.0454E+25	3.1443E+19

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 0.5000	Atmosphere	Sump	
Noble gases (atoms)	1.1244E+21	0.0000E+00	
Elemental I (atoms)	1.1108E+22	0.0000E+00	
Organic I (atoms)	3.4354E+20	0.0000E+00	
Aerosols (kg)	1.0248E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.6887E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.1342E-03
Total I (Ci)			3.6654E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 0.5000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	7.0505E+11
Elemental I (atoms)	0.0000E+00	1.2065E+13
Organic I (atoms)	0.0000E+00	3.7314E+11
Aerosols (kg)	0.0000E+00	1.1083E-08

Detailed model information at time (H) = 0.7500

EAB Doses:

Time (h) = 0.7500	Whole Body	Thyroid	TEDE
Delta dose (rem)	8.6089E-07	2.0646E-04	1.0896E-05
Accumulated dose (rem)	2.7591E-06	6.0544E-04	3.0065E-05

LPZ Doses:

Time (h) = 0.7500	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.8426E-07	6.8169E-05	3.5978E-06
Accumulated dose (rem)	6.0494E-07	1.3684E-04	6.8910E-06

Control Room Doses:

Time (h) = 0.7500	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.1785E-08	5.6478E-05	2.4543E-06
Accumulated dose (rem)	3.9445E-08	1.7545E-04	7.6204E-06

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 0.7500	Ci	kg	Atoms	Decay
Co-58	2.2469E+02	7.0663E-06	7.3369E+19	5.0882E+15
Co-60	2.6901E+02	2.3798E-04	2.3886E+21	6.0914E+15
Rb-86	1.9141E+04	2.3524E-04	1.6472E+21	1.0073E+18
Sr-89	3.2890E+05	1.1321E-02	7.6604E+22	7.4481E+18
Sr-90	3.7373E+04	2.7398E-01	1.8333E+24	8.4628E+17
Sr-91	4.2319E+05	1.1674E-04	7.7258E+20	9.6541E+18
Sr-92	3.8994E+05	3.1023E-05	2.0307E+20	9.0634E+18
Y-90	4.5278E+02	8.3222E-07	5.5686E+18	9.2409E+15
Y-91	4.0689E+03	1.6592E-04	1.0980E+21	9.1918E+16
Y-92	1.7719E+04	1.8415E-06	1.2054E+19	2.0934E+17
Y-93	5.0555E+03	1.5153E-06	9.8122E+18	1.1528E+17
Zr-95	5.2773E+03	2.4565E-04	1.5572E+21	1.1950E+17
Zr-97	5.3107E+03	2.7781E-06	1.7247E+19	1.2076E+17
Nb-95	5.3061E+03	1.3569E-04	8.6018E+20	1.2015E+17
Mo-99	7.4061E+04	1.5442E-04	9.3932E+20	1.6788E+18
Tc-99m	6.5404E+04	1.2438E-05	7.5662E+19	1.4737E+18
Ru-103	6.1735E+04	1.9129E-03	1.1184E+22	1.3980E+18
Ru-105	3.8024E+04	5.6567E-06	3.2443E+19	8.7482E+17
Ru-106	2.5430E+04	7.6009E-03	4.3183E+22	5.7583E+17
Rh-105	4.0453E+04	4.7927E-05	2.7488E+20	9.1537E+17
Sb-127	8.4665E+04	3.1703E-04	1.5033E+21	1.9186E+18
Sb-129	2.2516E+05	4.0041E-05	1.8692E+20	5.1826E+18
Te-127	8.4278E+04	3.1935E-05	1.5143E+20	1.9032E+18
Te-127m	1.1334E+04	1.2016E-03	5.6979E+21	2.5665E+17
Te-129	2.3668E+05	1.1301E-05	5.2759E+19	5.2885E+18
Te-129m	3.7260E+04	1.2368E-03	5.7739E+21	8.4364E+17
Te-131m	1.1179E+05	1.4020E-04	6.4450E+20	2.5374E+18
Te-132	1.1159E+06	3.6758E-03	1.6770E+22	2.5292E+19
I-131	8.6677E+06	6.9915E-02	3.2140E+23	4.3273E+20
I-132	1.1288E+07	1.0935E-03	4.9890E+21	5.8137E+20
I-133	1.7525E+07	1.5470E-02	7.0047E+22	8.8156E+20
I-134	1.1019E+07	4.1305E-04	1.8563E+21	6.7866E+20
I-135	1.5521E+07	4.4196E-03	1.9715E+22	7.9514E+20
Xe-133	1.4095E+05	7.5302E-04	3.4096E+21	3.6452E+18
Xe-135	1.5203E+06	5.9531E-04	2.6556E+21	3.9725E+19
Cs-134	2.1403E+06	1.6542E+00	7.4342E+24	1.1259E+20
Cs-136	5.9495E+05	8.1177E-03	3.5945E+22	3.1316E+19
Cs-137	1.3342E+06	1.5338E+01	6.7424E+25	7.0184E+19
Ba-139	4.1003E+05	2.5067E-05	1.0860E+20	9.7765E+18
Ba-140	5.7479E+05	7.8514E-03	3.3773E+22	1.3019E+19
La-140	7.5642E+03	1.3609E-05	5.8539E+19	1.4656E+17
La-141	4.7805E+03	8.4531E-07	3.6103E+18	1.1021E+17
La-142	3.8041E+03	2.6574E-07	1.1270E+18	9.0203E+16
Ce-141	1.3205E+04	4.6344E-04	1.9794E+21	2.9902E+17
Ce-143	1.2812E+04	1.9293E-05	8.1247E+19	2.9073E+17
Ce-144	1.0571E+04	3.3145E-03	1.3861E+22	2.3938E+17
Pr-143	5.0515E+03	7.5017E-05	3.1592E+20	1.1433E+17
Nd-147	2.1572E+03	2.6666E-05	1.0924E+20	4.8861E+16
Np-239	1.5722E+05	6.7769E-04	1.7076E+21	3.5645E+18
Pu-238	5.2803E+01	3.0843E-03	7.8043E+21	1.1957E+15
Pu-239	3.5284E+00	5.6766E-02	1.4304E+23	7.9895E+13
Pu-240	3.7867E+00	1.6618E-02	4.1699E+22	8.5747E+13
Pu-241	1.8175E+03	1.7643E-02	4.4088E+22	4.1156E+16
Am-241	1.1206E+00	3.2651E-04	8.1588E+20	2.5375E+13
Cm-242	2.8079E+02	8.4721E-05	2.1083E+20	6.3584E+15
Cm-244	3.0599E+01	3.7823E-04	9.3349E+20	6.9289E+14

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 0.7500	Atmosphere	Sump	
Noble gases (atoms)	6.0652E+21	0.0000E+00	
Elemental I (atoms)	2.0274E+22	0.0000E+00	
Organic I (atoms)	6.2702E+20	0.0000E+00	
Aerosols (kg)	1.7498E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.0839E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.8798E-03
Total I (Ci)			6.4020E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 0.7500	Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.2579E+12

Elemental I (atoms)	0.0000E+00	2.9057E+13
Organic I (atoms)	0.0000E+00	8.9868E+11
Aerosols (kg)	0.0000E+00	2.6087E-08

Detailed model information at time (H) = 1.0000

EAB Doses:

Time (h) = 1.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.1609E-07	5.5411E-05	3.1672E-06
Accumulated dose (rem)	2.9752E-06	6.6085E-04	3.3232E-05

LPZ Doses:

Time (h) = 1.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.1560E-07	5.5287E-05	3.1601E-06
Accumulated dose (rem)	8.2054E-07	1.9212E-04	1.0051E-05

Control Room Doses:

Time (h) = 1.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	7.6328E-09	3.9620E-05	1.7348E-06
Accumulated dose (rem)	4.7078E-08	2.1507E-04	9.3553E-06

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 1.0000	Ci	kg	Atoms	Decay
Co-58	4.4934E+02	1.4131E-05	1.4672E+20	1.7658E+16
Co-60	5.3801E+02	4.7595E-04	4.7771E+21	2.1141E+16
Rb-86	2.6787E+04	3.2921E-04	2.3053E+21	1.8179E+18
Sr-89	6.5771E+05	2.2639E-02	1.5319E+23	2.5847E+19
Sr-90	7.4746E+04	5.4797E-01	3.6666E+24	2.9371E+18
Sr-91	8.3109E+05	2.2927E-04	1.5172E+21	3.3098E+19
Sr-92	7.3157E+05	5.8203E-05	3.8098E+20	3.0144E+19
Y-90	1.0054E+03	1.8480E-06	1.2365E+19	3.4616E+16
Y-91	8.1585E+03	3.3267E-04	2.2016E+21	3.1955E+17
Y-92	5.1944E+04	5.3982E-06	3.5336E+19	1.1844E+18
Y-93	9.9391E+03	2.9791E-06	1.9291E+19	3.9551E+17
Zr-95	1.0553E+04	4.9124E-04	3.1140E+21	4.1472E+17
Zr-97	1.0513E+04	5.4994E-06	3.4143E+19	4.1623E+17
Nb-95	1.0612E+04	2.7139E-04	1.7203E+21	4.1698E+17
Mo-99	1.4773E+05	3.0803E-04	1.8737E+21	5.8162E+18
Tc-99m	1.3081E+05	2.4877E-05	1.5133E+20	5.1142E+18
Ru-103	1.2345E+05	3.8250E-03	2.2364E+22	4.8514E+18
Ru-105	7.3138E+04	1.0880E-05	6.2403E+19	2.9580E+18
Ru-106	5.0858E+04	1.5202E-02	8.6364E+22	1.9984E+18
Rh-105	8.0876E+04	9.5818E-05	5.4955E+20	3.1763E+18
Sb-127	1.6901E+05	6.3288E-04	3.0010E+21	6.6503E+18
Sb-129	4.3262E+05	7.6932E-05	3.5915E+20	1.7511E+19
Te-127	1.6843E+05	6.3820E-05	3.0262E+20	6.6014E+18
Te-127m	2.2669E+04	2.4033E-03	1.1396E+22	8.9075E+17
Te-129	4.6299E+05	2.2108E-05	1.0321E+20	1.8087E+19
Te-129m	7.4524E+04	2.4738E-03	1.1549E+22	2.9281E+18
Te-131m	2.2230E+05	2.7878E-04	1.2816E+21	8.7722E+18
Te-132	2.2269E+06	7.3352E-03	3.3465E+22	8.7647E+19
I-131	1.2597E+07	1.0161E-01	4.6711E+23	8.1042E+20
I-132	1.6021E+07	1.5521E-03	7.0811E+21	1.0699E+21
I-133	2.5279E+07	2.2315E-02	1.0104E+23	1.6422E+21
I-134	1.3153E+07	4.9305E-04	2.2158E+21	1.1126E+21
I-135	2.1992E+07	6.2622E-03	2.7934E+22	1.4626E+21
Xe-133	3.0653E+05	1.6376E-03	7.4150E+21	1.1586E+19
Xe-135	3.2480E+06	1.2718E-03	5.6735E+21	1.2454E+20
Cs-134	2.9963E+06	2.3159E+00	1.0408E+25	2.0325E+20
Cs-136	8.3248E+05	1.1359E-02	5.0296E+22	5.6509E+19
Cs-137	1.8678E+06	2.1474E+01	9.4393E+25	1.2670E+20
Ba-139	7.2317E+05	4.4212E-05	1.9155E+20	3.1228E+19
Ba-140	1.1489E+06	1.5694E-02	6.7508E+22	4.5165E+19
La-140	1.7563E+04	3.1599E-05	1.3592E+20	5.7077E+17
La-141	9.1487E+03	1.6177E-06	6.9092E+18	3.7141E+17
La-142	6.7993E+03	4.7498E-07	2.0143E+18	2.9063E+17
Ce-141	2.6408E+04	9.2681E-04	3.9584E+21	1.0377E+18
Ce-143	2.5490E+04	3.8383E-05	1.6164E+20	1.0055E+18
Ce-144	2.1142E+04	6.6287E-03	2.7722E+22	8.3078E+17
Pr-143	1.0107E+04	1.5010E-04	6.3209E+20	3.9691E+17
Nd-147	4.3116E+03	5.3297E-05	2.1834E+20	1.6950E+17

Np-239	3.1348E+05	1.3512E-03	3.4047E+21	1.2345E+19
Pu-238	1.0561E+02	6.1687E-03	1.5609E+22	4.1497E+15
Pu-239	7.0570E+00	1.1354E-01	2.8608E+23	2.7729E+14
Pu-240	7.5734E+00	3.3236E-02	8.3397E+22	2.9759E+14
Pu-241	3.6350E+03	3.5287E-02	8.8175E+22	1.4283E+17
Am-241	2.2414E+00	6.5305E-04	1.6318E+21	8.8068E+13
Cm-242	5.6156E+02	1.6944E-04	4.2164E+20	2.2067E+16
Cm-244	6.1199E+01	7.5645E-04	1.8670E+21	2.4047E+15

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 1.0000	Atmosphere	Sump	
Noble gases (atoms)	1.3089E+22	0.0000E+00	
Elemental I (atoms)	2.9361E+22	0.0000E+00	
Organic I (atoms)	9.0807E+20	0.0000E+00	
Aerosols (kg)	2.4747E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.4685E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.5978E-03
Total I (Ci)			8.9042E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 1.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.4211E+13
Elemental I (atoms)	0.0000E+00	5.5927E+13
Organic I (atoms)	0.0000E+00	1.7297E+12
Aerosols (kg)	0.0000E+00	4.8930E-08

Detailed model information at time (H) = 1.2500

EAB Doses:

Time (h) = 1.2500	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.7912E-07	7.6038E-05	4.4920E-06
Accumulated dose (rem)	3.2543E-06	7.3689E-04	3.7724E-05

LPZ Doses:

Time (h) = 1.2500	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.7849E-07	7.5867E-05	4.4819E-06
Accumulated dose (rem)	1.0990E-06	2.6799E-04	1.4533E-05

Control Room Doses:

Time (h) = 1.2500	Whole Body	Thyroid	TEDE
Delta dose (rem)	5.2043E-09	2.9011E-05	1.2958E-06
Accumulated dose (rem)	5.2282E-08	2.4408E-04	1.0651E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 1.2500	Ci	kg	Atoms	Decay
Co-58	6.7395E+02	2.1195E-05	2.2006E+20	3.7707E+16
Co-60	8.0701E+02	7.1393E-04	7.1656E+21	4.5148E+16
Rb-86	3.4427E+04	4.2310E-04	2.9628E+21	2.8830E+18
Sr-89	9.8643E+05	3.3954E-02	2.2975E+23	5.5193E+19
Sr-90	1.1212E+05	8.2195E-01	5.4999E+24	6.2724E+18
Sr-91	1.2241E+06	3.3768E-04	2.2347E+21	6.9831E+19
Sr-92	1.0294E+06	8.1896E-05	5.3608E+20	6.1718E+19
Y-90	1.6576E+03	3.0467E-06	2.0387E+19	7.9445E+16
Y-91	1.2268E+04	5.0025E-04	3.3105E+21	6.8356E+17
Y-92	9.9670E+04	1.0358E-05	6.7803E+19	3.4374E+18
Y-93	1.4655E+04	4.3926E-06	2.8444E+19	8.3505E+17
Zr-95	1.5828E+04	7.3678E-04	4.6705E+21	8.8560E+17
Zr-97	1.5609E+04	8.1650E-06	5.0691E+19	8.8283E+17
Nb-95	1.5918E+04	4.0708E-04	2.5805E+21	8.9049E+17
Mo-99	2.2102E+05	4.6083E-04	2.8032E+21	1.2399E+19
Tc-99m	1.9620E+05	3.7313E-05	2.2697E+20	1.0921E+19
Ru-103	1.8514E+05	5.7365E-03	3.3540E+22	1.0359E+19
Ru-105	1.0551E+05	1.5696E-05	9.0021E+19	6.1557E+18
Ru-106	7.6286E+04	2.2802E-02	1.2954E+23	4.2678E+18
Rh-105	1.2125E+05	1.4365E-04	8.2388E+20	6.7813E+18
Sb-127	2.5304E+05	9.4754E-04	4.4931E+21	1.4185E+19
Sb-129	6.2342E+05	1.1086E-04	5.1754E+20	3.6415E+19
Te-127	2.5244E+05	9.5654E-05	4.5358E+20	1.4090E+19
Te-127m	3.4005E+04	3.6051E-03	1.7095E+22	1.9023E+18

Te-129	6.7824E+05	3.2386E-05	1.5119E+20	3.8049E+19
Te-129m	1.1179E+05	3.7109E-03	1.7324E+22	6.2534E+18
Te-131m	3.3153E+05	4.1576E-04	1.9113E+21	1.8662E+19
Te-132	3.3330E+06	1.0978E-02	5.0086E+22	1.8690E+20
I-131	1.6520E+07	1.3325E-01	6.1257E+23	1.3188E+21
I-132	2.0489E+07	1.9850E-03	9.0558E+21	1.7111E+21
I-133	3.2903E+07	2.9046E-02	1.3152E+23	2.6585E+21
I-134	1.4167E+07	5.3106E-04	2.3866E+21	1.5929E+21
I-135	2.8117E+07	8.0064E-03	3.5715E+22	2.3386E+21
Xe-133	5.2204E+05	2.7889E-03	1.2628E+22	2.6051E+19
Xe-135	5.4340E+06	2.1279E-03	9.4921E+21	2.7637E+20
Cs-134	3.8524E+06	2.9775E+00	1.3381E+25	3.2241E+20
Cs-136	1.0697E+06	1.4596E-02	6.4631E+22	8.9607E+19
Cs-137	2.4015E+06	2.7609E+01	1.2136E+26	2.0098E+20
Ba-139	9.5660E+05	5.8483E-05	2.5338E+20	6.1461E+19
Ba-140	1.7224E+06	2.3528E-02	1.0120E+23	9.6417E+19
La-140	2.9985E+04	5.3946E-05	2.3205E+20	1.3535E+18
La-141	1.3131E+04	2.3219E-06	9.9168E+18	7.7035E+17
La-142	9.1147E+03	6.3672E-07	2.7003E+18	5.7683E+17
Ce-141	3.9609E+04	1.3901E-03	5.9371E+21	2.2161E+18
Ce-143	3.8034E+04	5.7273E-05	2.4119E+20	2.1397E+18
Ce-144	3.1713E+04	9.9429E-03	4.1581E+22	1.7742E+18
Pr-143	1.5167E+04	2.2523E-04	9.4852E+20	8.4788E+17
Nd-147	6.4632E+03	7.9892E-05	3.2729E+20	3.6183E+17
Np-239	4.6877E+05	2.0207E-03	5.0915E+21	2.6311E+19
Pu-238	1.5841E+02	9.2530E-03	2.3413E+22	8.8620E+15
Pu-239	1.0586E+01	1.7031E-01	4.2914E+23	5.9219E+14
Pu-240	1.1360E+01	4.9854E-02	1.2510E+23	6.3553E+14
Pu-241	5.4525E+03	5.2930E-02	1.3226E+23	3.0503E+17
Am-241	3.3622E+00	9.7962E-04	2.4479E+21	1.8808E+14
Cm-242	8.4230E+02	2.5414E-04	6.3243E+20	4.7124E+16
Cm-244	9.1798E+01	1.1347E-03	2.8005E+21	5.1356E+15

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 1.2500	Atmosphere	Sump	
Noble gases (atoms)	2.2120E+22	0.0000E+00	
Elemental I (atoms)	3.8375E+22	0.0000E+00	
Organic I (atoms)	1.1869E+21	0.0000E+00	
Aerosols (kg)	3.1996E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.8426E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.2906E-03
Total I (Ci)			1.1220E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 1.2500	Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.2783E+13
Elemental I (atoms)	0.0000E+00	9.2592E+13
Organic I (atoms)	0.0000E+00	2.8637E+12
Aerosols (kg)	0.0000E+00	7.9613E-08

Detailed model information at time (H) = 1.5000

EAB Doses:

Time (h) = 1.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.3545E-07	9.6514E-05	5.8042E-06
Accumulated dose (rem)	3.5898E-06	8.3341E-04	4.3529E-05

LPZ Doses:

Time (h) = 1.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.3470E-07	9.6297E-05	5.7911E-06
Accumulated dose (rem)	1.4337E-06	3.6429E-04	2.0324E-05

Control Room Doses:

Time (h) = 1.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.8146E-09	2.2601E-05	1.0450E-06
Accumulated dose (rem)	5.6096E-08	2.6668E-04	1.1696E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 1.5000	Ci	kg	Atoms	Decay

Co-58	8.9850E+02	2.8257E-05	2.9339E+20	6.5235E+16
Co-60	1.0760E+03	9.5190E-04	9.5541E+21	7.8113E+16
Rb-86	4.2061E+04	5.1692E-04	3.6197E+21	4.2024E+18
Sr-89	1.3151E+06	4.5265E-02	3.0628E+23	9.5484E+19
Sr-90	1.4949E+05	1.0959E+00	7.3332E+24	1.0852E+19
Sr-91	1.6026E+06	4.4211E-04	2.9257E+21	1.1936E+20
Sr-92	1.2875E+06	1.0243E-04	6.7049E+20	1.0241E+20
Y-90	2.4091E+03	4.4280E-06	2.9629E+19	1.4704E+17
Y-91	1.6397E+04	6.6860E-04	4.4246E+21	1.1846E+18
Y-92	1.5825E+05	1.6446E-05	1.0765E+20	7.3850E+18
Y-93	1.9208E+04	5.7571E-06	3.7280E+19	1.4284E+18
Zr-95	2.1102E+04	9.8227E-04	6.2267E+21	1.5321E+18
Zr-97	2.0599E+04	1.0776E-05	6.6899E+19	1.5171E+18
Nb-95	2.1224E+04	5.4277E-04	3.4407E+21	1.5407E+18
Mo-99	2.9392E+05	6.1282E-04	3.7278E+21	2.1415E+19
Tc-99m	2.6156E+05	4.9744E-05	3.0259E+20	1.8894E+19
Ru-103	2.4681E+05	7.6472E-03	4.4711E+22	1.7921E+19
Ru-105	1.3529E+05	2.0127E-05	1.1543E+20	1.0380E+19
Ru-106	1.0171E+05	3.0402E-02	1.7272E+23	7.3839E+18
Rh-105	1.6155E+05	1.9139E-04	1.0977E+21	1.1729E+19
Sb-127	3.3676E+05	1.2610E-03	5.9796E+21	2.4511E+19
Sb-129	7.9854E+05	1.4200E-04	6.6292E+20	6.1359E+19
Te-127	3.3632E+05	1.2744E-04	6.0429E+20	2.4365E+19
Te-127m	4.5341E+04	4.8069E-03	2.2793E+22	3.2913E+18
Te-129	8.8201E+05	4.2116E-05	1.9661E+20	6.4807E+19
Te-129m	1.4906E+05	4.9481E-03	2.3099E+22	1.0820E+19
Te-131m	4.3950E+05	5.5116E-04	2.5337E+21	3.2164E+19
Te-132	4.4341E+06	1.4606E-02	6.6634E+22	3.2289E+20
I-131	2.0436E+07	1.6484E-01	7.5778E+23	1.9577E+21
I-132	2.4709E+07	2.3938E-03	1.0921E+22	2.4964E+21
I-133	4.0399E+07	3.5663E-02	1.6148E+23	3.9261E+21
I-134	1.4394E+07	5.3957E-04	2.4249E+21	2.0890E+21
I-135	3.3911E+07	9.6562E-03	4.3075E+22	3.4120E+21
Xe-133	7.8683E+05	4.2036E-03	1.9033E+22	4.8691E+19
Xe-135	8.0461E+06	3.1507E-03	1.4055E+22	5.0985E+20
Cs-134	4.7084E+06	3.6391E+00	1.6355E+25	4.7008E+20
Cs-136	1.3067E+06	1.7829E-02	7.8949E+22	1.3060E+20
Cs-137	2.9352E+06	3.3745E+01	1.4833E+26	2.9303E+20
Ba-139	1.1248E+06	6.8765E-05	2.9792E+20	9.8099E+19
Ba-140	2.2953E+06	3.1352E-02	1.3486E+23	1.6675E+20
La-140	4.4814E+04	8.0626E-05	3.4682E+20	2.5752E+18
La-141	1.6753E+04	2.9623E-06	1.2652E+19	1.2947E+18
La-142	1.0861E+04	7.5870E-07	3.2176E+18	9.2830E+17
Ce-141	5.2806E+04	1.8533E-03	7.9154E+21	3.8339E+18
Ce-143	5.0447E+04	7.5965E-05	3.1991E+20	3.6892E+18
Ce-144	4.2283E+04	1.3257E-02	5.5441E+22	3.0696E+18
Pr-143	2.0231E+04	3.0043E-04	1.2652E+21	1.4674E+18
Nd-147	8.6119E+03	1.0645E-04	4.3611E+20	6.2575E+17
Np-239	6.2312E+05	2.6860E-03	6.7679E+21	4.5429E+19
Pu-238	2.1121E+02	1.2337E-02	3.1217E+22	1.5333E+16
Pu-239	1.4115E+01	2.2709E-01	5.7220E+23	1.0246E+15
Pu-240	1.5147E+01	6.6473E-02	1.6679E+23	1.0996E+15
Pu-241	7.2700E+03	7.0574E-02	1.7635E+23	5.2776E+17
Am-241	4.4832E+00	1.3062E-03	3.2640E+21	3.2542E+14
Cm-242	1.1230E+03	3.3884E-04	8.4320E+20	8.1529E+16
Cm-244	1.2240E+02	1.5129E-03	3.7340E+21	8.8853E+15

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 1.5000	Atmosphere	Sump	
Noble gases (atoms)	3.3088E+22	0.0000E+00	
Elemental I (atoms)	4.7321E+22	0.0000E+00	
Organic I (atoms)	1.4635E+21	0.0000E+00	
Aerosols (kg)	3.9244E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.2065E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.9603E-03
Total I (Ci)			1.3385E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 1.5000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	6.2113E+13
Elemental I (atoms)	0.0000E+00	1.3897E+14
Organic I (atoms)	0.0000E+00	4.2982E+12
Aerosols (kg)	0.0000E+00	1.1814E-07

Detailed model information at time (H) = 1.7500

EAB Doses:

Time (h) = 1.7500	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.8660E-07	1.1684E-04	7.1056E-06
Accumulated dose (rem)	3.9764E-06	9.5025E-04	5.0634E-05

LPZ Doses:

Time (h) = 1.7500	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.8573E-07	1.1658E-04	7.0897E-06
Accumulated dose (rem)	1.8195E-06	4.8087E-04	2.7414E-05

Control Room Doses:

Time (h) = 1.7500	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.0537E-09	1.9009E-05	9.2068E-07
Accumulated dose (rem)	5.9150E-08	2.8569E-04	1.2617E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 1.7500	Ci	kg	Atoms	Decay
Co-58	1.1230E+03	3.5317E-05	3.6670E+20	1.0024E+17
Co-60	1.3450E+03	1.1899E-03	1.1943E+22	1.2004E+17
Rb-86	4.9689E+04	6.1067E-04	4.2762E+21	5.7758E+18
Sr-89	1.6436E+06	5.6573E-02	3.8280E+23	1.4672E+20
Sr-90	1.8687E+05	1.3699E+00	9.1664E+24	1.6677E+19
Sr-91	1.9671E+06	5.4264E-04	3.5911E+21	1.8122E+20
Sr-92	1.5097E+06	1.2011E-04	7.8620E+20	1.5095E+20
Y-90	3.2597E+03	5.9914E-06	4.0090E+19	2.4071E+17
Y-91	2.0544E+04	8.3770E-04	5.5436E+21	1.8234E+18
Y-92	2.2534E+05	2.3419E-05	1.5329E+20	1.3360E+19
Y-93	2.3601E+04	7.0740E-06	4.5807E+19	2.1702E+18
Zr-95	2.6374E+04	1.2277E-03	7.7825E+21	2.3542E+18
Zr-97	2.5487E+04	1.3332E-05	8.2771E+19	2.3154E+18
Nb-95	2.6530E+04	6.7846E-04	4.3008E+21	2.3676E+18
Mo-99	3.6644E+05	7.6402E-04	4.6475E+21	3.2851E+19
Tc-99m	3.2689E+05	6.2167E-05	3.7816E+20	2.9032E+19
Ru-103	3.0845E+05	9.5572E-03	5.5879E+22	2.7536E+19
Ru-105	1.6264E+05	2.4195E-05	1.3877E+20	1.5546E+19
Ru-106	1.2714E+05	3.8002E-02	2.1590E+23	1.1347E+19
Rh-105	2.0176E+05	2.3904E-04	1.3710E+21	1.8015E+19
Sb-127	4.2016E+05	1.5733E-03	7.4605E+21	3.7619E+19
Sb-129	9.5893E+05	1.7052E-04	7.9606E+20	9.1839E+19
Te-127	4.2006E+05	1.5917E-04	7.5474E+20	3.7422E+19
Te-127m	5.6678E+04	6.0087E-03	2.8492E+22	5.0579E+18
Te-129	1.0741E+06	5.1289E-05	2.3943E+20	9.7986E+19
Te-129m	1.8634E+05	6.1853E-03	2.8875E+22	1.6627E+19
Te-131m	5.4621E+05	6.8498E-04	3.1489E+21	4.9236E+19
Te-132	5.5304E+06	1.8217E-02	8.3108E+22	4.9545E+20
I-131	2.4346E+07	1.9638E-01	9.0275E+23	2.7269E+21
I-132	2.8700E+07	2.7804E-03	1.2685E+22	3.4178E+21
I-133	4.7769E+07	4.2168E-02	1.9094E+23	5.4409E+21
I-134	1.4084E+07	5.2795E-04	2.3727E+21	2.5797E+21
I-135	3.9386E+07	1.1215E-02	5.0029E+22	4.6719E+21
Xe-133	1.1003E+06	5.8783E-03	2.6616E+22	8.1137E+19
Xe-135	1.1054E+07	4.3284E-03	1.9308E+22	8.3858E+20
Cs-134	5.5645E+06	4.3008E+00	1.9328E+25	6.4625E+20
Cs-136	1.5435E+06	2.1060E-02	9.3252E+22	1.7948E+20
Cs-137	3.4688E+06	3.9880E+01	1.7530E+26	4.0286E+20
Ba-139	1.2399E+06	7.5801E-05	3.2841E+20	1.3921E+20
Ba-140	2.8674E+06	3.9168E-02	1.6848E+23	2.5615E+20
La-140	6.2040E+04	1.1162E-04	4.8012E+20	4.3159E+18
La-141	2.0038E+04	3.5431E-06	1.5133E+19	1.9328E+18
La-142	1.2133E+04	8.4755E-07	3.5944E+18	1.3279E+18
Ce-141	6.6002E+04	2.3164E-03	9.8933E+21	5.8912E+18
Ce-143	6.2728E+04	9.4459E-05	3.9779E+20	5.6493E+18
Ce-144	5.2852E+04	1.6571E-02	6.9299E+22	4.7169E+18
Pr-143	2.5298E+04	3.7569E-04	1.5821E+21	2.2555E+18
Nd-147	1.0758E+04	1.3298E-04	5.4477E+20	9.6116E+17
Np-239	7.7651E+05	3.3472E-03	8.4339E+21	6.9668E+19
Pu-238	2.6402E+02	1.5422E-02	3.9022E+22	2.3562E+16
Pu-239	1.7645E+01	2.8387E-01	7.1528E+23	1.5746E+15

Pu-240	1.8934E+01	8.3091E-02	2.0849E+23	1.6897E+15
Pu-241	9.0875E+03	8.8217E-02	2.2044E+23	8.1100E+17
Am-241	5.6043E+00	1.6329E-03	4.0802E+21	5.0010E+14
Cm-242	1.4037E+03	4.2353E-04	1.0540E+21	1.2528E+17
Cm-244	1.5300E+02	1.8911E-03	4.6675E+21	1.3654E+16

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 1.7500	Atmosphere	Sump	
Noble gases (atoms)	4.5925E+22	0.0000E+00	
Elemental I (atoms)	5.6201E+22	0.0000E+00	
Organic I (atoms)	1.7382E+21	0.0000E+00	
Aerosols (kg)	4.6492E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.5606E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.0609E-02
Total I (Ci)			1.5428E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 1.7500	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.0426E+14
Elemental I (atoms)	0.0000E+00	1.9500E+14
Organic I (atoms)	0.0000E+00	6.0310E+12
Aerosols (kg)	0.0000E+00	1.6450E-07

Detailed model information at time (H) = 2.0000

EAB Doses:

Time (h) = 2.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.3369E-07	1.3703E-04	8.3977E-06
Accumulated dose (rem)	4.4101E-06	1.0873E-03	5.9032E-05

LPZ Doses:

Time (h) = 2.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.3272E-07	1.3672E-04	8.3788E-06
Accumulated dose (rem)	2.2522E-06	6.1759E-04	3.5793E-05

Control Room Doses:

Time (h) = 2.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.6747E-09	1.7310E-05	8.8122E-07
Accumulated dose (rem)	6.1825E-08	3.0300E-04	1.3498E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 2.0000	Ci	kg	Atoms	Decay
Co-58	1.3475E+03	4.2376E-05	4.3999E+20	1.4272E+17
Co-60	1.6140E+03	1.4278E-03	1.4331E+22	1.7092E+17
Rb-86	5.7311E+04	7.0435E-04	4.9322E+21	7.6032E+18
Sr-89	1.9720E+06	6.7878E-02	4.5929E+23	2.0889E+20
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	2.3746E+19
Sr-91	2.3178E+06	6.3940E-04	4.2314E+21	2.5495E+20
Sr-92	1.6994E+06	1.3520E-04	8.8501E+20	2.0624E+20
Y-90	4.2090E+03	7.7363E-06	5.1766E+19	3.6373E+17
Y-91	2.4708E+04	1.0075E-03	6.6675E+21	2.6004E+18
Y-92	2.9890E+05	3.1064E-05	2.0334E+20	2.1621E+19
Y-93	2.7840E+04	8.3444E-06	5.4034E+19	3.0552E+18
Zr-95	3.1646E+04	1.4731E-03	9.3379E+21	3.3519E+18
Zr-97	3.0272E+04	1.5835E-05	9.8312E+19	3.2745E+18
Nb-95	3.1836E+04	8.1415E-04	5.1610E+21	3.3711E+18
Mo-99	4.3857E+05	9.1442E-04	5.5624E+21	4.6694E+19
Tc-99m	3.9216E+05	7.4579E-05	4.5366E+20	4.1334E+19
Ru-103	3.7007E+05	1.1467E-02	6.7042E+22	3.9203E+19
Ru-105	1.8770E+05	2.7923E-05	1.6015E+20	2.1578E+19
Ru-106	1.5256E+05	4.5601E-02	2.5907E+23	1.6156E+19
Rh-105	2.4186E+05	2.8655E-04	1.6435E+21	2.5638E+19
Sb-127	5.0325E+05	1.8845E-03	8.9358E+21	5.3498E+19
Sb-129	1.1055E+06	1.9658E-04	9.1772E+20	1.2738E+20
Te-127	5.0365E+05	1.9084E-04	9.0494E+20	5.3255E+19
Te-127m	6.8015E+04	7.2106E-03	3.4192E+22	7.2019E+18
Te-129	1.2545E+06	5.9903E-05	2.7965E+20	1.3720E+20
Te-129m	2.2361E+05	7.4226E-03	3.4651E+22	2.3676E+19
Te-131m	6.5167E+05	8.1724E-04	3.7569E+21	6.9838E+19

Te-132	6.6218E+06	2.1811E-02	9.9509E+22	7.0443E+20
I-131	2.8249E+07	2.2786E-01	1.0475E+24	3.6262E+21
I-132	3.2476E+07	3.1462E-03	1.4354E+22	4.4679E+21
I-133	5.5013E+07	4.8564E-02	2.1989E+23	7.1986E+21
I-134	1.3422E+07	5.0314E-04	2.2612E+21	3.0511E+21
I-135	4.4555E+07	1.2687E-02	5.6595E+22	6.1081E+21
Xe-133	1.4618E+06	7.8097E-03	3.5362E+22	1.2500E+20
Xe-135	1.4427E+07	5.6493E-03	2.5201E+22	1.2752E+21
Cs-134	6.4205E+06	4.9624E+00	2.2302E+25	8.5093E+20
Cs-136	1.7799E+06	2.4286E-02	1.0754E+23	2.3624E+20
Cs-137	4.0025E+06	4.6015E+01	2.0227E+26	5.3046E+20
Ba-139	1.3121E+06	8.0216E-05	3.4753E+20	1.8322E+20
Ba-140	3.4390E+06	4.6975E-02	2.0206E+23	3.6459E+20
La-140	8.1647E+04	1.4689E-04	6.3187E+20	6.6552E+18
La-141	2.3008E+04	4.0684E-06	1.7376E+19	2.6740E+18
La-142	1.3011E+04	9.0893E-07	3.8547E+18	1.7615E+18
Ce-141	7.9194E+04	2.7794E-03	1.1871E+22	8.3878E+18
Ce-143	7.4880E+04	1.1276E-04	4.7485E+20	8.0159E+18
Ce-144	6.3421E+04	1.9884E-02	8.3157E+22	6.7162E+18
Pr-143	3.0370E+04	4.5100E-04	1.8993E+21	3.2124E+18
Nd-147	1.2901E+04	1.5947E-04	6.5330E+20	1.3680E+18
Np-239	9.2896E+05	4.0043E-03	1.0090E+22	9.8997E+19
Pu-238	3.1682E+02	1.8506E-02	4.6826E+22	3.3549E+16
Pu-239	2.1174E+01	3.4066E-01	8.5837E+23	2.2420E+15
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	2.4059E+15
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	1.1548E+18
Am-241	6.7255E+00	1.9595E-03	4.8965E+21	7.1210E+14
Cm-242	1.6844E+03	5.0822E-04	1.2647E+21	1.7838E+17
Cm-244	1.8360E+02	2.2693E-03	5.6009E+21	1.9442E+16

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 2.0000	Atmosphere	Sump	
Noble gases (atoms)	6.0562E+22	0.0000E+00	
Elemental I (atoms)	6.5018E+22	0.0000E+00	
Organic I (atoms)	2.0109E+21	0.0000E+00	
Aerosols (kg)	5.3740E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.9051E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.2237E-02
Total I (Ci)			1.7372E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 2.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.6122E+14
Elemental I (atoms)	0.0000E+00	2.6060E+14
Organic I (atoms)	0.0000E+00	8.0599E+12
Aerosols (kg)	0.0000E+00	2.1870E-07

Detailed model information at time (H) = 2.5000

EAB Doses:

Time (h) = 2.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	8.6749E-07	2.9309E-04	1.7996E-05
Accumulated dose (rem)	5.2776E-06	1.3804E-03	7.7028E-05

LPZ Doses:

Time (h) = 2.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.8447E-07	1.2989E-04	7.9758E-06
Accumulated dose (rem)	2.6366E-06	7.4749E-04	4.3768E-05

Control Room Doses:

Time (h) = 2.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.4137E-09	2.3420E-05	1.2220E-06
Accumulated dose (rem)	6.5239E-08	3.2642E-04	1.4720E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 2.5000	Ci	kg	Atoms	Decay
Co-58	1.3472E+03	4.2368E-05	4.3990E+20	2.3245E+17
Co-60	1.6140E+03	1.4278E-03	1.4331E+22	2.7841E+17
Rb-86	5.7267E+04	7.0380E-04	4.9284E+21	1.1419E+19

Sr-89	1.9714E+06	6.7859E-02	4.5916E+23	3.4020E+20
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	3.8680E+19
Sr-91	2.2348E+06	6.1650E-04	4.0798E+21	4.0653E+20
Sr-92	1.4954E+06	1.1897E-04	7.7876E+20	3.1248E+20
Y-90	5.3980E+03	9.9216E-06	6.6388E+19	6.7559E+17
Y-91	2.4938E+04	1.0169E-03	6.7295E+21	4.2521E+18
Y-92	4.2111E+05	4.3764E-05	2.8647E+20	4.4728E+19
Y-93	2.6901E+04	8.0629E-06	5.2211E+19	4.8779E+18
Zr-95	3.1639E+04	1.4727E-03	9.3358E+21	5.4593E+18
Zr-97	2.9657E+04	1.5514E-05	9.6316E+19	5.2701E+18
Nb-95	3.1836E+04	8.1415E-04	5.1609E+21	5.4913E+18
Mo-99	4.3627E+05	9.0963E-04	5.5333E+21	7.5827E+19
Tc-99m	3.9188E+05	7.4526E-05	4.5334E+20	6.7295E+19
Ru-103	3.6994E+05	1.1462E-02	6.7017E+22	6.3845E+19
Ru-105	1.7361E+05	2.5826E-05	1.4812E+20	3.3603E+19
Ru-106	1.5256E+05	4.5599E-02	2.5906E+23	2.6316E+19
Rh-105	2.4127E+05	2.8584E-04	1.6394E+21	4.1716E+19
Sb-127	5.0136E+05	1.8774E-03	8.9023E+21	8.6951E+19
Sb-129	1.0202E+06	1.8143E-04	8.4697E+20	1.9813E+20
Te-127	5.0280E+05	1.9052E-04	9.0341E+20	8.6652E+19
Te-127m	6.8017E+04	7.2109E-03	3.4193E+22	1.1732E+19
Te-129	1.1864E+06	5.6650E-05	2.6446E+20	2.1654E+20
Te-129m	2.2361E+05	7.4227E-03	3.4652E+22	3.8568E+19
Te-131m	6.4419E+05	8.0785E-04	3.7137E+21	1.1299E+20
Te-132	6.5925E+06	2.1715E-02	9.9069E+22	1.1445E+21
I-131	2.8199E+07	2.2746E-01	1.0456E+24	5.5059E+21
I-132	2.8871E+07	2.7970E-03	1.2761E+22	6.5011E+21
I-133	5.4104E+07	4.7761E-02	2.1626E+23	1.0832E+22
I-134	9.0392E+06	3.3884E-04	1.5228E+21	3.7894E+21
I-135	4.2280E+07	1.2039E-02	5.3705E+22	8.9990E+21
Xe-133	1.6033E+06	8.5657E-03	3.8785E+22	2.2611E+20
Xe-135	1.5272E+07	5.9805E-03	2.6678E+22	2.2553E+21
Cs-134	6.4203E+06	4.9623E+00	2.2301E+25	1.2785E+21
Cs-136	1.7780E+06	2.4259E-02	1.0742E+23	3.5472E+20
Cs-137	4.0025E+06	4.6015E+01	2.0227E+26	7.9702E+20
Ba-139	1.0204E+06	6.2382E-05	2.7027E+20	2.6048E+20
Ba-140	3.4351E+06	4.6922E-02	2.0184E+23	5.9350E+20
La-140	1.1042E+05	1.9867E-04	8.5457E+20	1.2856E+19
La-141	2.1066E+04	3.7250E-06	1.5909E+19	4.1407E+18
La-142	1.0392E+04	7.2594E-07	3.0787E+18	2.5375E+18
Ce-141	7.9169E+04	2.7785E-03	1.1867E+22	1.3661E+19
Ce-143	7.4097E+04	1.1158E-04	4.6989E+20	1.2977E+19
Ce-144	6.3417E+04	1.9883E-02	8.3152E+22	1.0940E+19
Pr-143	3.0416E+04	4.5169E-04	1.9022E+21	5.2360E+18
Nd-147	1.2884E+04	1.5926E-04	6.5244E+20	2.2266E+18
Np-239	9.2329E+05	3.9798E-03	1.0028E+22	1.6068E+20
Pu-238	3.1682E+02	1.8506E-02	4.6826E+22	5.4649E+16
Pu-239	2.1176E+01	3.4068E-01	8.5843E+23	3.6523E+15
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	3.9191E+15
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	1.8810E+18
Am-241	6.7265E+00	1.9598E-03	4.8973E+21	1.1600E+15
Cm-242	1.6842E+03	5.0817E-04	1.2646E+21	2.9056E+17
Cm-244	1.8360E+02	2.2693E-03	5.6009E+21	3.1669E+16

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 2.5000	Atmosphere	Sump	
Noble gases (atoms)	6.5463E+22	0.0000E+00	
Elemental I (atoms)	6.4499E+22	0.0000E+00	
Organic I (atoms)	1.9948E+21	0.0000E+00	
Aerosols (kg)	5.3738E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.8305E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.2062E-02
Total I (Ci)			1.6249E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 2.5000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.9650E+14
Elemental I (atoms)	0.0000E+00	4.0078E+14
Organic I (atoms)	0.0000E+00	1.2395E+13
Aerosols (kg)	0.0000E+00	3.3493E-07

Detailed model information at time (H) = 3.0000

EAB Doses:

Time (h) = 3.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	7.8967E-07	2.9095E-04	1.7838E-05
Accumulated dose (rem)	6.0672E-06	1.6713E-03	9.4866E-05

LPZ Doses:

Time (h) = 3.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.4998E-07	1.2895E-04	7.9057E-06
Accumulated dose (rem)	2.9866E-06	8.7643E-04	5.1674E-05

Control Room Doses:

Time (h) = 3.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.4158E-09	1.0620E-05	5.5523E-07
Accumulated dose (rem)	6.6654E-08	3.3704E-04	1.5275E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 3.0000	Ci	kg	Atoms	Decay
Co-58	1.3469E+03	4.2359E-05	4.3981E+20	3.2217E+17
Co-60	1.6140E+03	1.4278E-03	1.4331E+22	3.8590E+17
Rb-86	5.7222E+04	7.0326E-04	4.9246E+21	1.5231E+19
Sr-89	1.9709E+06	6.7839E-02	4.5903E+23	4.7148E+20
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	5.3614E+19
Sr-91	2.1547E+06	5.9441E-04	3.9337E+21	5.5269E+20
Sr-92	1.3159E+06	1.0469E-04	6.8528E+20	4.0597E+20
Y-90	6.5805E+03	1.2095E-05	8.0932E+19	1.0664E+18
Y-91	2.5159E+04	1.0259E-03	6.7892E+21	5.9188E+18
Y-92	5.1391E+05	5.3408E-05	3.4960E+20	7.5091E+19
Y-93	2.5993E+04	7.7910E-06	5.0450E+19	6.6391E+18
Zr-95	3.1632E+04	1.4724E-03	9.3337E+21	7.5661E+18
Zr-97	2.9055E+04	1.5199E-05	9.4361E+19	7.2252E+18
Nb-95	3.1835E+04	8.1414E-04	5.1609E+21	7.6115E+18
Mo-99	4.3399E+05	9.0487E-04	5.5043E+21	1.0481E+20
Tc-99m	3.9150E+05	7.4454E-05	4.5290E+20	9.3234E+19
Ru-103	3.6980E+05	1.1458E-02	6.6993E+22	8.8479E+19
Ru-105	1.6057E+05	2.3887E-05	1.3700E+20	4.4726E+19
Ru-106	1.5255E+05	4.5598E-02	2.5905E+23	3.6477E+19
Rh-105	2.4054E+05	2.8499E-04	1.6345E+21	5.7750E+19
Sb-127	4.9949E+05	1.8704E-03	8.8690E+21	1.2028E+20
Sb-129	9.4159E+05	1.6744E-04	7.8167E+20	2.6342E+20
Te-127	5.0193E+05	1.9019E-04	9.0184E+20	1.1999E+20
Te-127m	6.8020E+04	7.2112E-03	3.4194E+22	1.6262E+19
Te-129	1.1191E+06	5.3438E-05	2.4947E+20	2.9150E+20
Te-129m	2.2361E+05	7.4226E-03	3.4651E+22	5.3460E+19
Te-131m	6.3679E+05	7.9857E-04	3.6711E+21	1.5565E+20
Te-132	6.5634E+06	2.1619E-02	9.8631E+22	1.5826E+21
I-131	2.8149E+07	2.2706E-01	1.0438E+24	7.3823E+21
I-132	2.5766E+07	2.4962E-03	1.1388E+22	8.3113E+21
I-133	5.3210E+07	4.6972E-02	2.1268E+23	1.4406E+22
I-134	6.0875E+06	2.2820E-04	1.0255E+21	4.2867E+21
I-135	4.0120E+07	1.1424E-02	5.0961E+22	1.1742E+22
Xe-133	1.7421E+06	9.3069E-03	4.2141E+22	3.3657E+20
Xe-135	1.6016E+07	6.2715E-03	2.7976E+22	3.2889E+21
Cs-134	6.4202E+06	4.9622E+00	2.2301E+25	1.7061E+21
Cs-136	1.7760E+06	2.4233E-02	1.0730E+23	4.7307E+20
Cs-137	4.0025E+06	4.6015E+01	2.0227E+26	1.0636E+21
Ba-139	7.9352E+05	4.8513E-05	2.1018E+20	3.2057E+20
Ba-140	3.4312E+06	4.6869E-02	2.0161E+23	8.2215E+20
La-140	1.3892E+05	2.4994E-04	1.0751E+21	2.0964E+19
La-141	1.9288E+04	3.4105E-06	1.4566E+19	5.4836E+18
La-142	8.2997E+03	5.7979E-07	2.4588E+18	3.1574E+18
Ce-141	7.9142E+04	2.7776E-03	1.1863E+22	1.8933E+19
Ce-143	7.3323E+04	1.1041E-04	4.6498E+20	1.7886E+19
Ce-144	6.3414E+04	1.9882E-02	8.3148E+22	1.5163E+19
Pr-143	3.0463E+04	4.5238E-04	1.9051E+21	7.2628E+18
Nd-147	1.2867E+04	1.5905E-04	6.5158E+20	3.0841E+18
Np-239	9.1764E+05	3.9555E-03	9.9668E+21	2.2198E+20
Pu-238	3.1682E+02	1.8506E-02	4.6826E+22	7.5750E+16
Pu-239	2.1177E+01	3.4071E-01	8.5849E+23	5.0626E+15
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	5.4323E+15
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	2.6073E+18
Am-241	6.7275E+00	1.9601E-03	4.8980E+21	1.6081E+15

Cm-242	1.6841E+03	5.0813E-04	1.2645E+21	4.0272E+17
Cm-244	1.8359E+02	2.2693E-03	5.6009E+21	4.3897E+16

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 3.0000	Atmosphere	Sump	
Noble gases (atoms)	7.0117E+22	0.0000E+00	
Elemental I (atoms)	6.4013E+22	0.0000E+00	
Organic I (atoms)	1.9798E+21	0.0000E+00	
Aerosols (kg)	5.3735E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.7586E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1901E-02
Total I (Ci)			1.5333E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 3.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.4216E+14
Elemental I (atoms)	0.0000E+00	5.3986E+14
Organic I (atoms)	0.0000E+00	1.6697E+13
Aerosols (kg)	0.0000E+00	4.5116E-07

Detailed model information at time (H) = 3.5000

EAB Doses:

Time (h) = 3.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	7.2773E-07	2.8889E-04	1.7700E-05
Accumulated dose (rem)	6.7950E-06	1.9602E-03	1.1257E-04

LPZ Doses:

Time (h) = 3.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.2253E-07	1.2804E-04	7.8444E-06
Accumulated dose (rem)	3.3091E-06	1.0045E-03	5.9518E-05

Control Room Doses:

Time (h) = 3.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	5.9516E-10	4.8203E-06	2.5254E-07
Accumulated dose (rem)	6.7250E-08	3.4186E-04	1.5528E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 3.5000	Ci	kg	Atoms	Decay
Co-58	1.3467E+03	4.2350E-05	4.3972E+20	4.1186E+17
Co-60	1.6140E+03	1.4278E-03	1.4331E+22	4.9339E+17
Rb-86	5.7178E+04	7.0272E-04	4.9208E+21	1.9041E+19
Sr-89	1.9703E+06	6.7820E-02	4.5890E+23	6.0272E+20
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	6.8548E+19
Sr-91	2.0775E+06	5.7312E-04	3.7927E+21	6.9361E+20
Sr-92	1.1579E+06	9.2122E-05	6.0301E+20	4.8823E+20
Y-90	7.7566E+03	1.4257E-05	9.5396E+19	1.5358E+18
Y-91	2.5372E+04	1.0346E-03	6.8467E+21	7.6001E+18
Y-92	5.8219E+05	6.0504E-05	3.9605E+20	1.1090E+20
Y-93	2.5116E+04	7.5282E-06	4.8748E+19	8.3408E+18
Zr-95	3.1624E+04	1.4721E-03	9.3316E+21	9.6726E+18
Zr-97	2.8466E+04	1.4890E-05	9.2446E+19	9.1405E+18
Nb-95	3.1835E+04	8.1413E-04	5.1609E+21	9.7316E+18
Mo-99	4.3172E+05	9.0013E-04	5.4755E+21	1.3363E+20
Tc-99m	3.9103E+05	7.4365E-05	4.5236E+20	1.1915E+20
Ru-103	3.6966E+05	1.1454E-02	6.6968E+22	1.1310E+20
Ru-105	1.4851E+05	2.2094E-05	1.2671E+20	5.5013E+19
Ru-106	1.5254E+05	4.5596E-02	2.5904E+23	4.6636E+19
Rh-105	2.3971E+05	2.8399E-04	1.6288E+21	7.3732E+19
Sb-127	4.9762E+05	1.8634E-03	8.8358E+21	1.5348E+20
Sb-129	8.6900E+05	1.5453E-04	7.2141E+20	3.2368E+20
Te-127	5.0103E+05	1.8985E-04	9.0023E+20	1.5327E+20
Te-127m	6.8023E+04	7.2115E-03	3.4196E+22	2.0792E+19
Te-129	1.0538E+06	5.0317E-05	2.3490E+20	3.6214E+20
Te-129m	2.2360E+05	7.4223E-03	3.4649E+22	6.8351E+19
Te-131m	6.2947E+05	7.8940E-04	3.6289E+21	1.9781E+20
Te-132	6.5344E+06	2.1523E-02	9.8195E+22	2.0187E+21
I-131	2.8100E+07	2.2666E-01	1.0420E+24	9.2553E+21
I-132	2.3092E+07	2.2371E-03	1.0206E+22	9.9295E+21

I-133	5.2331E+07	4.6196E-02	2.0917E+23	1.7920E+22
I-134	4.0997E+06	1.5368E-04	6.9066E+20	4.6216E+21
I-135	3.8071E+07	1.0841E-02	4.8358E+22	1.4345E+22
Xe-133	1.8781E+06	1.0033E-02	4.5430E+22	4.5620E+20
Xe-135	1.6664E+07	6.5253E-03	2.9109E+22	4.3691E+21
Cs-134	6.4201E+06	4.9621E+00	2.2300E+25	2.1337E+21
Cs-136	1.7741E+06	2.4206E-02	1.0718E+23	5.9129E+20
Cs-137	4.0025E+06	4.6015E+01	2.0227E+26	1.3302E+21
Ba-139	6.1710E+05	3.7727E-05	1.6345E+20	3.6730E+20
Ba-140	3.4273E+06	4.6816E-02	2.0138E+23	1.0505E+21
La-140	1.6714E+05	3.0071E-04	1.2935E+21	3.0960E+19
La-141	1.7660E+04	3.1227E-06	1.3337E+19	6.7132E+18
La-142	6.6287E+03	4.6306E-07	1.9638E+18	3.6524E+18
Ce-141	7.9115E+04	2.7766E-03	1.1859E+22	2.4203E+19
Ce-143	7.2557E+04	1.0926E-04	4.6012E+20	2.2744E+19
Ce-144	6.3411E+04	1.9881E-02	8.3144E+22	1.9387E+19
Pr-143	3.0508E+04	4.5305E-04	1.9079E+21	9.2926E+18
Nd-147	1.2850E+04	1.5884E-04	6.5073E+20	3.9405E+18
Np-239	9.1203E+05	3.9313E-03	9.9058E+21	2.8291E+20
Pu-238	3.1682E+02	1.8506E-02	4.6827E+22	9.6850E+16
Pu-239	2.1179E+01	3.4073E-01	8.5855E+23	6.4731E+15
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	6.9455E+15
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	3.3336E+18
Am-241	6.7285E+00	1.9604E-03	4.8987E+21	2.0561E+15
Cm-242	1.6839E+03	5.0808E-04	1.2644E+21	5.1487E+17
Cm-244	1.8359E+02	2.2693E-03	5.6009E+21	5.6124E+16

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 3.5000	Atmosphere	Sump	
Noble gases (atoms)	7.4539E+22	0.0000E+00	
Elemental I (atoms)	6.3553E+22	0.0000E+00	
Organic I (atoms)	1.9656E+21	0.0000E+00	
Aerosols (kg)	5.3733E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.6890E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1752E-02
Total I (Ci)			1.4569E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 3.5000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	5.9768E+14
Elemental I (atoms)	0.0000E+00	6.7792E+14
Organic I (atoms)	0.0000E+00	2.0966E+13
Aerosols (kg)	0.0000E+00	5.6738E-07

Detailed model information at time (H) = 4.0000

EAB Doses:

Time (h) = 4.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	6.7741E-07	2.8689E-04	1.7576E-05
Accumulated dose (rem)	7.4724E-06	2.2471E-03	1.3014E-04

LPZ Doses:

Time (h) = 4.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.0022E-07	1.2715E-04	7.7897E-06
Accumulated dose (rem)	3.6094E-06	1.1316E-03	6.7308E-05

Control Room Doses:

Time (h) = 4.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.5324E-10	2.1916E-06	1.1509E-07
Accumulated dose (rem)	6.7503E-08	3.4405E-04	1.5643E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 4.0000	Ci	kg	Atoms	Decay
Co-58	1.3464E+03	4.2342E-05	4.3963E+20	5.0154E+17
Co-60	1.6140E+03	1.4278E-03	1.4331E+22	6.0088E+17
Rb-86	5.7134E+04	7.0217E-04	4.9170E+21	2.2847E+19
Sr-89	1.9698E+06	6.7801E-02	4.5877E+23	7.3393E+20
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	8.3483E+19
Sr-91	2.0031E+06	5.5259E-04	3.6569E+21	8.2948E+20

Sr-92	1.0189E+06	8.1063E-05	5.3062E+20	5.6062E+20
Y-90	8.9264E+03	1.6407E-05	1.0978E+20	2.0833E+18
Y-91	2.5578E+04	1.0430E-03	6.9021E+21	9.2954E+18
Y-92	6.3016E+05	6.5489E-05	4.2868E+20	1.5066E+20
Y-93	2.4269E+04	7.2742E-06	4.7104E+19	9.9852E+18
Zr-95	3.1617E+04	1.4717E-03	9.3295E+21	1.1779E+19
Zr-97	2.7888E+04	1.4588E-05	9.0569E+19	1.1017E+19
Nb-95	3.1835E+04	8.1413E-04	5.1608E+21	1.1852E+19
Mo-99	4.2945E+05	8.9541E-04	5.4468E+21	1.6231E+20
Tc-99m	3.9047E+05	7.4259E-05	4.5171E+20	1.4503E+20
Ru-103	3.6953E+05	1.1450E-02	6.6944E+22	1.3772E+20
Ru-105	1.3736E+05	2.0435E-05	1.1720E+20	6.4528E+19
Ru-106	1.5254E+05	4.5594E-02	2.5903E+23	5.6795E+19
Rh-105	2.3876E+05	2.8288E-04	1.6224E+21	8.9657E+19
Sb-127	4.9575E+05	1.8564E-03	8.8027E+21	1.8656E+20
Sb-129	8.0201E+05	1.4262E-04	6.6580E+20	3.7930E+20
Te-127	5.0011E+05	1.8950E-04	8.9857E+20	1.8649E+20
Te-127m	6.8026E+04	7.2118E-03	3.4197E+22	2.5322E+19
Te-129	9.9102E+05	4.7322E-05	2.2091E+20	4.2863E+20
Te-129m	2.2358E+05	7.4217E-03	3.4647E+22	8.3242E+19
Te-131m	6.2224E+05	7.8033E-04	3.5872E+21	2.3949E+20
Te-132	6.5055E+06	2.1428E-02	9.7760E+22	2.4529E+21
I-131	2.8050E+07	2.2626E-01	1.0401E+24	1.1125E+22
I-132	2.0788E+07	2.0139E-03	9.1879E+21	1.1382E+22
I-133	5.1466E+07	4.5432E-02	2.0571E+23	2.1376E+22
I-134	2.7610E+06	1.0350E-04	4.6513E+20	4.8471E+21
I-135	3.6126E+07	1.0287E-02	4.5888E+22	1.6816E+22
Xe-133	2.0113E+06	1.0745E-02	4.8654E+22	5.8481E+20
Xe-135	1.7224E+07	6.7447E-03	3.0087E+22	5.4901E+21
Cs-134	6.4200E+06	4.9620E+00	2.2300E+25	2.5613E+21
Cs-136	1.7721E+06	2.4179E-02	1.0707E+23	7.0937E+20
Cs-137	4.0025E+06	4.6015E+01	2.0227E+26	1.5967E+21
Ba-139	4.7991E+05	2.9340E-05	1.2711E+20	4.0364E+20
Ba-140	3.4234E+06	4.6763E-02	2.0115E+23	1.2787E+21
La-140	1.9509E+05	3.5098E-04	1.5098E+21	4.2828E+19
La-141	1.6169E+04	2.8591E-06	1.2211E+19	7.8389E+18
La-142	5.2942E+03	3.6983E-07	1.5684E+18	4.0478E+18
Ce-141	7.9088E+04	2.7756E-03	1.1855E+22	2.9471E+19
Ce-143	7.1799E+04	1.0812E-04	4.5532E+20	2.7551E+19
Ce-144	6.3408E+04	1.9880E-02	8.3140E+22	2.3610E+19
Pr-143	3.0552E+04	4.5371E-04	1.9107E+21	1.1325E+19
Nd-147	1.2833E+04	1.5863E-04	6.4987E+20	4.7958E+18
Np-239	9.0646E+05	3.9073E-03	9.8453E+21	3.4346E+20
Pu-238	3.1682E+02	1.8506E-02	4.6827E+22	1.1795E+17
Pu-239	2.1180E+01	3.4076E-01	8.5861E+23	7.8836E+15
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	8.4586E+15
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	4.0598E+18
Am-241	6.7295E+00	1.9607E-03	4.8994E+21	2.5043E+15
Cm-242	1.6838E+03	5.0804E-04	1.2642E+21	6.2702E+17
Cm-244	1.8359E+02	2.2693E-03	5.6009E+21	6.8351E+16

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 4.0000	Atmosphere	Sump	
Noble gases (atoms)	7.8741E+22	0.0000E+00	
Elemental I (atoms)	6.3116E+22	0.0000E+00	
Organic I (atoms)	1.9521E+21	0.0000E+00	
Aerosols (kg)	5.3730E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.6216E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1612E-02
Total I (Ci)			1.3919E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 4.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	7.6258E+14
Elemental I (atoms)	0.0000E+00	8.1500E+14
Organic I (atoms)	0.0000E+00	2.5206E+13
Aerosols (kg)	0.0000E+00	6.8360E-07

Detailed model information at time (H) = 4.5000

EAB Doses:

Time (h) = 4.5000	Whole Body	Thyroid	TEDE

Delta dose (rem)	6.3570E-07	2.8496E-04	1.7464E-05
Accumulated dose (rem)	8.1081E-06	2.5321E-03	1.4761E-04

LPZ Doses:

Time (h) = 4.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.8174E-07	1.2629E-04	7.7401E-06
Accumulated dose (rem)	3.8911E-06	1.2579E-03	7.5048E-05

Control Room Doses:

Time (h) = 4.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.0905E-10	9.9998E-07	5.2659E-08
Accumulated dose (rem)	6.7612E-08	3.4505E-04	1.5696E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 4.5000	Ci	kg	Atoms	Decay
Co-58	1.3461E+03	4.2333E-05	4.3954E+20	5.9120E+17
Co-60	1.6140E+03	1.4278E-03	1.4331E+22	7.0837E+17
Rb-86	5.7090E+04	7.0163E-04	4.9131E+21	2.6651E+19
Sr-89	1.9692E+06	6.7781E-02	4.5864E+23	8.6510E+20
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	9.8417E+19
Sr-91	1.9314E+06	5.3279E-04	3.5259E+21	9.6048E+20
Sr-92	8.9659E+05	7.1331E-05	4.6692E+20	6.2432E+20
Y-90	1.0090E+04	1.8545E-05	1.2409E+20	2.7085E+18
Y-91	2.5775E+04	1.0510E-03	6.9554E+21	1.1004E+19
Y-92	6.6138E+05	6.8733E-05	4.4992E+20	1.9313E+20
Y-93	2.3450E+04	7.0288E-06	4.5515E+19	1.1574E+19
Zr-95	3.1610E+04	1.4714E-03	9.3274E+21	1.3884E+19
Zr-97	2.7322E+04	1.4292E-05	8.8731E+19	1.2855E+19
Nb-95	3.1835E+04	8.1412E-04	5.1608E+21	1.3972E+19
Mo-99	4.2721E+05	8.9073E-04	5.4183E+21	1.9084E+20
Tc-99m	3.8983E+05	7.4138E-05	4.5098E+20	1.7087E+20
Ru-103	3.6939E+05	1.1446E-02	6.6919E+22	1.6232E+20
Ru-105	1.2705E+05	1.8900E-05	1.0840E+20	7.3328E+19
Ru-106	1.5253E+05	4.5592E-02	2.5902E+23	6.6954E+19
Rh-105	2.3772E+05	2.8165E-04	1.6153E+21	1.0552E+20
Sb-127	4.9390E+05	1.8494E-03	8.7698E+21	2.1952E+20
Sb-129	7.4018E+05	1.3163E-04	6.1447E+20	4.3063E+20
Te-127	4.9916E+05	1.8914E-04	8.9687E+20	2.1965E+20
Te-127m	6.8029E+04	7.2121E-03	3.4199E+22	2.9853E+19
Te-129	9.3132E+05	4.4471E-05	2.0760E+20	4.9114E+20
Te-129m	2.2356E+05	7.4209E-03	3.4643E+22	9.8131E+19
Te-131m	6.1510E+05	7.7137E-04	3.5460E+21	2.8070E+20
Te-132	6.4767E+06	2.1333E-02	9.7328E+22	2.8852E+21
I-131	2.8001E+07	2.2586E-01	1.0383E+24	1.2992E+22
I-132	1.8802E+07	1.8215E-03	8.3100E+21	1.2692E+22
I-133	5.0616E+07	4.4682E-02	2.0231E+23	2.4776E+22
I-134	1.8594E+06	6.9701E-05	3.1325E+20	4.9990E+21
I-135	3.4281E+07	9.7614E-03	4.3544E+22	1.9160E+22
Xe-133	2.1420E+06	1.1443E-02	5.1814E+22	7.2222E+20
Xe-135	1.7703E+07	6.9323E-03	3.0924E+22	6.6460E+21
Cs-134	6.4199E+06	4.9619E+00	2.2299E+25	2.9888E+21
Cs-136	1.7702E+06	2.4153E-02	1.0695E+23	8.2733E+20
Cs-137	4.0025E+06	4.6015E+01	2.0227E+26	1.8633E+21
Ba-139	3.7321E+05	2.2817E-05	9.8853E+19	4.3190E+20
Ba-140	3.4196E+06	4.6710E-02	2.0092E+23	1.5065E+21
La-140	2.2276E+05	4.0077E-04	1.7239E+21	5.6547E+19
La-141	1.4804E+04	2.6177E-06	1.1180E+19	8.8697E+18
La-142	4.2283E+03	2.9537E-07	1.2527E+18	4.3635E+18
Ce-141	7.9059E+04	2.7747E-03	1.1851E+22	3.4737E+19
Ce-143	7.1049E+04	1.0699E-04	4.5056E+20	3.2307E+19
Ce-144	6.3404E+04	1.9879E-02	8.3136E+22	2.7833E+19
Pr-143	3.0596E+04	4.5435E-04	1.9134E+21	1.3361E+19
Nd-147	1.2816E+04	1.5842E-04	6.4902E+20	5.6499E+18
Np-239	9.0091E+05	3.8834E-03	9.7851E+21	4.0365E+20
Pu-238	3.1682E+02	1.8506E-02	4.6827E+22	1.3905E+17
Pu-239	2.1182E+01	3.4078E-01	8.5867E+23	9.2942E+15
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	9.9718E+15
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	4.7861E+18
Am-241	6.7305E+00	1.9610E-03	4.9002E+21	2.9525E+15
Cm-242	1.6836E+03	5.0799E-04	1.2641E+21	7.3915E+17
Cm-244	1.8359E+02	2.2693E-03	5.6009E+21	8.0579E+16

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 4.5000	Atmosphere	Sump	
Noble gases (atoms)	8.2738E+22	0.0000E+00	
Elemental I (atoms)	6.2699E+22	0.0000E+00	
Organic I (atoms)	1.9391E+21	0.0000E+00	
Aerosols (kg)	5.3728E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.5561E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1481E-02
Total I (Ci)			1.3356E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 4.5000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	9.3638E+14
Elemental I (atoms)	0.0000E+00	9.5115E+14
Organic I (atoms)	0.0000E+00	2.9417E+13
Aerosols (kg)	0.0000E+00	7.9982E-07

Detailed model information at time (H) = 5.0000

EAB Doses:

Time (h) = 5.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	6.0049E-07	2.8307E-04	1.7362E-05
Accumulated dose (rem)	8.7085E-06	2.8151E-03	1.6497E-04

LPZ Doses:

Time (h) = 5.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.6613E-07	1.2546E-04	7.6946E-06
Accumulated dose (rem)	4.1572E-06	1.3834E-03	8.2743E-05

Control Room Doses:

Time (h) = 5.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.7659E-11	4.5967E-07	2.4296E-08
Accumulated dose (rem)	6.7659E-08	3.4551E-04	1.5720E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 5.0000	Ci	kg	Atoms	Decay
Co-58	1.3458E+03	4.2324E-05	4.3945E+20	6.8084E+17
Co-60	1.6139E+03	1.4278E-03	1.4330E+22	8.1586E+17
Rb-86	5.7046E+04	7.0109E-04	4.9093E+21	3.0452E+19
Sr-89	1.9686E+06	6.7762E-02	4.5851E+23	9.9623E+20
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	1.1335E+20
Sr-91	1.8622E+06	5.1370E-04	3.3996E+21	1.0868E+21
Sr-92	7.8896E+05	6.2768E-05	4.1087E+20	6.8037E+20
Y-90	1.1247E+04	2.0672E-05	1.3832E+20	3.4109E+18
Y-91	2.5965E+04	1.0588E-03	7.0067E+21	1.2726E+19
Y-92	6.7888E+05	7.0552E-05	4.6182E+20	2.3727E+20
Y-93	2.2659E+04	6.7917E-06	4.3979E+19	1.3109E+19
Zr-95	3.1603E+04	1.4711E-03	9.3253E+21	1.5989E+19
Zr-97	2.6767E+04	1.4002E-05	8.6930E+19	1.4657E+19
Nb-95	3.1835E+04	8.1412E-04	5.1608E+21	1.6092E+19
Mo-99	4.2497E+05	8.8606E-04	5.3899E+21	2.1922E+20
Tc-99m	3.8912E+05	7.4003E-05	4.5015E+20	1.9666E+20
Ru-103	3.6926E+05	1.1441E-02	6.6894E+22	1.8692E+20
Ru-105	1.1751E+05	1.7481E-05	1.0026E+20	8.1467E+19
Ru-106	1.5253E+05	4.5590E-02	2.5901E+23	7.7113E+19
Rh-105	2.3660E+05	2.8031E-04	1.6077E+21	1.2130E+20
Sb-127	4.9205E+05	1.8425E-03	8.7369E+21	2.5235E+20
Sb-129	6.8312E+05	1.2148E-04	5.6710E+20	4.7800E+20
Te-127	4.9820E+05	1.8878E-04	8.9514E+20	2.5275E+20
Te-127m	6.8032E+04	7.2124E-03	3.4200E+22	3.4383E+19
Te-129	8.7489E+05	4.1776E-05	1.9502E+20	5.4987E+20
Te-129m	2.2353E+05	7.4200E-03	3.4639E+22	1.1302E+20
Te-131m	6.0803E+05	7.6251E-04	3.5053E+21	3.2143E+20
Te-132	6.4480E+06	2.1239E-02	9.6898E+22	3.3156E+21
I-131	2.7951E+07	2.2546E-01	1.0364E+24	1.4855E+22
I-132	1.7089E+07	1.6556E-03	7.5532E+21	1.3880E+22
I-133	4.9779E+07	4.3943E-02	1.9897E+23	2.8119E+22
I-134	1.2522E+06	4.6941E-05	2.1096E+20	5.1013E+21
I-135	3.2529E+07	9.2627E-03	4.1320E+22	2.1384E+22

Xe-133	2.2700E+06	1.2127E-02	5.4911E+22	8.6826E+20
Xe-135	1.8107E+07	7.0903E-03	3.1629E+22	7.8316E+21
Cs-134	6.4197E+06	4.9618E+00	2.2299E+25	3.4164E+21
Cs-136	1.7682E+06	2.4126E-02	1.0683E+23	9.4516E+20
Cs-137	4.0025E+06	4.6015E+01	2.0227E+26	2.1298E+21
Ba-139	2.9024E+05	1.7744E-05	7.6876E+19	4.5388E+20
Ba-140	3.4157E+06	4.6657E-02	2.0070E+23	1.7342E+21
La-140	2.5016E+05	4.5007E-04	1.9360E+21	7.2101E+19
La-141	1.3555E+04	2.3968E-06	1.0237E+19	9.8134E+18
La-142	3.3770E+03	2.3591E-07	1.0005E+18	4.6157E+18
Ce-141	7.9031E+04	2.7736E-03	1.1846E+22	4.0002E+19
Ce-143	7.0307E+04	1.0587E-04	4.4585E+20	3.7015E+19
Ce-144	6.3401E+04	1.9878E-02	8.3131E+22	3.2055E+19
Pr-143	3.0638E+04	4.5499E-04	1.9161E+21	1.5400E+19
Nd-147	1.2799E+04	1.5822E-04	6.4816E+20	6.5029E+18
Np-239	8.9541E+05	3.8597E-03	9.7253E+21	4.6347E+20
Pu-238	3.1682E+02	1.8506E-02	4.6827E+22	1.6015E+17
Pu-239	2.1183E+01	3.4080E-01	8.5873E+23	1.0705E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.1485E+16
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	5.5123E+18
Am-241	6.7315E+00	1.9613E-03	4.9009E+21	3.4008E+15
Cm-242	1.6835E+03	5.0795E-04	1.2640E+21	8.5128E+17
Cm-244	1.8359E+02	2.2693E-03	5.6009E+21	9.2806E+16

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 5.0000	Atmosphere	Sump	
Noble gases (atoms)	8.6540E+22	0.0000E+00	
Elemental I (atoms)	6.2298E+22	0.0000E+00	
Organic I (atoms)	1.9268E+21	0.0000E+00	
Aerosols (kg)	5.3726E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.4924E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1356E-02
Total I (Ci)			1.2860E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 5.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.1187E+15
Elemental I (atoms)	0.0000E+00	1.0864E+15
Organic I (atoms)	0.0000E+00	3.3600E+13
Aerosols (kg)	0.0000E+00	9.1603E-07

Detailed model information at time (H) = 5.5000

EAB Doses:

Time (h) = 5.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	5.7029E-07	2.8124E-04	1.7266E-05
Accumulated dose (rem)	9.2788E-06	3.0964E-03	1.8223E-04

LPZ Doses:

Time (h) = 5.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.5275E-07	1.2464E-04	7.6522E-06
Accumulated dose (rem)	4.4100E-06	1.5080E-03	9.0395E-05

Control Room Doses:

Time (h) = 5.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.1298E-11	2.1463E-07	1.1406E-08
Accumulated dose (rem)	6.7681E-08	3.4572E-04	1.5731E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 5.5000	Ci	kg	Atoms	Decay
Co-58	1.3456E+03	4.2316E-05	4.3936E+20	7.7047E+17
Co-60	1.6139E+03	1.4278E-03	1.4330E+22	9.2335E+17
Rb-86	5.7001E+04	7.0054E-04	4.9055E+21	3.4249E+19
Sr-89	1.9681E+06	6.7742E-02	4.5838E+23	1.1273E+21
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	1.2829E+20
Sr-91	1.7955E+06	4.9530E-04	3.2778E+21	1.2086E+21
Sr-92	6.9425E+05	5.5233E-05	3.6154E+20	7.2970E+20
Y-90	1.2398E+04	2.2788E-05	1.5248E+20	4.1903E+18
Y-91	2.6148E+04	1.0662E-03	7.0561E+21	1.4460E+19

Y-92	6.8524E+05	7.1214E-05	4.6615E+20	2.8227E+20
Y-93	2.1895E+04	6.5626E-06	4.2496E+19	1.4593E+19
Zr-95	3.1596E+04	1.4707E-03	9.3232E+21	1.8094E+19
Zr-97	2.6224E+04	1.3718E-05	8.5165E+19	1.6421E+19
Nb-95	3.1834E+04	8.1411E-04	5.1607E+21	1.8212E+19
Mo-99	4.2274E+05	8.8142E-04	5.3616E+21	2.4744E+20
Tc-99m	3.8834E+05	7.3854E-05	4.4925E+20	2.2241E+20
Ru-103	3.6912E+05	1.1437E-02	6.6870E+22	2.1151E+20
Ru-105	1.0868E+05	1.6168E-05	9.2731E+19	8.8996E+19
Ru-106	1.5252E+05	4.5589E-02	2.5900E+23	8.7271E+19
Rh-105	2.3539E+05	2.7889E-04	1.5995E+21	1.3701E+20
Sb-127	4.9021E+05	1.8356E-03	8.7042E+21	2.8506E+20
Sb-129	6.3046E+05	1.1211E-04	5.2338E+20	5.2171E+20
Te-127	4.9721E+05	1.8840E-04	8.9337E+20	2.8578E+20
Te-127m	6.8034E+04	7.2127E-03	3.4201E+22	3.8914E+19
Te-129	8.2181E+05	3.9242E-05	1.8319E+20	6.0504E+20
Te-129m	2.2349E+05	7.4188E-03	3.4634E+22	1.2790E+20
Te-131m	6.0105E+05	7.5375E-04	3.4650E+21	3.6169E+20
Te-132	6.4195E+06	2.1145E-02	9.6469E+22	3.7441E+21
I-131	2.7902E+07	2.2506E-01	1.0346E+24	1.6715E+22
I-132	1.5612E+07	1.5125E-03	6.9004E+21	1.4961E+22
I-133	4.8957E+07	4.3217E-02	1.9568E+23	3.1407E+22
I-134	8.4332E+05	3.1613E-05	1.4207E+20	5.1702E+21
I-135	3.0868E+07	8.7896E-03	3.9209E+22	2.3495E+22
Xe-133	2.3954E+06	1.2797E-02	5.7946E+22	1.0228E+21
Xe-135	1.8441E+07	7.2211E-03	3.2212E+22	9.0421E+21
Cs-134	6.4196E+06	4.9617E+00	2.2299E+25	3.8440E+21
Cs-136	1.7663E+06	2.4099E-02	1.0671E+23	1.0629E+21
Cs-137	4.0025E+06	4.6015E+01	2.0227E+26	2.3964E+21
Ba-139	2.2571E+05	1.3799E-05	5.9785E+19	4.7097E+20
Ba-140	3.4118E+06	4.6604E-02	2.0047E+23	1.9615E+21
La-140	2.7729E+05	4.9888E-04	2.1460E+21	8.9471E+19
La-141	1.2410E+04	2.1945E-06	9.3726E+18	1.0677E+19
La-142	2.6971E+03	1.8841E-07	7.9905E+17	4.8171E+18
Ce-141	7.9001E+04	2.7726E-03	1.1842E+22	4.5264E+19
Ce-143	6.9572E+04	1.0476E-04	4.4119E+20	4.1672E+19
Ce-144	6.3398E+04	1.9877E-02	8.3127E+22	3.6278E+19
Pr-143	3.0680E+04	4.5561E-04	1.9187E+21	1.7441E+19
Nd-147	1.2783E+04	1.5801E-04	6.4731E+20	7.3548E+18
Np-239	8.8993E+05	3.8361E-03	9.6658E+21	5.2292E+20
Pu-238	3.1682E+02	1.8506E-02	4.6827E+22	1.8125E+17
Pu-239	2.1185E+01	3.4083E-01	8.5879E+23	1.2116E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.2998E+16
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	6.2386E+18
Am-241	6.7325E+00	1.9616E-03	4.9016E+21	3.8491E+15
Cm-242	1.6833E+03	5.0790E-04	1.2639E+21	9.6339E+17
Cm-244	1.8359E+02	2.2693E-03	5.6009E+21	1.0503E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 5.5000	Atmosphere	Sump	
Noble gases (atoms)	9.0158E+22	0.0000E+00	
Elemental I (atoms)	6.1913E+22	0.0000E+00	
Organic I (atoms)	1.9148E+21	0.0000E+00	
Aerosols (kg)	5.3724E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.4304E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1237E-02
Total I (Ci)			1.2418E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 5.5000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.3090E+15
Elemental I (atoms)	0.0000E+00	1.2208E+15
Organic I (atoms)	0.0000E+00	3.7757E+13
Aerosols (kg)	0.0000E+00	1.0322E-06

Detailed model information at time (H) = 6.0000

EAB Doses:

Time (h) = 6.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	5.4400E-07	2.7945E-04	1.7177E-05
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 6.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.4110E-07	1.2385E-04	7.6125E-06
Accumulated dose (rem)	4.6511E-06	1.6319E-03	9.8007E-05

Control Room Doses:

Time (h) = 6.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	9.8961E-12	1.0346E-07	5.5475E-09
Accumulated dose (rem)	6.7691E-08	3.4583E-04	1.5737E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 6.0000	Ci	kg	Atoms	Decay
Co-58	1.3453E+03	4.2307E-05	4.3927E+20	8.6007E+17
Co-60	1.6139E+03	1.4278E-03	1.4330E+22	1.0308E+18
Rb-86	5.6957E+04	7.0000E-04	4.9018E+21	3.8044E+19
Sr-89	1.9675E+06	6.7723E-02	4.5824E+23	1.2584E+21
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	1.4322E+20
Sr-91	1.7311E+06	4.7756E-04	3.1603E+21	1.3260E+21
Sr-92	6.1090E+05	4.8602E-05	3.1814E+20	7.7310E+20
Y-90	1.3543E+04	2.4892E-05	1.6656E+20	5.0460E+18
Y-91	2.6325E+04	1.0734E-03	7.1037E+21	1.6206E+19
Y-92	6.8265E+05	7.0944E-05	4.6439E+20	3.2743E+20
Y-93	2.1156E+04	6.3413E-06	4.1062E+19	1.6026E+19
Zr-95	3.1589E+04	1.4704E-03	9.3211E+21	2.0198E+19
Zr-97	2.5692E+04	1.3439E-05	8.3436E+19	1.8150E+19
Nb-95	3.1834E+04	8.1411E-04	5.1607E+21	2.0332E+19
Mo-99	4.2053E+05	8.7680E-04	5.3336E+21	2.7552E+20
Tc-99m	3.8749E+05	7.3692E-05	4.4827E+20	2.4810E+20
Ru-103	3.6898E+05	1.1433E-02	6.6845E+22	2.3609E+20
Ru-105	1.0052E+05	1.4954E-05	8.5768E+19	9.5959E+19
Ru-106	1.5251E+05	4.5587E-02	2.5899E+23	9.7428E+19
Rh-105	2.3412E+05	2.7737E-04	1.5908E+21	1.5264E+20
Sb-127	4.8837E+05	1.8287E-03	8.6716E+21	3.1764E+20
Sb-129	5.8185E+05	1.0347E-04	4.8303E+20	5.6206E+20
Te-127	4.9621E+05	1.8802E-04	8.9157E+20	3.1874E+20
Te-127m	6.8037E+04	7.2130E-03	3.4203E+22	4.3446E+19
Te-129	7.7208E+05	3.6867E-05	1.7211E+20	6.5687E+20
Te-129m	2.2346E+05	7.4175E-03	3.4628E+22	1.4279E+20
Te-131m	5.9414E+05	7.4510E-04	3.4252E+21	4.0149E+20
Te-132	6.3911E+06	2.1052E-02	9.6043E+22	4.1707E+21
I-131	2.7853E+07	2.2466E-01	1.0328E+24	1.8571E+22
I-132	1.4338E+07	1.3890E-03	6.3372E+21	1.5951E+22
I-133	4.8148E+07	4.2503E-02	1.9245E+23	3.4640E+22
I-134	5.6794E+05	2.1290E-05	9.5679E+19	5.2166E+21
I-135	2.9291E+07	8.3406E-03	3.7206E+22	2.5497E+22
Xe-133	2.5184E+06	1.3454E-02	6.0919E+22	1.1855E+21
Xe-135	1.8711E+07	7.3268E-03	3.2684E+22	1.0273E+22
Cs-134	6.4195E+06	4.9616E+00	2.2298E+25	4.2715E+21
Cs-136	1.7643E+06	2.4073E-02	1.0660E+23	1.1804E+21
Cs-137	4.0025E+06	4.6015E+01	2.0227E+26	2.6630E+21
Ba-139	1.7553E+05	1.0731E-05	4.6493E+19	4.8426E+20
Ba-140	3.4079E+06	4.6551E-02	2.0024E+23	2.1886E+21
La-140	3.0416E+05	5.4722E-04	2.3539E+21	1.0864E+20
La-141	1.1363E+04	2.0092E-06	8.5814E+18	1.1469E+19
La-142	2.1541E+03	1.5048E-07	6.3818E+17	4.9780E+18
Ce-141	7.8971E+04	2.7716E-03	1.1837E+22	5.0524E+19
Ce-143	6.8845E+04	1.0367E-04	4.3658E+20	4.6282E+19
Ce-144	6.3395E+04	1.9876E-02	8.3123E+22	4.0500E+19
Pr-143	3.0721E+04	4.5622E-04	1.9213E+21	1.9485E+19
Nd-147	1.2766E+04	1.5780E-04	6.4646E+20	8.2055E+18
Np-239	8.8449E+05	3.8126E-03	9.6067E+21	5.8200E+20
Pu-238	3.1682E+02	1.8506E-02	4.6827E+22	2.0235E+17
Pu-239	2.1186E+01	3.4085E-01	8.5885E+23	1.3527E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.4511E+16
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	6.9649E+18
Am-241	6.7335E+00	1.9619E-03	4.9024E+21	4.2975E+15
Cm-242	1.6832E+03	5.0786E-04	1.2638E+21	1.0755E+18
Cm-244	1.8359E+02	2.2693E-03	5.6008E+21	1.1726E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 6.0000	Atmosphere	Sump
Noble gases (atoms)	9.3603E+22	0.0000E+00

Elemental I (atoms)	6.1541E+22	0.0000E+00	
Organic I (atoms)	1.9033E+21	0.0000E+00	
Aerosols (kg)	5.3722E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.3700E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1123E-02
Total I (Ci)			1.2020E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 6.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.5070E+15
Elemental I (atoms)	0.0000E+00	1.3544E+15
Organic I (atoms)	0.0000E+00	4.1889E+13
Aerosols (kg)	0.0000E+00	1.1484E-06

Detailed model information at time (H) = 6.5000

EAB Doses:

Time (h) = 6.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 6.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.3083E-07	1.2308E-04	7.5751E-06
Accumulated dose (rem)	4.8819E-06	1.7549E-03	1.0558E-04

Control Room Doses:

Time (h) = 6.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.9271E-12	5.3001E-08	2.8832E-09
Accumulated dose (rem)	6.7696E-08	3.4588E-04	1.5740E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 6.5000	Ci	kg	Atoms	Decay
Co-58	1.3450E+03	4.2299E-05	4.3919E+20	9.4966E+17
Co-60	1.6139E+03	1.4277E-03	1.4330E+22	1.1383E+18
Rb-86	5.6913E+04	6.9946E-04	4.8980E+21	4.1836E+19
Sr-89	1.9669E+06	6.7704E-02	4.5811E+23	1.3894E+21
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	1.5815E+20
Sr-91	1.6691E+06	4.6045E-04	3.0471E+21	1.4392E+21
Sr-92	5.3757E+05	4.2768E-05	2.7995E+20	8.1129E+20
Y-90	1.4681E+04	2.6984E-05	1.8056E+20	5.9778E+18
Y-91	2.6494E+04	1.0804E-03	7.1495E+21	1.7964E+19
Y-92	6.7294E+05	6.9935E-05	4.5778E+20	3.7223E+20
Y-93	2.0443E+04	6.1274E-06	3.9677E+19	1.7412E+19
Zr-95	3.1582E+04	1.4701E-03	9.3190E+21	2.2301E+19
Zr-97	2.5170E+04	1.3167E-05	8.1743E+19	1.9843E+19
Nb-95	3.1834E+04	8.1410E-04	5.1607E+21	2.2452E+19
Mo-99	4.1833E+05	8.7221E-04	5.3056E+21	3.0346E+20
Tc-99m	3.8658E+05	7.3519E-05	4.4721E+20	2.7374E+20
Ru-103	3.6885E+05	1.1429E-02	6.6821E+22	2.6066E+20
Ru-105	9.2975E+04	1.3831E-05	7.9328E+19	1.0240E+20
Ru-106	1.5251E+05	4.5585E-02	2.5898E+23	1.0759E+20
Rh-105	2.3278E+05	2.7579E-04	1.5817E+21	1.6818E+20
Sb-127	4.8654E+05	1.8219E-03	8.6392E+21	3.5011E+20
Sb-129	5.3700E+05	9.5494E-05	4.4580E+20	5.9930E+20
Te-127	4.9519E+05	1.8763E-04	8.8973E+20	3.5164E+20
Te-127m	6.8040E+04	7.2133E-03	3.4204E+22	4.7977E+19
Te-129	7.2565E+05	3.4650E-05	1.6176E+20	7.0557E+20
Te-129m	2.2341E+05	7.4161E-03	3.4621E+22	1.5767E+20
Te-131m	5.8732E+05	7.3654E-04	3.3859E+21	4.4083E+20
Te-132	6.3629E+06	2.0959E-02	9.5618E+22	4.5954E+21
I-131	2.7804E+07	2.2427E-01	1.0310E+24	2.0425E+22
I-132	1.3238E+07	1.2825E-03	5.8509E+21	1.6862E+22
I-133	4.7352E+07	4.1801E-02	1.8927E+23	3.7820E+22
I-134	3.8248E+05	1.4338E-05	6.4435E+19	5.2478E+21
I-135	2.7795E+07	7.9146E-03	3.5306E+22	2.7398E+22
Xe-133	2.6388E+06	1.4098E-02	6.3833E+22	1.3564E+21
Xe-135	1.8921E+07	7.4093E-03	3.3052E+22	1.1520E+22
Cs-134	6.4194E+06	4.9615E+00	2.2298E+25	4.6990E+21

Cs-136	1.7624E+06	2.4046E-02	1.0648E+23	1.2979E+21
Cs-137	4.0024E+06	4.6015E+01	2.0227E+26	2.9295E+21
Ba-139	1.3651E+05	8.3455E-06	3.6157E+19	4.9460E+20
Ba-140	3.4041E+06	4.6498E-02	2.0001E+23	2.4154E+21
La-140	3.3077E+05	5.9509E-04	2.5598E+21	1.2959E+20
La-141	1.0404E+04	1.8396E-06	7.8571E+18	1.2193E+19
La-142	1.7204E+03	1.2018E-07	5.0969E+17	5.1065E+18
Ce-141	7.8941E+04	2.7705E-03	1.1833E+22	5.5783E+19
Ce-143	6.8126E+04	1.0259E-04	4.3202E+20	5.0843E+19
Ce-144	6.3392E+04	1.9875E-02	8.3119E+22	4.4722E+19
Pr-143	3.0761E+04	4.5682E-04	1.9238E+21	2.1532E+19
Nd-147	1.2749E+04	1.5759E-04	6.4561E+20	9.0552E+18
Np-239	8.7909E+05	3.7893E-03	9.5480E+21	6.4073E+20
Pu-238	3.1683E+02	1.8506E-02	4.6827E+22	2.2345E+17
Pu-239	2.1188E+01	3.4087E-01	8.5891E+23	1.4938E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.6025E+16
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	7.6911E+18
Am-241	6.7345E+00	1.9622E-03	4.9031E+21	4.7460E+15
Cm-242	1.6830E+03	5.0781E-04	1.2637E+21	1.1876E+18
Cm-244	1.8359E+02	2.2693E-03	5.6008E+21	1.2949E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 6.5000	Atmosphere	Sump	
Noble gases (atoms)	9.6885E+22	0.0000E+00	
Elemental I (atoms)	6.1181E+22	0.0000E+00	
Organic I (atoms)	1.8922E+21	0.0000E+00	
Aerosols (kg)	5.3720E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.3110E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1014E-02
Total I (Ci)			1.1657E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 6.5000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.7123E+15
Elemental I (atoms)	0.0000E+00	1.4872E+15
Organic I (atoms)	0.0000E+00	4.5996E+13
Aerosols (kg)	0.0000E+00	1.2646E-06

Detailed model information at time (H) = 7.0000

EAB Doses:

Time (h) = 7.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 7.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.2169E-07	1.2232E-04	7.5395E-06
Accumulated dose (rem)	5.1036E-06	1.8773E-03	1.1312E-04

Control Room Doses:

Time (h) = 7.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.7418E-12	3.0074E-08	1.6707E-09
Accumulated dose (rem)	6.7698E-08	3.4591E-04	1.5741E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 7.0000	Ci	kg	Atoms	Decay
Co-58	1.3447E+03	4.2290E-05	4.3910E+20	1.0392E+18
Co-60	1.6139E+03	1.4277E-03	1.4330E+22	1.2458E+18
Rb-86	5.6869E+04	6.9892E-04	4.8942E+21	4.5625E+19
Sr-89	1.9664E+06	6.7684E-02	4.5798E+23	1.5204E+21
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	1.7309E+20
Sr-91	1.6093E+06	4.4395E-04	2.9380E+21	1.5484E+21
Sr-92	4.7303E+05	3.7634E-05	2.4634E+20	8.4490E+20
Y-90	1.5814E+04	2.9066E-05	1.9449E+20	6.9853E+18
Y-91	2.6658E+04	1.0870E-03	7.1936E+21	1.9733E+19
Y-92	6.5765E+05	6.8346E-05	4.4738E+20	4.1624E+20
Y-93	1.9753E+04	5.9207E-06	3.8339E+19	1.8750E+19
Zr-95	3.1574E+04	1.4697E-03	9.3169E+21	2.4404E+19

Zr-97	2.4659E+04	1.2899E-05	8.0084E+19	2.1503E+19
Nb-95	3.1834E+04	8.1409E-04	5.1606E+21	2.4572E+19
Mo-99	4.1613E+05	8.6764E-04	5.2778E+21	3.3125E+20
Tc-99m	3.8561E+05	7.3335E-05	4.4609E+20	2.9931E+20
Ru-103	3.6871E+05	1.1425E-02	6.6796E+22	2.8522E+20
Ru-105	8.5994E+04	1.2793E-05	7.3372E+19	1.0836E+20
Ru-106	1.5250E+05	4.5583E-02	2.5897E+23	1.1774E+20
Rh-105	2.3138E+05	2.7413E-04	1.5722E+21	1.8363E+20
Sb-127	4.8472E+05	1.8151E-03	8.6068E+21	3.8245E+20
Sb-129	4.9560E+05	8.8132E-05	4.1143E+20	6.3367E+20
Te-127	4.9415E+05	1.8724E-04	8.8786E+20	3.8447E+20
Te-127m	6.8042E+04	7.2135E-03	3.4205E+22	5.2508E+19
Te-129	6.8238E+05	3.2584E-05	1.5211E+20	7.5134E+20
Te-129m	2.2337E+05	7.4145E-03	3.4613E+22	1.7254E+20
Te-131m	5.8057E+05	7.2808E-04	3.3470E+21	4.7972E+20
Te-132	6.3347E+06	2.0866E-02	9.5195E+22	5.0183E+21
I-131	2.7754E+07	2.2387E-01	1.0292E+24	2.2275E+22
I-132	1.2288E+07	1.1904E-03	5.4309E+21	1.7704E+22
I-133	4.6570E+07	4.1110E-02	1.8614E+23	4.0948E+22
I-134	2.5759E+05	9.6558E-06	4.3394E+19	5.2689E+21
I-135	2.6375E+07	7.5103E-03	3.3502E+22	2.9201E+22
Xe-133	2.7568E+06	1.4728E-02	6.6688E+22	1.5353E+21
Xe-135	1.9078E+07	7.4706E-03	3.3325E+22	1.2780E+22
Cs-134	6.4192E+06	4.9614E+00	2.2297E+25	5.1266E+21
Cs-136	1.7604E+06	2.4020E-02	1.0636E+23	1.4152E+21
Cs-137	4.0024E+06	4.6015E+01	2.0227E+26	3.1961E+21
Ba-139	1.0616E+05	6.4901E-06	2.8118E+19	5.0263E+20
Ba-140	3.4002E+06	4.6446E-02	1.9979E+23	2.6420E+21
La-140	3.5711E+05	6.4248E-04	2.7637E+21	1.5230E+20
La-141	9.5256E+03	1.6843E-06	7.1939E+18	1.2856E+19
La-142	1.3741E+03	9.5988E-08	4.0708E+17	5.2091E+18
Ce-141	7.8911E+04	2.7694E-03	1.1828E+22	6.1039E+19
Ce-143	6.7414E+04	1.0152E-04	4.2751E+20	5.5356E+19
Ce-144	6.3388E+04	1.9874E-02	8.3114E+22	4.8944E+19
Pr-143	3.0801E+04	4.5740E-04	1.9262E+21	2.3582E+19
Nd-147	1.2732E+04	1.5739E-04	6.4476E+20	9.9037E+18
Np-239	8.7371E+05	3.7661E-03	9.4896E+21	6.9910E+20
Pu-238	3.1683E+02	1.8507E-02	4.6827E+22	2.4455E+17
Pu-239	2.1189E+01	3.4090E-01	8.5897E+23	1.6349E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.7538E+16
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	8.4174E+18
Am-241	6.7355E+00	1.9625E-03	4.9038E+21	5.1945E+15
Cm-242	1.6829E+03	5.0776E-04	1.2636E+21	1.2997E+18
Cm-244	1.8359E+02	2.2693E-03	5.6008E+21	1.4171E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 7.0000	Atmosphere	Sump	
Noble gases (atoms)	1.0001E+23	0.0000E+00	
Elemental I (atoms)	6.0832E+22	0.0000E+00	
Organic I (atoms)	1.8814E+21	0.0000E+00	
Aerosols (kg)	5.3718E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.2534E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.0909E-02
Total I (Ci)			1.1324E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 7.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.9246E+15
Elemental I (atoms)	0.0000E+00	1.6192E+15
Organic I (atoms)	0.0000E+00	5.0080E+13
Aerosols (kg)	0.0000E+00	1.3808E-06

Detailed model information at time (H) = 7.5000

EAB Doses:

Time (h) = 7.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 7.5000	Whole Body	Thyroid	TEDE

Delta dose (rem)	2.1348E-07	1.2158E-04	7.5056E-06
Accumulated dose (rem)	5.3171E-06	1.9988E-03	1.2063E-04

Control Room Doses:

Time (h) = 7.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.7676E-12	1.9636E-08	1.1183E-09
Accumulated dose (rem)	6.7700E-08	3.4593E-04	1.5742E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 7.5000	Ci	kg	Atoms	Decay
Co-58	1.3445E+03	4.2281E-05	4.3901E+20	1.1288E+18
Co-60	1.6139E+03	1.4277E-03	1.4330E+22	1.3533E+18
Rb-86	5.6825E+04	6.9838E-04	4.8904E+21	4.9411E+19
Sr-89	1.9658E+06	6.7665E-02	4.5785E+23	1.6513E+21
Sr-90	2.2424E+05	1.6439E+00	1.1000E+25	1.8802E+20
Sr-91	1.5517E+06	4.2805E-04	2.8327E+21	1.6536E+21
Sr-92	4.1625E+05	3.3116E-05	2.1677E+20	8.7447E+20
Y-90	1.6940E+04	3.1136E-05	2.0834E+20	8.0679E+18
Y-91	2.6815E+04	1.0934E-03	7.2360E+21	2.1512E+19
Y-92	6.3810E+05	6.6314E-05	4.3408E+20	4.5912E+20
Y-93	1.9087E+04	5.7210E-06	3.7046E+19	2.0043E+19
Zr-95	3.1567E+04	1.4694E-03	9.3148E+21	2.6507E+19
Zr-97	2.4159E+04	1.2637E-05	7.8458E+19	2.3128E+19
Nb-95	3.1833E+04	8.1409E-04	5.1606E+21	2.6692E+19
Mo-99	4.1396E+05	8.6310E-04	5.2502E+21	3.5889E+20
Tc-99m	3.8459E+05	7.3140E-05	4.4491E+20	3.2482E+20
Ru-103	3.6858E+05	1.1420E-02	6.6772E+22	3.0977E+20
Ru-105	7.9536E+04	1.1832E-05	6.7862E+19	1.1387E+20
Ru-106	1.5250E+05	4.5581E-02	2.5896E+23	1.2790E+20
Rh-105	2.2993E+05	2.7242E-04	1.5624E+21	1.9899E+20
Sb-127	4.8291E+05	1.8083E-03	8.5746E+21	4.1467E+20
Sb-129	4.5739E+05	8.1338E-05	3.7971E+20	6.6539E+20
Te-127	4.9309E+05	1.8684E-04	8.8597E+20	4.1723E+20
Te-127m	6.8045E+04	7.2138E-03	3.4207E+22	5.7040E+19
Te-129	6.4215E+05	3.0663E-05	1.4314E+20	7.9440E+20
Te-129m	2.2331E+05	7.4129E-03	3.4606E+22	1.8742E+20
Te-131m	5.7390E+05	7.1971E-04	3.3086E+21	5.1816E+20
Te-132	6.3067E+06	2.0774E-02	9.4774E+22	5.4392E+21
I-131	2.7705E+07	2.2348E-01	1.0273E+24	2.4122E+22
I-132	1.1466E+07	1.1108E-03	5.0679E+21	1.8488E+22
I-133	4.5800E+07	4.0431E-02	1.8307E+23	4.4024E+22
I-134	1.7347E+05	6.5028E-06	2.9224E+19	5.2830E+21
I-135	2.5028E+07	7.1267E-03	3.1791E+22	3.0913E+22
Xe-133	2.8725E+06	1.5346E-02	6.9485E+22	1.7219E+21
Xe-135	1.9184E+07	7.5122E-03	3.3511E+22	1.4049E+22
Cs-134	6.4191E+06	4.9613E+00	2.2297E+25	5.5541E+21
Cs-136	1.7585E+06	2.3993E-02	1.0624E+23	1.5324E+21
Cs-137	4.0024E+06	4.6015E+01	2.0227E+26	3.4627E+21
Ba-139	8.2557E+04	5.0472E-06	2.1867E+19	5.0889E+20
Ba-140	3.3964E+06	4.6393E-02	1.9956E+23	2.8684E+21
La-140	3.8319E+05	6.8941E-04	2.9655E+21	1.7676E+20
La-141	8.7215E+03	1.5422E-06	6.5866E+18	1.3463E+19
La-142	1.0974E+03	7.6663E-08	3.2512E+17	5.2911E+18
Ce-141	7.8880E+04	2.7683E-03	1.1824E+22	6.6294E+19
Ce-143	6.6710E+04	1.0045E-04	4.2304E+20	5.9823E+19
Ce-144	6.3385E+04	1.9873E-02	8.3110E+22	5.3165E+19
Pr-143	3.0839E+04	4.5797E-04	1.9287E+21	2.5634E+19
Nd-147	1.2716E+04	1.5718E-04	6.4392E+20	1.0751E+19
Np-239	8.6837E+05	3.7431E-03	9.4316E+21	7.5711E+20
Pu-238	3.1683E+02	1.8507E-02	4.6827E+22	2.6565E+17
Pu-239	2.1190E+01	3.4092E-01	8.5902E+23	1.7760E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.9051E+16
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	9.1436E+18
Am-241	6.7365E+00	1.9627E-03	4.9045E+21	5.6431E+15
Cm-242	1.6827E+03	5.0772E-04	1.2635E+21	1.4118E+18
Cm-244	1.8359E+02	2.2693E-03	5.6008E+21	1.5394E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 7.5000	Atmosphere	Sump
Noble gases (atoms)	1.0300E+23	0.0000E+00
Elemental I (atoms)	6.0494E+22	0.0000E+00
Organic I (atoms)	1.8709E+21	0.0000E+00
Aerosols (kg)	5.3717E+01	0.0000E+00

Dose Effective (Ci/cc)	I-131 (Thyroid)	9.1971E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	1.0807E-02
Total I (Ci)		1.1017E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 7.5000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.1436E+15
Elemental I (atoms)	0.0000E+00	1.7505E+15
Organic I (atoms)	0.0000E+00	5.4140E+13
Aerosols (kg)	0.0000E+00	1.4970E-06

Detailed model information at time (H) = 8.0000

EAB Doses:

Time (h) = 8.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 8.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.0604E-07	1.2086E-04	7.4731E-06
Accumulated dose (rem)	5.5231E-06	2.1197E-03	1.2810E-04

Control Room Doses:

Time (h) = 8.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.3232E-12	1.4865E-08	8.6585E-10
Accumulated dose (rem)	6.7701E-08	3.4594E-04	1.5743E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 8.0000	Ci	kg	Atoms	Decay
Co-58	1.3442E+03	4.2273E-05	4.3892E+20	1.2183E+18
Co-60	1.6139E+03	1.4277E-03	1.4330E+22	1.4608E+18
Rb-86	5.6781E+04	6.9784E-04	4.8866E+21	5.3194E+19
Sr-89	1.9653E+06	6.7646E-02	4.5772E+23	1.7822E+21
Sr-90	2.2423E+05	1.6439E+00	1.1000E+25	2.0296E+20
Sr-91	1.4961E+06	4.1272E-04	2.7312E+21	1.7551E+21
Sr-92	3.6628E+05	2.9140E-05	1.9075E+20	9.0050E+20
Y-90	1.8060E+04	3.3195E-05	2.2211E+20	9.2253E+18
Y-91	2.6966E+04	1.0996E-03	7.2768E+21	2.3302E+19
Y-92	6.1535E+05	6.3950E-05	4.1860E+20	5.0061E+20
Y-93	1.8443E+04	5.5280E-06	3.5796E+19	2.1293E+19
Zr-95	3.1560E+04	1.4691E-03	9.3127E+21	2.8609E+19
Zr-97	2.3668E+04	1.2381E-05	7.6865E+19	2.4721E+19
Nb-95	3.1833E+04	8.1408E-04	5.1605E+21	2.8812E+19
Mo-99	4.1179E+05	8.5858E-04	5.2227E+21	3.8638E+20
Tc-99m	3.8352E+05	7.2936E-05	4.4367E+20	3.5025E+20
Ru-103	3.6844E+05	1.1416E-02	6.6747E+22	3.3431E+20
Ru-105	7.3564E+04	1.0944E-05	6.2767E+19	1.1896E+20
Ru-106	1.5249E+05	4.5580E-02	2.5895E+23	1.3805E+20
Rh-105	2.2844E+05	2.7064E-04	1.5522E+21	2.1425E+20
Sb-127	4.8110E+05	1.8015E-03	8.5425E+21	4.4678E+20
Sb-129	4.2213E+05	7.5067E-05	3.5044E+20	6.9466E+20
Te-127	4.9202E+05	1.8643E-04	8.8404E+20	4.4992E+20
Te-127m	6.8047E+04	7.2141E-03	3.4208E+22	6.1572E+19
Te-129	6.0479E+05	2.8879E-05	1.3482E+20	8.3494E+20
Te-129m	2.2326E+05	7.4110E-03	3.4597E+22	2.0229E+20
Te-131m	5.6731E+05	7.1145E-04	3.2706E+21	5.5617E+20
Te-132	6.2788E+06	2.0682E-02	9.4355E+22	5.8583E+21
I-131	2.7657E+07	2.2308E-01	1.0255E+24	2.5965E+22
I-132	1.0756E+07	1.0420E-03	4.7539E+21	1.9222E+22
I-133	4.5043E+07	3.9763E-02	1.8004E+23	4.7049E+22
I-134	1.1683E+05	4.3793E-06	1.9681E+19	5.2926E+21
I-135	2.3749E+07	6.7626E-03	3.0167E+22	3.2537E+22
Xe-133	2.9857E+06	1.5951E-02	7.2225E+22	1.9162E+21
Xe-135	1.9245E+07	7.5359E-03	3.3616E+22	1.5324E+22
Cs-134	6.4190E+06	4.9612E+00	2.2296E+25	5.9816E+21
Cs-136	1.7566E+06	2.3967E-02	1.0613E+23	1.6494E+21
Cs-137	4.0024E+06	4.6015E+01	2.0227E+26	3.7292E+21
Ba-139	6.4203E+04	3.9251E-06	1.7005E+19	5.1375E+20

Ba-140	3.3925E+06	4.6340E-02	1.9933E+23	3.0944E+21
La-140	4.0902E+05	7.3588E-04	3.1654E+21	2.0295E+20
La-141	7.9853E+03	1.4120E-06	6.0307E+18	1.4019E+19
La-142	8.7649E+02	6.1229E-08	2.5967E+17	5.3565E+18
Ce-141	7.8848E+04	2.7672E-03	1.1819E+22	7.1546E+19
Ce-143	6.6013E+04	9.9405E-05	4.1862E+20	6.4242E+19
Ce-144	6.3382E+04	1.9872E-02	8.3106E+22	5.7386E+19
Pr-143	3.0877E+04	4.5854E-04	1.9310E+21	2.7689E+19
Nd-147	1.2699E+04	1.5697E-04	6.4307E+20	1.1597E+19
Np-239	8.6306E+05	3.7202E-03	9.3740E+21	8.1477E+20
Pu-238	3.1683E+02	1.8507E-02	4.6827E+22	2.8675E+17
Pu-239	2.1192E+01	3.4094E-01	8.5908E+23	1.9171E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	2.0564E+16
Pu-241	1.0905E+04	1.0586E-01	2.6452E+23	9.8698E+18
Am-241	6.7375E+00	1.9630E-03	4.9053E+21	6.0918E+15
Cm-242	1.6826E+03	5.0767E-04	1.2633E+21	1.5238E+18
Cm-244	1.8359E+02	2.2693E-03	5.6008E+21	1.6617E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 8.0000	Atmosphere	Sump	
Noble gases (atoms)	1.0584E+23	0.0000E+00	
Elemental I (atoms)	6.0164E+22	0.0000E+00	
Organic I (atoms)	1.8608E+21	0.0000E+00	
Aerosols (kg)	5.3715E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.1420E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.0709E-02
Total I (Ci)			1.0732E+08

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 8.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.3688E+15
Elemental I (atoms)	0.0000E+00	1.8811E+15
Organic I (atoms)	0.0000E+00	5.8178E+13
Aerosols (kg)	0.0000E+00	1.6132E-06

Detailed model information at time (H) = 10.0000

EAB Doses:

Time (h) = 10.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 10.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	5.0653E-07	1.5981E-04	1.0175E-05
Accumulated dose (rem)	6.0297E-06	2.2795E-03	1.3828E-04

Control Room Doses:

Time (h) = 10.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.9624E-12	4.6306E-08	2.7737E-09
Accumulated dose (rem)	6.7705E-08	3.4599E-04	1.5746E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 10.0000	Ci	kg	Atoms	Decay
Co-58	1.3431E+03	4.2238E-05	4.3856E+20	1.5763E+18
Co-60	1.6138E+03	1.4277E-03	1.4329E+22	1.8907E+18
Rb-86	5.6606E+04	6.9568E-04	4.8715E+21	6.8297E+19
Sr-89	1.9630E+06	6.7568E-02	4.5720E+23	2.3055E+21
Sr-90	2.2423E+05	1.6439E+00	1.0999E+25	2.6269E+20
Sr-91	1.2930E+06	3.5668E-04	2.3604E+21	2.1259E+21
Sr-92	2.1961E+05	1.7472E-05	1.1437E+20	9.7688E+20
Y-90	2.2480E+04	4.1320E-05	2.7648E+20	1.4595E+19
Y-91	2.7517E+04	1.1220E-03	7.4253E+21	3.0557E+19
Y-92	5.0823E+05	5.2817E-05	3.4573E+20	6.4987E+20
Y-93	1.6078E+04	4.8190E-06	3.1205E+19	2.5884E+19
Zr-95	3.1532E+04	1.4678E-03	9.3043E+21	3.7013E+19
Zr-97	2.1804E+04	1.1406E-05	7.0812E+19	3.0774E+19
Nb-95	3.1832E+04	8.1406E-04	5.1604E+21	3.7292E+19
Mo-99	4.0323E+05	8.4073E-04	5.1141E+21	4.9494E+20

Tc-99m	3.7879E+05	7.2037E-05	4.3820E+20	4.5126E+20
Ru-103	3.6790E+05	1.1399E-02	6.6649E+22	4.3239E+20
Ru-105	5.3835E+04	8.0088E-06	4.5933E+19	1.3579E+20
Ru-106	1.5247E+05	4.5573E-02	2.5891E+23	1.7868E+20
Rh-105	2.2208E+05	2.6312E-04	1.5091E+21	2.7425E+20
Sb-127	4.7393E+05	1.7747E-03	8.4153E+21	5.7398E+20
Sb-129	3.0625E+05	5.4461E-05	2.5424E+20	7.9086E+20
Te-127	4.8759E+05	1.8476E-04	8.7608E+20	5.7996E+20
Te-127m	6.8057E+04	7.2151E-03	3.4213E+22	7.9700E+19
Te-129	4.8080E+05	2.2958E-05	1.0718E+20	9.7529E+20
Te-129m	2.2301E+05	7.4028E-03	3.4559E+22	2.6173E+20
Te-131m	5.4169E+05	6.7932E-04	3.1229E+21	7.0386E+20
Te-132	6.1685E+06	2.0318E-02	9.2697E+22	7.5163E+21
I-131	2.7462E+07	2.2151E-01	1.0183E+24	3.3307E+22
I-132	8.7443E+06	8.4714E-04	3.8648E+21	2.1769E+22
I-133	4.2139E+07	3.7199E-02	1.6843E+23	5.8657E+22
I-134	2.4031E+04	9.0084E-07	4.0485E+18	5.3082E+21
I-135	1.9256E+07	5.4832E-03	2.4460E+22	3.8244E+22
Xe-133	3.4161E+06	1.8250E-02	8.2635E+22	2.7666E+21
Xe-135	1.9101E+07	7.4798E-03	3.3366E+22	2.0425E+22
Cs-134	6.4185E+06	4.9609E+00	2.2295E+25	7.6915E+21
Cs-136	1.7488E+06	2.3861E-02	1.0566E+23	2.1163E+21
Cs-137	4.0024E+06	4.6014E+01	2.0227E+26	4.7955E+21
Ba-139	2.3483E+04	1.4356E-06	6.2199E+18	5.2453E+20
Ba-140	3.3772E+06	4.6131E-02	1.9843E+23	3.9962E+21
La-140	5.0981E+05	9.1722E-04	3.9454E+21	3.2465E+20
La-141	5.6117E+03	9.9229E-07	4.2381E+18	1.5812E+19
La-142	3.5663E+02	2.4913E-08	1.0566E+17	5.5105E+18
Ce-141	7.8720E+04	2.7627E-03	1.1800E+22	9.2534E+19
Ce-143	6.3298E+04	9.5316E-05	4.0140E+20	8.1464E+19
Ce-144	6.3369E+04	1.9868E-02	8.3089E+22	7.4270E+19
Pr-143	3.1021E+04	4.6067E-04	1.9400E+21	3.5932E+19
Nd-147	1.2632E+04	1.5615E-04	6.3970E+20	1.4972E+19
Np-239	8.4215E+05	3.6301E-03	9.1468E+21	1.0419E+21
Pu-238	3.1683E+02	1.8507E-02	4.6828E+22	3.7116E+17
Pu-239	2.1197E+01	3.4103E-01	8.5931E+23	2.4818E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	2.6617E+16
Pu-241	1.0904E+04	1.0586E-01	2.6451E+23	1.2775E+19
Am-241	6.7415E+00	1.9642E-03	4.9082E+21	7.8872E+15
Cm-242	1.6820E+03	5.0749E-04	1.2629E+21	1.9720E+18
Cm-244	1.8359E+02	2.2693E-03	5.6007E+21	2.1508E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 10.0000	Atmosphere	Sump	
Noble gases (atoms)	1.1600E+23	0.0000E+00	
Elemental I (atoms)	5.8930E+22	0.0000E+00	
Organic I (atoms)	1.8226E+21	0.0000E+00	
Aerosols (kg)	5.3708E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.9331E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.0348E-02
Total I (Ci)			9.7625E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 10.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.3276E+15
Elemental I (atoms)	0.0000E+00	2.3964E+15
Organic I (atoms)	0.0000E+00	7.4117E+13
Aerosols (kg)	0.0000E+00	2.0779E-06

Detailed model information at time (H) = 12.0000

EAB Doses:

Time (h) = 12.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 12.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.5377E-07	1.5631E-04	1.0003E-05
Accumulated dose (rem)	6.4834E-06	2.4358E-03	1.4828E-04

Control Room Doses:

Time (h) = 12.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.3609E-12	4.2380E-08	2.5816E-09
Accumulated dose (rem)	6.7709E-08	3.4603E-04	1.5749E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 12.0000	Ci	kg	Atoms	Decay
Co-58	1.3420E+03	4.2204E-05	4.3820E+20	1.9339E+18
Co-60	1.6138E+03	1.4276E-03	1.4329E+22	2.3206E+18
Rb-86	5.6431E+04	6.9353E-04	4.8564E+21	8.3354E+19
Sr-89	1.9608E+06	6.7491E-02	4.5667E+23	2.8281E+21
Sr-90	2.2423E+05	1.6438E+00	1.0999E+25	3.2243E+20
Sr-91	1.1174E+06	3.0825E-04	2.0399E+21	2.4464E+21
Sr-92	1.3167E+05	1.0475E-05	6.8570E+19	1.0227E+21
Y-90	2.6806E+04	4.9270E-05	3.2968E+20	2.1130E+19
Y-91	2.7988E+04	1.1413E-03	7.5525E+21	3.7949E+19
Y-92	3.9887E+05	4.1452E-05	2.7134E+20	7.7005E+20
Y-93	1.4016E+04	4.2009E-06	2.7203E+19	2.9886E+19
Zr-95	3.1503E+04	1.4664E-03	9.2959E+21	4.5409E+19
Zr-97	2.0087E+04	1.0508E-05	6.5235E+19	3.6351E+19
Nb-95	3.1831E+04	8.1403E-04	5.1602E+21	4.5772E+19
Mo-99	3.9485E+05	8.2326E-04	5.0078E+21	6.0124E+20
Tc-99m	3.7349E+05	7.1029E-05	4.3207E+20	5.5093E+20
Ru-103	3.6736E+05	1.1383E-02	6.6551E+22	5.3033E+20
Ru-105	3.9397E+04	5.8610E-06	3.3615E+19	1.4811E+20
Ru-106	1.5244E+05	4.5565E-02	2.5887E+23	2.1929E+20
Rh-105	2.1532E+05	2.5511E-04	1.4631E+21	3.3251E+20
Sb-127	4.6688E+05	1.7483E-03	8.2900E+21	6.9930E+20
Sb-129	2.2219E+05	3.9511E-05	1.8445E+20	8.6065E+20
Te-127	4.8296E+05	1.8300E-04	8.6777E+20	7.0879E+20
Te-127m	6.8065E+04	7.2160E-03	3.4217E+22	9.7832E+19
Te-129	3.9002E+05	1.8623E-05	8.6940E+19	1.0879E+21
Te-129m	2.2273E+05	7.3934E-03	3.4515E+22	3.2111E+20
Te-131m	5.1723E+05	6.4864E-04	2.9818E+21	8.4488E+20
Te-132	6.0601E+06	1.9961E-02	9.1068E+22	9.1451E+21
I-131	2.7268E+07	2.1995E-01	1.0111E+24	4.0597E+22
I-132	7.5931E+06	7.3561E-04	3.3560E+21	2.3906E+22
I-133	3.9422E+07	3.4800E-02	1.5757E+23	6.9517E+22
I-134	4.9433E+03	1.8531E-07	8.3279E+17	5.3114E+21
I-135	1.5613E+07	4.4458E-03	1.9832E+22	4.2872E+22
Xe-133	3.8118E+06	2.0364E-02	9.2208E+22	3.7272E+21
Xe-135	1.8490E+07	7.2406E-03	3.2299E+22	2.5426E+22
Cs-134	6.4180E+06	4.9605E+00	2.2293E+25	9.4014E+21
Cs-136	1.7411E+06	2.3756E-02	1.0519E+23	2.5812E+21
Cs-137	4.0024E+06	4.6014E+01	2.0227E+26	5.8617E+21
Ba-139	8.5891E+03	5.2510E-07	2.2750E+18	5.2848E+20
Ba-140	3.3619E+06	4.5922E-02	1.9754E+23	4.8938E+21
La-140	6.0668E+05	1.0915E-03	4.6950E+21	4.7268E+20
La-141	3.9437E+03	6.9733E-07	2.9783E+18	1.7072E+19
La-142	1.4511E+02	1.0137E-08	4.2990E+16	5.5732E+18
Ce-141	7.8589E+04	2.7581E-03	1.1780E+22	1.1349E+20
Ce-143	6.0694E+04	9.1395E-05	3.8489E+20	9.7977E+19
Ce-144	6.3356E+04	1.9864E-02	8.3072E+22	9.1149E+19
Pr-143	3.1152E+04	4.6262E-04	1.9482E+21	4.4212E+19
Nd-147	1.2566E+04	1.5533E-04	6.3634E+20	1.8328E+19
Np-239	8.2175E+05	3.5421E-03	8.9252E+21	1.2635E+21
Pu-238	3.1683E+02	1.8507E-02	4.6828E+22	4.5556E+17
Pu-239	2.1203E+01	3.4112E-01	8.5953E+23	3.0465E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	3.2669E+16
Pu-241	1.0904E+04	1.0585E-01	2.6451E+23	1.5680E+19
Am-241	6.7454E+00	1.9654E-03	4.9111E+21	9.6836E+15
Cm-242	1.6814E+03	5.0731E-04	1.2624E+21	2.4200E+18
Cm-244	1.8359E+02	2.2692E-03	5.6007E+21	2.6399E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 12.0000	Atmosphere	Sump	
Noble gases (atoms)	1.2451E+23	0.0000E+00	
Elemental I (atoms)	5.7806E+22	0.0000E+00	
Organic I (atoms)	1.7878E+21	0.0000E+00	
Aerosols (kg)	5.3702E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.7401E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.0026E-02
Total I (Ci)			8.9901E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 12.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.3672E+15
Elemental I (atoms)	0.0000E+00	2.9016E+15
Organic I (atoms)	0.0000E+00	8.9740E+13
Aerosols (kg)	0.0000E+00	2.5425E-06

Detailed model information at time (H) = 14.0000

EAB Doses:

Time (h) = 14.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 14.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.1808E-07	1.5345E-04	9.8706E-06
Accumulated dose (rem)	6.9015E-06	2.5893E-03	1.5815E-04

Control Room Doses:

Time (h) = 14.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.1013E-12	4.1482E-08	2.5484E-09
Accumulated dose (rem)	6.7712E-08	3.4607E-04	1.5751E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 14.0000	Ci	kg	Atoms	Decay
Co-58	1.3409E+03	4.2169E-05	4.3784E+20	2.2913E+18
Co-60	1.6137E+03	1.4276E-03	1.4329E+22	2.7505E+18
Rb-86	5.6256E+04	6.9139E-04	4.8414E+21	9.8364E+19
Sr-89	1.9585E+06	6.7414E-02	4.5615E+23	3.3502E+21
Sr-90	2.2423E+05	1.6438E+00	1.0999E+25	3.8216E+20
Sr-91	9.6568E+05	2.6640E-04	1.7629E+21	2.7234E+21
Sr-92	7.8945E+04	6.2807E-06	4.1112E+19	1.0501E+21
Y-90	3.1053E+04	5.7075E-05	3.8191E+20	2.8640E+19
Y-91	2.8391E+04	1.1577E-03	7.6614E+21	4.5443E+19
Y-92	3.0452E+05	3.1647E-05	2.0716E+20	8.6169E+20
Y-93	1.2218E+04	3.6622E-06	2.3714E+19	3.3375E+19
Zr-95	3.1475E+04	1.4651E-03	9.2875E+21	5.3798E+19
Zr-97	1.8505E+04	9.6800E-06	6.0097E+19	4.1489E+19
Nb-95	3.1830E+04	8.1400E-04	5.1600E+21	5.4249E+19
Mo-99	3.8664E+05	8.0615E-04	4.9038E+21	7.0533E+20
Tc-99m	3.6998E+05	7.0362E-05	4.2801E+20	6.4659E+20
Ru-103	3.6682E+05	1.1366E-02	6.6453E+22	6.2812E+20
Ru-105	2.8832E+04	4.2891E-06	2.4600E+19	1.5713E+20
Ru-106	1.5242E+05	4.5558E-02	2.5883E+23	2.5990E+20
Rh-105	2.0835E+05	2.4685E-04	1.4158E+21	3.8890E+20
Sb-127	4.5992E+05	1.7222E-03	8.1665E+21	8.2274E+20
Sb-129	1.6120E+05	2.8665E-05	1.3382E+20	9.1128E+20
Te-127	4.7940E+05	1.8165E-04	8.6136E+20	8.3420E+20
Te-127m	6.8074E+04	7.2169E-03	3.4221E+22	1.1596E+20
Te-129	3.6506E+05	1.7432E-05	8.1376E+19	1.1709E+21
Te-129m	2.2242E+05	7.3831E-03	3.4467E+22	3.8040E+20
Te-131m	4.9387E+05	6.1935E-04	2.8472E+21	9.7954E+20
Te-132	5.9536E+06	1.9611E-02	8.9468E+22	1.0745E+22
I-131	2.7076E+07	2.1840E-01	1.0040E+24	4.7835E+22
I-132	7.1602E+06	6.9367E-04	3.1647E+21	2.5698E+22
I-133	3.6880E+07	3.2557E-02	1.4741E+23	7.9677E+22
I-134	1.0169E+03	3.8118E-08	1.7131E+17	5.3121E+21
I-135	1.2659E+07	3.6047E-03	1.6080E+22	4.6624E+22
Xe-133	4.1759E+06	2.2309E-02	1.0101E+23	4.7754E+21
Xe-135	1.7604E+07	6.8934E-03	3.0750E+22	3.0164E+22
Cs-134	6.4175E+06	4.9601E+00	2.2291E+25	1.1111E+22
Cs-136	1.7335E+06	2.3652E-02	1.0473E+23	3.0440E+21
Cs-137	4.0024E+06	4.6014E+01	2.0226E+26	6.9279E+21
Ba-139	3.1415E+03	1.9206E-07	8.3210E+17	5.2992E+20
Ba-140	3.3467E+06	4.5714E-02	1.9664E+23	5.7874E+21
La-140	7.0025E+05	1.2598E-03	5.4192E+21	6.4212E+20
La-141	2.7714E+03	4.9006E-07	2.0930E+18	1.7957E+19

La-142	5.9043E+01	4.1246E-09	1.7492E+16	5.5987E+18
Ce-141	7.8455E+04	2.7534E-03	1.1760E+22	1.3441E+20
Ce-143	5.8197E+04	8.7635E-05	3.6905E+20	1.1381E+20
Ce-144	6.3343E+04	1.9860E-02	8.3055E+22	1.0803E+20
Pr-143	3.1273E+04	4.6441E-04	1.9558E+21	5.2517E+19
Nd-147	1.2500E+04	1.5451E-04	6.3300E+20	2.1667E+19
Np-239	8.0184E+05	3.4563E-03	8.7090E+21	1.4798E+21
Pu-238	3.1683E+02	1.8507E-02	4.6828E+22	5.3997E+17
Pu-239	2.1208E+01	3.4121E-01	8.5975E+23	3.6114E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	3.8722E+16
Pu-241	1.0904E+04	1.0585E-01	2.6451E+23	1.8585E+19
Am-241	6.7494E+00	1.9665E-03	4.9140E+21	1.1481E+16
Cm-242	1.6808E+03	5.0713E-04	1.2620E+21	2.8678E+18
Cm-244	1.8359E+02	2.2692E-03	5.6006E+21	3.1289E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 14.0000	Atmosphere	Sump	
Noble gases (atoms)	1.3177E+23	0.0000E+00	
Elemental I (atoms)	5.6776E+22	0.0000E+00	
Organic I (atoms)	1.7560E+21	0.0000E+00	
Aerosols (kg)	5.3696E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.5609E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.7377E-03
Total I (Ci)			8.3776E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 14.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	5.4671E+15
Elemental I (atoms)	0.0000E+00	3.3985E+15
Organic I (atoms)	0.0000E+00	1.0511E+14
Aerosols (kg)	0.0000E+00	3.0071E-06

Detailed model information at time (H) = 16.0000

EAB Doses:

Time (h) = 16.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 16.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.9135E-07	1.5069E-04	9.7515E-06
Accumulated dose (rem)	7.2928E-06	2.7400E-03	1.6790E-04

Control Room Doses:

Time (h) = 16.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.9055E-12	4.0731E-08	2.5229E-09
Accumulated dose (rem)	6.7715E-08	3.4611E-04	1.5754E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 16.0000	Ci	kg	Atoms	Decay
Co-58	1.3398E+03	4.2135E-05	4.3749E+20	2.6483E+18
Co-60	1.6137E+03	1.4275E-03	1.4328E+22	3.1804E+18
Rb-86	5.6083E+04	6.8925E-04	4.8265E+21	1.1333E+20
Sr-89	1.9563E+06	6.7337E-02	4.5563E+23	3.8716E+21
Sr-90	2.2423E+05	1.6438E+00	1.0999E+25	4.4190E+20
Sr-91	8.3456E+05	2.3022E-04	1.5236E+21	2.9628E+21
Sr-92	4.7333E+04	3.7657E-06	2.4650E+19	1.0666E+21
Y-90	3.5218E+04	6.4732E-05	4.3314E+20	3.7145E+19
Y-91	2.8736E+04	1.1717E-03	7.7543E+21	5.3028E+19
Y-92	2.2762E+05	2.3656E-05	1.5484E+20	9.3047E+20
Y-93	1.0651E+04	3.1925E-06	2.0673E+19	3.6416E+19
Zr-95	3.1446E+04	1.4638E-03	9.2791E+21	6.2179E+19
Zr-97	1.7048E+04	8.9177E-06	5.5365E+19	4.6222E+19
Nb-95	3.1829E+04	8.1398E-04	5.1599E+21	6.2725E+19
Mo-99	3.7860E+05	7.8939E-04	4.8018E+21	8.0726E+20
Tc-99m	3.6718E+05	6.9829E-05	4.2477E+20	7.3953E+20
Ru-103	3.6628E+05	1.1349E-02	6.6356E+22	7.2577E+20
Ru-105	2.1099E+04	3.1389E-06	1.8002E+19	1.6372E+20

Ru-106	1.5239E+05	4.5551E-02	2.5879E+23	3.0050E+20
Rh-105	2.0130E+05	2.3849E-04	1.3679E+21	4.4340E+20
Sb-127	4.5308E+05	1.6966E-03	8.0449E+21	9.4435E+20
Sb-129	1.1695E+05	2.0796E-05	9.7084E+19	9.4801E+20
Te-127	4.7638E+05	1.8051E-04	8.5595E+20	9.5711E+20
Te-127m	6.8081E+04	7.2177E-03	3.4225E+22	1.3410E+20
Te-129	3.4035E+05	1.6252E-05	7.5869E+19	1.2432E+21
Te-129m	2.2209E+05	7.3722E-03	3.4416E+22	4.3960E+20
Te-131m	4.7157E+05	5.9138E-04	2.7186E+21	1.1081E+21
Te-132	5.8490E+06	1.9266E-02	8.7896E+22	1.2317E+22
I-131	2.6885E+07	2.1685E-01	9.9689E+23	5.5022E+22
I-132	7.0109E+06	6.7921E-04	3.0987E+21	2.7336E+22
I-133	3.4502E+07	3.0457E-02	1.3791E+23	8.9181E+22
I-134	2.0917E+02	7.8409E-09	3.5238E+16	5.3122E+21
I-135	1.0264E+07	2.9227E-03	1.3038E+22	4.9666E+22
Xe-133	4.5102E+06	2.4095E-02	1.0910E+23	5.9075E+21
Xe-135	1.6537E+07	6.4756E-03	2.8887E+22	3.4613E+22
Cs-134	6.4170E+06	4.9597E+00	2.2290E+25	1.2821E+22
Cs-136	1.7258E+06	2.3548E-02	1.0427E+23	3.5048E+21
Cs-137	4.0023E+06	4.6014E+01	2.0226E+26	7.9942E+21
Ba-139	1.1491E+03	7.0249E-08	3.0435E+17	5.3045E+20
Ba-140	3.3316E+06	4.5508E-02	1.9575E+23	6.6769E+21
La-140	7.9052E+05	1.4222E-03	6.1178E+21	8.3309E+20
La-141	1.9476E+03	3.4439E-07	1.4709E+18	1.8579E+19
La-142	2.4024E+01	1.6782E-09	7.1173E+15	5.6091E+18
Ce-141	7.8320E+04	2.7487E-03	1.1740E+22	1.5529E+20
Ce-143	5.5803E+04	8.4030E-05	3.5387E+20	1.2899E+20
Ce-144	6.3330E+04	1.9856E-02	8.3038E+22	1.2490E+20
Pr-143	3.1382E+04	4.6604E-04	1.9626E+21	6.0846E+19
Nd-147	1.2434E+04	1.5370E-04	6.2968E+20	2.4988E+19
Np-239	7.8241E+05	3.3726E-03	8.4980E+21	1.6908E+21
Pu-238	3.1684E+02	1.8507E-02	4.6829E+22	6.2437E+17
Pu-239	2.1213E+01	3.4129E-01	8.5996E+23	4.1765E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	4.4775E+16
Pu-241	1.0904E+04	1.0585E-01	2.6450E+23	2.1489E+19
Am-241	6.7534E+00	1.9677E-03	4.9169E+21	1.3279E+16
Cm-242	1.6802E+03	5.0695E-04	1.2616E+21	3.3155E+18
Cm-244	1.8358E+02	2.2692E-03	5.6006E+21	3.6180E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 16.0000	Atmosphere	Sump	
Noble gases (atoms)	1.3799E+23	0.0000E+00	
Elemental I (atoms)	5.5821E+22	0.0000E+00	
Organic I (atoms)	1.7264E+21	0.0000E+00	
Aerosols (kg)	5.3690E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.3936E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.4751E-03
Total I (Ci)			7.8662E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 16.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	6.6211E+15
Elemental I (atoms)	0.0000E+00	3.8877E+15
Organic I (atoms)	0.0000E+00	1.2024E+14
Aerosols (kg)	0.0000E+00	3.4717E-06

Detailed model information at time (H) = 18.0000

EAB Doses:

Time (h) = 18.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 18.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.6651E-07	1.4781E-04	9.6307E-06
Accumulated dose (rem)	7.6594E-06	2.8878E-03	1.7753E-04

Control Room Doses:

Time (h) = 18.0000	Whole Body	Thyroid	TEDE

Delta dose (rem)	2.7222E-12	3.9952E-08	2.4968E-09
Accumulated dose (rem)	6.7717E-08	3.4615E-04	1.5756E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 18.0000	Ci	kg	Atoms	Decay
Co-58	1.3387E+03	4.2101E-05	4.3713E+20	3.0051E+18
Co-60	1.6136E+03	1.4275E-03	1.4328E+22	3.6103E+18
Rb-86	5.5909E+04	6.8712E-04	4.8116E+21	1.2824E+20
Sr-89	1.9540E+06	6.7260E-02	4.5511E+23	4.3925E+21
Sr-90	2.2423E+05	1.6438E+00	1.0999E+25	5.0163E+20
Sr-91	7.2125E+05	1.9897E-04	1.3167E+21	3.1696E+21
Sr-92	2.8379E+04	2.2578E-06	1.4779E+19	1.0765E+21
Y-90	3.9294E+04	7.2224E-05	4.8327E+20	4.6748E+19
Y-91	2.9029E+04	1.1837E-03	7.8335E+21	6.0702E+19
Y-92	1.6692E+05	1.7347E-05	1.1355E+20	9.8163E+20
Y-93	9.2850E+03	2.7830E-06	1.8021E+19	3.9068E+19
Zr-95	3.1418E+04	1.4625E-03	9.2707E+21	7.0552E+19
Zr-97	1.5705E+04	8.2154E-06	5.1004E+19	5.0582E+19
Nb-95	3.1828E+04	8.1395E-04	5.1597E+21	7.1201E+19
Mo-99	3.7073E+05	7.7298E-04	4.7020E+21	9.0707E+20
Tc-99m	3.6342E+05	6.9115E-05	4.2043E+20	8.3170E+20
Ru-103	3.6574E+05	1.1332E-02	6.6258E+22	8.2328E+20
Ru-105	1.5441E+04	2.2971E-06	1.3174E+19	1.6855E+20
Ru-106	1.5237E+05	4.5544E-02	2.5875E+23	3.4109E+20
Rh-105	1.9427E+05	2.3016E-04	1.3200E+21	4.9604E+20
Sb-127	4.4633E+05	1.6713E-03	7.9251E+21	1.0642E+21
Sb-129	8.4844E+04	1.5088E-05	7.0434E+19	9.7466E+20
Te-127	4.7299E+05	1.7922E-04	8.4985E+20	1.0792E+21
Te-127m	6.8088E+04	7.2184E-03	3.4228E+22	1.5223E+20
Te-129	3.0630E+05	1.4626E-05	6.8279E+19	1.3098E+21
Te-129m	2.2174E+05	7.3607E-03	3.4362E+22	4.9872E+20
Te-131m	4.5028E+05	5.6468E-04	2.5958E+21	1.2309E+21
Te-132	5.7463E+06	1.8928E-02	8.6352E+22	1.3862E+22
I-131	2.6695E+07	2.1532E-01	9.8985E+23	6.2159E+22
I-132	6.8749E+06	6.6603E-04	3.0386E+21	2.8940E+22
I-133	3.2278E+07	2.8494E-02	1.2902E+23	9.8073E+22
I-134	4.3027E+01	1.6129E-09	7.2486E+15	5.3122E+21
I-135	8.3222E+06	2.3697E-03	1.0571E+22	5.2133E+22
Xe-133	4.8164E+06	2.5731E-02	1.1651E+23	7.1265E+21
Xe-135	1.5352E+07	6.0115E-03	2.6816E+22	3.8780E+22
Cs-134	6.4165E+06	4.9593E+00	2.2288E+25	1.4530E+22
Cs-136	1.7183E+06	2.3444E-02	1.0381E+23	3.9635E+21
Cs-137	4.0023E+06	4.6013E+01	2.0226E+26	9.0604E+21
Ba-139	4.2028E+02	2.5694E-08	1.1132E+17	5.3064E+20
Ba-140	3.3165E+06	4.5302E-02	1.9487E+23	7.5624E+21
La-140	8.7721E+05	1.5782E-03	6.7887E+21	1.0477E+21
La-141	1.3687E+03	2.4202E-07	1.0337E+18	1.9016E+19
La-142	9.7751E+00	6.8285E-10	2.8959E+15	5.6133E+18
Ce-141	7.8184E+04	2.7439E-03	1.1719E+22	1.7613E+20
Ce-143	5.3507E+04	8.0573E-05	3.3931E+20	1.4355E+20
Ce-144	6.3318E+04	1.9852E-02	8.3022E+22	1.4177E+20
Pr-143	3.1482E+04	4.6751E-04	1.9688E+21	6.9205E+19
Nd-147	1.2369E+04	1.5290E-04	6.2637E+20	2.8292E+19
Np-239	7.6345E+05	3.2909E-03	8.2921E+21	1.8967E+21
Pu-238	3.1684E+02	1.8507E-02	4.6829E+22	7.0878E+17
Pu-239	2.1219E+01	3.4137E-01	8.6016E+23	4.7416E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	5.0828E+16
Pu-241	1.0904E+04	1.0585E-01	2.6450E+23	2.4394E+19
Am-241	6.7574E+00	1.9688E-03	4.9198E+21	1.5079E+16
Cm-242	1.6796E+03	5.0678E-04	1.2611E+21	3.7630E+18
Cm-244	1.8358E+02	2.2692E-03	5.6005E+21	4.1071E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 18.0000	Atmosphere	Sump	
Noble gases (atoms)	1.4332E+23	0.0000E+00	
Elemental I (atoms)	5.4925E+22	0.0000E+00	
Organic I (atoms)	1.6987E+21	0.0000E+00	
Aerosols (kg)	5.3685E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.2364E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.2330E-03
Total I (Ci)			7.4170E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 18.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	7.8269E+15
Elemental I (atoms)	0.0000E+00	4.3686E+15
Organic I (atoms)	0.0000E+00	1.3511E+14
Aerosols (kg)	0.0000E+00	3.9362E-06

Detailed model information at time (H) = 20.0000

EAB Doses:

Time (h) = 20.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 20.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.4525E-07	1.4510E-04	9.5195E-06
Accumulated dose (rem)	8.0046E-06	3.0329E-03	1.8705E-04

Control Room Doses:

Time (h) = 20.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.5625E-12	3.9219E-08	2.4723E-09
Accumulated dose (rem)	6.7720E-08	3.4619E-04	1.5759E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 20.0000	Ci	kg	Atoms	Decay
Co-58	1.3376E+03	4.2066E-05	4.3677E+20	3.3616E+18
Co-60	1.6136E+03	1.4275E-03	1.4327E+22	4.0401E+18
Rb-86	5.5736E+04	6.8500E-04	4.7967E+21	1.4312E+20
Sr-89	1.9518E+06	6.7183E-02	4.5459E+23	4.9127E+21
Sr-90	2.2423E+05	1.6438E+00	1.0999E+25	5.6137E+20
Sr-91	6.2332E+05	1.7195E-04	1.1379E+21	3.3484E+21
Sr-92	1.7015E+04	1.3537E-06	8.8610E+18	1.0824E+21
Y-90	4.3283E+04	7.9555E-05	5.3232E+20	5.7426E+19
Y-91	2.9279E+04	1.1939E-03	7.9009E+21	6.8451E+19
Y-92	1.2066E+05	1.2540E-05	8.2082E+19	1.0190E+21
Y-93	8.0942E+03	2.4261E-06	1.5710E+19	4.1379E+19
Zr-95	3.1390E+04	1.4611E-03	9.2624E+21	7.8918E+19
Zr-97	1.4468E+04	7.5684E-06	4.6987E+19	5.4599E+19
Nb-95	3.1827E+04	8.1392E-04	5.1595E+21	7.9676E+19
Mo-99	3.6303E+05	7.5692E-04	4.6043E+21	1.0048E+21
Tc-99m	3.5895E+05	6.8265E-05	4.1525E+20	9.2288E+20
Ru-103	3.6521E+05	1.1316E-02	6.6161E+22	9.2064E+20
Ru-105	1.1300E+04	1.6810E-06	9.6413E+18	1.7209E+20
Ru-106	1.5235E+05	4.5537E-02	2.5871E+23	3.8168E+20
Rh-105	1.8731E+05	2.2192E-04	1.2728E+21	5.4682E+20
Sb-127	4.3968E+05	1.6464E-03	7.8071E+21	1.1822E+21
Sb-129	6.1554E+04	1.0946E-05	5.1100E+19	9.9400E+20
Te-127	4.6928E+05	1.7782E-04	8.4318E+20	1.2004E+21
Te-127m	6.8094E+04	7.2190E-03	3.4231E+22	1.7037E+20
Te-129	2.7666E+05	1.3210E-05	6.1671E+19	1.3696E+21
Te-129m	2.2139E+05	7.3490E-03	3.4308E+22	5.5774E+20
Te-131m	4.2994E+05	5.3918E-04	2.4786E+21	1.3481E+21
Te-132	5.6453E+06	1.8595E-02	8.4834E+22	1.5379E+22
I-131	2.6506E+07	2.1380E-01	9.8286E+23	6.9245E+22
I-132	6.7471E+06	6.5365E-04	2.9821E+21	3.0514E+22
I-133	3.0197E+07	2.6657E-02	1.2070E+23	1.0639E+23
I-134	8.8507E+00	3.3178E-10	1.4910E+15	5.3123E+21
I-135	6.7476E+06	1.9214E-03	8.5710E+21	5.4133E+22
Xe-133	5.0963E+06	2.7226E-02	1.2328E+23	8.4251E+21
Xe-135	1.4116E+07	5.5276E-03	2.4658E+22	4.2639E+22
Cs-134	6.4160E+06	4.9590E+00	2.2286E+25	1.6239E+22
Cs-136	1.7107E+06	2.3341E-02	1.0336E+23	4.4203E+21
Cs-137	4.0023E+06	4.6013E+01	2.0226E+26	1.0127E+22
Ba-139	1.5372E+02	9.3979E-09	4.0716E+16	5.3071E+20
Ba-140	3.3015E+06	4.5097E-02	1.9399E+23	8.4440E+21
La-140	9.6046E+05	1.7280E-03	7.4330E+21	1.2849E+21
La-141	9.6187E+02	1.7008E-07	7.2642E+17	1.9324E+19
La-142	3.9774E+00	2.7784E-10	1.1783E+15	5.6150E+18
Ce-141	7.8047E+04	2.7391E-03	1.1699E+22	1.9694E+20
Ce-143	5.1306E+04	7.7258E-05	3.2536E+20	1.5751E+20

Ce-144	6.3305E+04	1.9848E-02	8.3005E+22	1.5863E+20
Pr-143	3.1571E+04	4.6883E-04	1.9744E+21	7.7588E+19
Nd-147	1.2304E+04	1.5210E-04	6.2309E+20	3.1578E+19
Np-239	7.4495E+05	3.2111E-03	8.0912E+21	2.0976E+21
Pu-238	3.1684E+02	1.8507E-02	4.6830E+22	7.9318E+17
Pu-239	2.1223E+01	3.4145E-01	8.6036E+23	5.3069E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	5.6880E+16
Pu-241	1.0904E+04	1.0585E-01	2.6450E+23	2.7299E+19
Am-241	6.7614E+00	1.9700E-03	4.9227E+21	1.6879E+16
Cm-242	1.6790E+03	5.0660E-04	1.2607E+21	4.2104E+18
Cm-244	1.8358E+02	2.2692E-03	5.6005E+21	4.5961E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 20.0000	Atmosphere	Sump	
Noble gases (atoms)	1.4794E+23	0.0000E+00	
Elemental I (atoms)	5.4083E+22	0.0000E+00	
Organic I (atoms)	1.6727E+21	0.0000E+00	
Aerosols (kg)	5.3680E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.0884E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.0088E-03
Total I (Ci)			7.0197E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 20.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	9.0773E+15
Elemental I (atoms)	0.0000E+00	4.8420E+15
Organic I (atoms)	0.0000E+00	1.4975E+14
Aerosols (kg)	0.0000E+00	4.4006E-06

Detailed model information at time (H) = 22.0000

EAB Doses:

Time (h) = 22.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 22.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.2694E-07	1.4254E-04	9.4167E-06
Accumulated dose (rem)	8.3315E-06	3.1754E-03	1.9647E-04

Control Room Doses:

Time (h) = 22.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.4225E-12	3.8527E-08	2.4494E-09
Accumulated dose (rem)	6.7722E-08	3.4623E-04	1.5761E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 22.0000	Ci	kg	Atoms	Decay
Co-58	1.3365E+03	4.2032E-05	4.3642E+20	3.7178E+18
Co-60	1.6135E+03	1.4274E-03	1.4327E+22	4.4700E+18
Rb-86	5.5564E+04	6.8288E-04	4.7819E+21	1.5794E+20
Sr-89	1.9496E+06	6.7106E-02	4.5407E+23	5.4324E+21
Sr-90	2.2423E+05	1.6438E+00	1.0999E+25	6.2110E+20
Sr-91	5.3868E+05	1.4860E-04	9.8341E+20	3.5029E+21
Sr-92	1.0202E+04	8.1163E-07	5.3128E+18	1.0859E+21
Y-90	4.7186E+04	8.6730E-05	5.8033E+20	6.9154E+19
Y-91	2.9490E+04	1.2025E-03	7.9580E+21	7.6263E+19
Y-92	8.6256E+04	8.9642E-06	5.8678E+19	1.0460E+21
Y-93	7.0561E+03	2.1149E-06	1.3695E+19	4.3394E+19
Zr-95	3.1361E+04	1.4598E-03	9.2540E+21	8.7277E+19
Zr-97	1.3329E+04	6.9723E-06	4.3287E+19	5.8299E+19
Nb-95	3.1825E+04	8.1388E-04	5.1593E+21	8.8151E+19
Mo-99	3.5548E+05	7.4118E-04	4.5086E+21	1.1005E+21
Tc-99m	3.5394E+05	6.7311E-05	4.0945E+20	1.0129E+21
Ru-103	3.6467E+05	1.1299E-02	6.6063E+22	1.0179E+21
Ru-105	8.2694E+03	1.2302E-06	7.0556E+18	1.7467E+20
Ru-106	1.5232E+05	4.5530E-02	2.5867E+23	4.2226E+20
Rh-105	1.8049E+05	2.1383E-04	1.2264E+21	5.9579E+20
Sb-127	4.3314E+05	1.6219E-03	7.6908E+21	1.2984E+21

Sb-129	4.4657E+04	7.9413E-06	3.7072E+19	1.0080E+21
Te-127	4.6531E+05	1.7631E-04	8.3604E+20	1.3207E+21
Te-127m	6.8100E+04	7.2196E-03	3.4234E+22	1.8851E+20
Te-129	2.5359E+05	1.2109E-05	5.6529E+19	1.4239E+21
Te-129m	2.2103E+05	7.3371E-03	3.4252E+22	6.1667E+20
Te-131m	4.1053E+05	5.1483E-04	2.3667E+21	1.4600E+21
Te-132	5.5461E+06	1.8268E-02	8.3344E+22	1.6870E+22
I-131	2.6319E+07	2.1229E-01	9.7591E+23	7.6281E+22
I-132	6.6247E+06	6.4179E-04	2.9280E+21	3.2059E+22
I-133	2.8250E+07	2.4938E-02	1.1292E+23	1.1417E+23
I-134	1.8206E+00	6.8247E-11	3.0671E+14	5.3123E+21
I-135	5.4710E+06	1.5579E-03	6.9494E+21	5.5754E+22
Xe-133	5.3516E+06	2.8591E-02	1.2946E+23	9.7963E+21
Xe-135	1.2878E+07	5.0428E-03	2.2495E+22	4.6180E+22
Cs-134	6.4155E+06	4.9586E+00	2.2284E+25	1.7949E+22
Cs-136	1.7032E+06	2.3238E-02	1.0290E+23	4.8750E+21
Cs-137	4.0023E+06	4.6013E+01	2.0226E+26	1.1193E+22
Ba-139	5.6225E+01	3.4374E-09	1.4892E+16	5.3074E+20
Ba-140	3.2866E+06	4.4893E-02	1.9311E+23	9.3215E+21
La-140	1.0404E+06	1.8718E-03	8.0515E+21	1.5439E+21
La-141	6.7596E+02	1.1953E-07	5.1050E+17	1.9540E+19
La-142	1.6183E+00	1.1305E-10	4.7944E+14	5.6157E+18
Ce-141	7.7910E+04	2.7343E-03	1.1678E+22	2.1772E+20
Ce-143	4.9195E+04	7.4080E-05	3.1197E+20	1.7090E+20
Ce-144	6.3292E+04	1.9844E-02	8.2988E+22	1.7550E+20
Pr-143	3.1650E+04	4.7002E-04	1.9794E+21	8.5995E+19
Nd-147	1.2240E+04	1.5130E-04	6.1982E+20	3.4848E+19
Np-239	7.2690E+05	3.1333E-03	7.8951E+21	2.2936E+21
Pu-238	3.1684E+02	1.8508E-02	4.6830E+22	8.7759E+17
Pu-239	2.1228E+01	3.4153E-01	8.6056E+23	5.8723E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	6.2933E+16
Pu-241	1.0904E+04	1.0585E-01	2.6450E+23	3.0204E+19
Am-241	6.7654E+00	1.9712E-03	4.9256E+21	1.8681E+16
Cm-242	1.6784E+03	5.0642E-04	1.2602E+21	4.6576E+18
Cm-244	1.8358E+02	2.2691E-03	5.6004E+21	5.0852E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 22.0000	Atmosphere	Sump	
Noble gases (atoms)	1.5195E+23	0.0000E+00	
Elemental I (atoms)	5.3287E+22	0.0000E+00	
Organic I (atoms)	1.6481E+21	0.0000E+00	
Aerosols (kg)	5.3675E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.9486E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.8004E-03
Total I (Ci)			6.6664E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 22.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.0366E+16
Elemental I (atoms)	0.0000E+00	5.3082E+15
Organic I (atoms)	0.0000E+00	1.6417E+14
Aerosols (kg)	0.0000E+00	4.8651E-06

Detailed model information at time (H) = 24.0000

EAB Doses:

Time (h) = 24.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 24.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.1109E-07	1.4012E-04	9.3211E-06
Accumulated dose (rem)	8.6426E-06	3.3155E-03	2.0579E-04

Control Room Doses:

Time (h) = 24.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.2992E-12	3.7872E-08	2.4277E-09
Accumulated dose (rem)	6.7725E-08	3.4627E-04	1.5764E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 24.0000	Ci	kg	Atoms	Decay
Co-58	1.3354E+03	4.1998E-05	4.3606E+20	4.0737E+18
Co-60	1.6135E+03	1.4274E-03	1.4326E+22	4.8998E+18
Rb-86	5.5392E+04	6.8077E-04	4.7671E+21	1.7272E+20
Sr-89	1.9474E+06	6.7030E-02	4.5355E+23	5.9515E+21
Sr-90	2.2423E+05	1.6438E+00	1.0999E+25	6.8083E+20
Sr-91	4.6554E+05	1.2843E-04	8.4989E+20	3.6365E+21
Sr-92	6.1166E+03	4.8663E-07	3.1854E+18	1.0881E+21
Y-90	5.1006E+04	9.3750E-05	6.2731E+20	8.1911E+19
Y-91	2.9669E+04	1.2098E-03	8.0062E+21	8.4130E+19
Y-92	6.1120E+04	6.3519E-06	4.1578E+19	1.0652E+21
Y-93	6.1511E+03	1.8437E-06	1.1939E+19	4.5150E+19
Zr-95	3.1333E+04	1.4585E-03	9.2456E+21	9.5628E+19
Zr-97	1.2279E+04	6.4232E-06	3.9878E+19	6.1708E+19
Nb-95	3.1824E+04	8.1385E-04	5.1591E+21	9.6626E+19
Mo-99	3.4809E+05	7.2578E-04	4.4149E+21	1.1942E+21
Tc-99m	3.4853E+05	6.6282E-05	4.0319E+20	1.1016E+21
Ru-103	3.6413E+05	1.1283E-02	6.5966E+22	1.1149E+21
Ru-105	6.0516E+03	9.0027E-07	5.1634E+18	1.7656E+20
Ru-106	1.5230E+05	4.5523E-02	2.5863E+23	4.6284E+20
Rh-105	1.7382E+05	2.0594E-04	1.1811E+21	6.4296E+20
Sb-127	4.2669E+05	1.5978E-03	7.5763E+21	1.4130E+21
Sb-129	3.2398E+04	5.7614E-06	2.6896E+19	1.0182E+21
Te-127	4.6112E+05	1.7473E-04	8.2852E+20	1.4399E+21
Te-127m	6.8105E+04	7.2201E-03	3.4237E+22	2.0665E+20
Te-129	2.3632E+05	1.1284E-05	5.2679E+19	1.4738E+21
Te-129m	2.2067E+05	7.3249E-03	3.4195E+22	6.7551E+20
Te-131m	3.9199E+05	4.9158E-04	2.2598E+21	1.5669E+21
Te-132	5.4486E+06	1.7947E-02	8.1879E+22	1.8334E+22
I-131	2.6132E+07	2.1079E-01	9.6901E+23	8.3268E+22
I-132	6.5062E+06	6.3031E-04	2.8756E+21	3.3576E+22
I-133	2.6428E+07	2.3330E-02	1.0564E+23	1.2145E+23
I-134	3.7450E-01	1.4039E-11	6.3091E+13	5.3123E+21
I-135	4.4359E+06	1.2631E-03	5.6346E+21	5.7069E+22
Xe-133	5.5842E+06	2.9833E-02	1.3508E+23	1.1234E+22
Xe-135	1.1671E+07	4.5703E-03	2.0387E+22	4.9405E+22
Cs-134	6.4151E+06	4.9582E+00	2.2283E+25	1.9658E+22
Cs-136	1.6957E+06	2.3136E-02	1.0245E+23	5.3277E+21
Cs-137	4.0023E+06	4.6013E+01	2.0226E+26	1.2259E+22
Ba-139	2.0565E+01	1.2573E-09	5.4471E+15	5.3075E+20
Ba-140	3.2717E+06	4.4690E-02	1.9223E+23	1.0195E+22
La-140	1.1171E+06	2.0098E-03	8.6451E+21	1.8238E+21
La-141	4.7503E+02	8.3997E-08	3.5875E+17	1.9691E+19
La-142	6.5848E-01	4.5999E-11	1.9508E+14	5.6160E+18
Ce-141	7.7773E+04	2.7295E-03	1.1658E+22	2.3845E+20
Ce-143	4.7171E+04	7.1032E-05	2.9914E+20	1.8373E+20
Ce-144	6.3279E+04	1.9840E-02	8.2971E+22	1.9236E+20
Pr-143	3.1721E+04	4.7106E-04	1.9838E+21	9.4423E+19
Nd-147	1.2176E+04	1.5050E-04	6.1657E+20	3.8100E+19
Np-239	7.0929E+05	3.0574E-03	7.7038E+21	2.4849E+21
Pu-238	3.1685E+02	1.8508E-02	4.6830E+22	9.6200E+17
Pu-239	2.1233E+01	3.4161E-01	8.6075E+23	6.4379E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	6.8986E+16
Pu-241	1.0904E+04	1.0585E-01	2.6449E+23	3.3109E+19
Am-241	6.7694E+00	1.9723E-03	4.9285E+21	2.0483E+16
Cm-242	1.6778E+03	5.0624E-04	1.2598E+21	5.1047E+18
Cm-244	1.8358E+02	2.2691E-03	5.6004E+21	5.5742E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 24.0000	Atmosphere	Sump	
Noble gases (atoms)	1.5547E+23	0.0000E+00	
Elemental I (atoms)	5.2533E+22	0.0000E+00	
Organic I (atoms)	1.6247E+21	0.0000E+00	
Aerosols (kg)	5.3671E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.8162E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.6060E-03
Total I (Ci)			6.3503E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 24.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.1689E+16

Elemental I (atoms)	0.0000E+00	5.7675E+15
Organic I (atoms)	0.0000E+00	1.7838E+14
Aerosols (kg)	0.0000E+00	5.3294E-06

Detailed model information at time (H) = 30.0000

EAB Doses:

Time (h) = 30.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 30.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.5655E-07	2.2447E-04	1.5023E-05
Accumulated dose (rem)	8.9992E-06	3.5400E-03	2.2081E-04

Control Room Doses:

Time (h) = 30.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.8270E-11	8.4743E-07	5.5255E-08
Accumulated dose (rem)	6.7773E-08	3.4712E-04	1.5819E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 30.0000	Ci	kg	Atoms	Decay
Co-58	1.3322E+03	4.1895E-05	4.3500E+20	5.1397E+18
Co-60	1.6133E+03	1.4272E-03	1.4325E+22	6.1893E+18
Rb-86	5.4880E+04	6.7448E-04	4.7230E+21	2.1679E+20
Sr-89	1.9407E+06	6.6800E-02	4.5200E+23	7.5051E+21
Sr-90	2.2422E+05	1.6438E+00	1.0999E+25	8.6003E+20
Sr-91	3.0049E+05	8.2895E-05	5.4858E+20	3.9378E+21
Sr-92	1.3183E+03	1.0488E-07	6.8655E+17	1.0906E+21
Y-90	6.1981E+04	1.1392E-04	7.6228E+20	1.2614E+20
Y-91	3.0050E+04	1.2253E-03	8.1089E+21	1.0798E+20
Y-92	2.0940E+04	2.1761E-06	1.4245E+19	1.0950E+21
Y-93	4.0750E+03	1.2214E-06	7.9091E+18	4.9180E+19
Zr-95	3.1248E+04	1.4546E-03	9.2206E+21	1.2064E+20
Zr-97	9.6005E+03	5.0220E-06	3.1179E+19	7.0408E+19
Nb-95	3.1820E+04	8.1375E-04	5.1584E+21	1.2205E+20
Mo-99	3.2684E+05	6.8145E-04	4.1453E+21	1.4638E+21
Tc-99m	3.3090E+05	6.2930E-05	3.8280E+20	1.3593E+21
Ru-103	3.6253E+05	1.1233E-02	6.5676E+22	1.4053E+21
Ru-105	2.3718E+03	3.5284E-07	2.0237E+18	1.7970E+20
Ru-106	1.5223E+05	4.5501E-02	2.5850E+23	5.8453E+20
Rh-105	1.5497E+05	1.8360E-04	1.0530E+21	7.7419E+20
Sb-127	4.0791E+05	1.5274E-03	7.2429E+21	1.7464E+21
Sb-129	1.2372E+04	2.2000E-06	1.0270E+19	1.0348E+21
Te-127	4.4766E+05	1.6963E-04	8.0434E+20	1.7908E+21
Te-127m	6.8116E+04	7.2213E-03	3.4242E+22	2.6107E+20
Te-129	2.0728E+05	9.8976E-06	4.6205E+19	1.6074E+21
Te-129m	2.1955E+05	7.2880E-03	3.4023E+22	8.5142E+20
Te-131m	3.4125E+05	4.2795E-04	1.9673E+21	1.8594E+21
Te-132	5.1664E+06	1.7018E-02	7.7638E+22	2.2575E+22
I-131	2.5581E+07	2.0634E-01	9.4857E+23	1.0393E+23
I-132	6.1671E+06	5.9746E-04	2.7258E+21	3.7966E+22
I-133	2.1639E+07	1.9102E-02	8.6492E+22	1.4060E+23
I-134	3.2597E-03	1.2219E-13	5.4915E+11	5.3123E+21
I-135	2.3645E+06	6.7329E-04	3.0034E+21	5.9700E+22
Xe-133	6.1595E+06	3.2906E-02	1.4900E+23	1.5887E+22
Xe-135	8.4288E+06	3.3006E-03	1.4723E+22	5.7306E+22
Cs-134	6.4136E+06	4.9571E+00	2.2278E+25	2.4784E+22
Cs-136	1.6734E+06	2.2832E-02	1.0110E+23	6.6740E+21
Cs-137	4.0022E+06	4.6012E+01	2.0226E+26	1.5458E+22
Ba-139	1.0063E+00	6.1520E-11	2.6653E+14	5.3075E+20
Ba-140	3.2275E+06	4.4086E-02	1.8964E+23	1.2792E+22
La-140	1.3290E+06	2.3911E-03	1.0285E+22	2.7806E+21
La-141	1.6487E+02	2.9153E-08	1.2451E+17	1.9926E+19
La-142	4.4358E-02	3.0987E-12	1.3141E+13	5.6162E+18
Ce-141	7.7361E+04	2.7150E-03	1.1596E+22	3.0045E+20
Ce-143	4.1586E+04	6.2621E-05	2.6372E+20	2.1915E+20
Ce-144	6.3240E+04	1.9828E-02	8.2920E+22	2.4291E+20
Pr-143	3.1881E+04	4.7345E-04	1.9938E+21	1.1981E+20
Nd-147	1.1985E+04	1.4815E-04	6.0691E+20	4.7754E+19

Np-239	6.5897E+05	2.8405E-03	7.1573E+21	3.0314E+21
Pu-238	3.1685E+02	1.8508E-02	4.6831E+22	1.2152E+18
Pu-239	2.1247E+01	3.4182E-01	8.6130E+23	8.1353E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	8.7144E+16
Pu-241	1.0903E+04	1.0584E-01	2.6448E+23	4.1823E+19
Am-241	6.7813E+00	1.9758E-03	4.9372E+21	2.5897E+16
Cm-242	1.6760E+03	5.0570E-04	1.2584E+21	6.4448E+18
Cm-244	1.8357E+02	2.2691E-03	5.6003E+21	7.0414E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 30.0000	Atmosphere	Sump	
Noble gases (atoms)	1.6372E+23	0.0000E+00	
Elemental I (atoms)	5.0478E+22	0.0000E+00	
Organic I (atoms)	1.5612E+21	0.0000E+00	
Aerosols (kg)	5.3658E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.4571E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.0928E-03
Total I (Ci)			5.5752E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 30.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.5820E+16
Elemental I (atoms)	0.0000E+00	7.1082E+15
Organic I (atoms)	0.0000E+00	2.1984E+14
Aerosols (kg)	0.0000E+00	6.7223E-06

Detailed model information at time (H) = 36.0000

EAB Doses:

Time (h) = 36.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 36.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.2083E-07	2.1458E-04	1.4665E-05
Accumulated dose (rem)	9.3200E-06	3.7546E-03	2.3548E-04

Control Room Doses:

Time (h) = 36.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.9024E-11	9.2115E-07	6.1367E-08
Accumulated dose (rem)	6.7822E-08	3.4804E-04	1.5880E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 36.0000	Ci	kg	Atoms	Decay
Co-58	1.3289E+03	4.1793E-05	4.3393E+20	6.2031E+18
Co-60	1.6132E+03	1.4271E-03	1.4324E+22	7.4786E+18
Rb-86	5.4373E+04	6.6824E-04	4.6794E+21	2.6044E+20
Sr-89	1.9340E+06	6.6571E-02	4.5045E+23	9.0535E+21
Sr-90	2.2422E+05	1.6437E+00	1.0999E+25	1.0392E+21
Sr-91	1.9396E+05	5.3506E-05	3.5409E+20	4.1323E+21
Sr-92	2.8414E+02	2.2606E-08	1.4797E+17	1.0911E+21
Y-90	7.2265E+04	1.3282E-04	8.8876E+20	1.7885E+20
Y-91	3.0263E+04	1.2340E-03	8.1665E+21	1.3207E+20
Y-92	6.9119E+03	7.1832E-07	4.7020E+18	1.1051E+21
Y-93	2.6996E+03	8.0915E-07	5.2396E+18	5.1849E+19
Zr-95	3.1164E+04	1.4506E-03	9.1957E+21	1.4558E+20
Zr-97	7.5062E+03	3.9265E-06	2.4377E+19	7.7209E+19
Nb-95	3.1816E+04	8.1363E-04	5.1577E+21	1.4747E+20
Mo-99	3.0688E+05	6.3984E-04	3.8921E+21	1.7170E+21
Tc-99m	3.1252E+05	5.9435E-05	3.6154E+20	1.6033E+21
Ru-103	3.6094E+05	1.1183E-02	6.5387E+22	1.6944E+21
Ru-105	9.2956E+02	1.3829E-07	7.9312E+17	1.8093E+20
Ru-106	1.5216E+05	4.5480E-02	2.5838E+23	7.0616E+20
Rh-105	1.3795E+05	1.6343E-04	9.3735E+20	8.9111E+20
Sb-127	3.8995E+05	1.4602E-03	6.9241E+21	2.0652E+21
Sb-129	4.7242E+03	8.4010E-07	3.9218E+18	1.0412E+21
Te-127	4.3344E+05	1.6424E-04	7.7878E+20	2.1311E+21
Te-127m	6.8122E+04	7.2219E-03	3.4245E+22	3.1550E+20

Te-129	1.9554E+05	9.3370E-06	4.3588E+19	1.7287E+21
Te-129m	2.1843E+05	7.2508E-03	3.3849E+22	1.0264E+21
Te-131m	2.9707E+05	3.7255E-04	1.7126E+21	2.1141E+21
Te-132	4.8988E+06	1.6136E-02	7.3617E+22	2.6596E+22
I-131	2.5041E+07	2.0199E-01	9.2854E+23	1.2416E+23
I-132	5.8474E+06	5.6649E-04	2.5844E+21	4.2129E+22
I-133	1.7717E+07	1.5640E-02	7.0818E+22	1.5627E+23
I-134	2.8372E-05	1.0636E-15	4.7798E+09	5.3123E+21
I-135	1.2603E+06	3.5888E-04	1.6009E+21	6.1103E+22
Xe-133	6.5789E+06	3.5147E-02	1.5914E+23	2.0944E+22
Xe-135	5.8899E+06	2.3064E-03	1.0288E+22	6.2933E+22
Cs-134	6.4121E+06	4.9559E+00	2.2273E+25	2.9909E+22
Cs-136	1.6514E+06	2.2532E-02	9.9773E+22	8.0026E+21
Cs-137	4.0021E+06	4.6011E+01	2.0225E+26	1.8656E+22
Ba-139	4.9239E-02	3.0103E-12	1.3042E+13	5.3075E+20
Ba-140	3.1839E+06	4.3490E-02	1.8708E+23	1.5354E+22
La-140	1.5158E+06	2.7272E-03	1.1731E+22	3.8969E+21
La-141	5.7220E+01	1.0118E-08	4.3214E+16	2.0007E+19
La-142	2.9881E-03	2.0874E-13	8.8524E+11	5.6162E+18
Ce-141	7.6950E+04	2.7006E-03	1.1534E+22	3.6211E+20
Ce-143	3.6662E+04	5.5206E-05	2.3249E+20	2.5038E+20
Ce-144	6.3202E+04	1.9816E-02	8.2870E+22	2.9344E+20
Pr-143	3.1973E+04	4.7481E-04	1.9996E+21	1.4529E+20
Nd-147	1.1797E+04	1.4583E-04	5.9741E+20	5.7257E+19
Np-239	6.1223E+05	2.6390E-03	6.6496E+21	3.5392E+21
Pu-238	3.1686E+02	1.8509E-02	4.6832E+22	1.4685E+18
Pu-239	2.1259E+01	3.4202E-01	8.6181E+23	9.8337E+16
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.0530E+17
Pu-241	1.0903E+04	1.0584E-01	2.6447E+23	5.0536E+19
Am-241	6.7933E+00	1.9793E-03	4.9459E+21	3.1321E+16
Cm-242	1.6742E+03	5.0516E-04	1.2571E+21	7.7836E+18
Cm-244	1.8357E+02	2.2690E-03	5.6001E+21	8.5085E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 36.0000	Atmosphere	Sump	
Noble gases (atoms)	1.6943E+23	0.0000E+00	
Elemental I (atoms)	4.8672E+22	0.0000E+00	
Organic I (atoms)	1.5053E+21	0.0000E+00	
Aerosols (kg)	5.3646E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.1448E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.6620E-03
Total I (Ci)			4.9866E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 36.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.0135E+16
Elemental I (atoms)	0.0000E+00	8.3984E+15
Organic I (atoms)	0.0000E+00	2.5974E+14
Aerosols (kg)	0.0000E+00	8.1149E-06

Detailed model information at time (H) = 42.0000

EAB Doses:

Time (h) = 42.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 42.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.9538E-07	2.0588E-04	1.4357E-05
Accumulated dose (rem)	9.6154E-06	3.9605E-03	2.4983E-04

Control Room Doses:

Time (h) = 42.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.4629E-11	8.8385E-07	6.0151E-08
Accumulated dose (rem)	6.7867E-08	3.4892E-04	1.5940E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 42.0000	Ci	kg	Atoms	Decay

Co-58	1.3257E+03	4.1690E-05	4.3287E+20	7.2638E+18
Co-60	1.6130E+03	1.4270E-03	1.4323E+22	8.7678E+18
Rb-86	5.3871E+04	6.6207E-04	4.6361E+21	3.0370E+20
Sr-89	1.9274E+06	6.6343E-02	4.4891E+23	1.0596E+22
Sr-90	2.2421E+05	1.6437E+00	1.0999E+25	1.2184E+21
Sr-91	1.2519E+05	3.4537E-05	2.2855E+20	4.2578E+21
Sr-92	6.1242E+01	4.8723E-09	3.1893E+16	1.0912E+21
Y-90	8.1901E+04	1.5054E-04	1.0073E+21	2.3953E+20
Y-91	3.0369E+04	1.2383E-03	8.1950E+21	1.5629E+20
Y-92	2.2306E+03	2.3182E-07	1.5174E+18	1.1084E+21
Y-93	1.7884E+03	5.3604E-07	3.4711E+18	5.3618E+19
Zr-95	3.1080E+04	1.4467E-03	9.1708E+21	1.7045E+20
Zr-97	5.8687E+03	3.0699E-06	1.9059E+19	8.2527E+19
Nb-95	3.1811E+04	8.1351E-04	5.1569E+21	1.7288E+20
Mo-99	2.8814E+05	6.0076E-04	3.6544E+21	1.9547E+21
Tc-99m	2.9436E+05	5.5980E-05	3.4053E+20	1.8335E+21
Ru-103	3.5935E+05	1.1134E-02	6.5099E+22	1.9822E+21
Ru-105	3.6432E+02	5.4198E-08	3.1084E+17	1.8142E+20
Ru-106	1.5208E+05	4.5458E-02	2.5826E+23	8.2773E+20
Rh-105	1.2271E+05	1.4538E-04	8.3380E+20	9.9515E+20
Sb-127	3.7279E+05	1.3959E-03	6.6194E+21	2.3699E+21
Sb-129	1.8040E+03	3.2080E-07	1.4976E+18	1.0436E+21
Te-127	4.1897E+05	1.5875E-04	7.5278E+20	2.4604E+21
Te-127m	6.8122E+04	7.2220E-03	3.4246E+22	3.6994E+20
Te-129	1.9045E+05	9.0943E-06	4.2455E+19	1.8449E+21
Te-129m	2.1731E+05	7.2137E-03	3.3676E+22	1.2006E+21
Te-131m	2.5862E+05	3.2432E-04	1.4909E+21	2.3358E+21
Te-132	4.6451E+06	1.5301E-02	6.9804E+22	3.0409E+22
I-131	2.4512E+07	1.9772E-01	9.0891E+23	1.4396E+23
I-132	5.5445E+06	5.3714E-04	2.4506E+21	4.6076E+22
I-133	1.4507E+07	1.2806E-02	5.7984E+22	1.6911E+23
I-134	2.4695E-07	9.2572E-18	4.1603E+07	5.3123E+21
I-135	6.7180E+05	1.9129E-04	8.5333E+20	6.1850E+22
Xe-133	6.8725E+06	3.6716E-02	1.6625E+23	2.6292E+22
Xe-135	4.0236E+06	1.5756E-03	7.0285E+21	6.6828E+22
Cs-134	6.4106E+06	4.9548E+00	2.2267E+25	3.5033E+22
Cs-136	1.6297E+06	2.2236E-02	9.8462E+22	9.3137E+21
Cs-137	4.0021E+06	4.6010E+01	2.0225E+26	2.1855E+22
Ba-139	2.4094E-03	1.4730E-13	6.3817E+11	5.3075E+20
Ba-140	3.1409E+06	4.2903E-02	1.8455E+23	1.7881E+22
La-140	1.6800E+06	3.0226E-03	1.3002E+22	5.1536E+21
La-141	1.9859E+01	3.5116E-09	1.4998E+16	2.0035E+19
La-142	2.0129E-04	1.4061E-14	5.9633E+10	5.6162E+18
Ce-141	7.6541E+04	2.6863E-03	1.1473E+22	4.2344E+20
Ce-143	3.2321E+04	4.8670E-05	2.0496E+20	2.7790E+20
Ce-144	6.3163E+04	1.9804E-02	8.2819E+22	3.4394E+20
Pr-143	3.2005E+04	4.7528E-04	2.0015E+21	1.7083E+20
Nd-147	1.1612E+04	1.4354E-04	5.8806E+20	6.6611E+19
Np-239	5.6879E+05	2.4518E-03	6.1778E+21	4.0109E+21
Pu-238	3.1687E+02	1.8509E-02	4.6834E+22	1.7217E+18
Pu-239	2.1271E+01	3.4221E-01	8.6228E+23	1.1533E+17
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.2346E+17
Pu-241	1.0903E+04	1.0584E-01	2.6447E+23	5.9250E+19
Am-241	6.8052E+00	1.9828E-03	4.9546E+21	3.6754E+16
Cm-242	1.6725E+03	5.0462E-04	1.2557E+21	9.1210E+18
Cm-244	1.8356E+02	2.2689E-03	5.6000E+21	9.9755E+17

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 42.0000	Atmosphere	Sump	
Noble gases (atoms)	1.7327E+23	0.0000E+00	
Elemental I (atoms)	4.7055E+22	0.0000E+00	
Organic I (atoms)	1.4553E+21	0.0000E+00	
Aerosols (kg)	5.3636E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.8691E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.2935E-03
Total I (Ci)			4.5235E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 42.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.4578E+16
Elemental I (atoms)	0.0000E+00	9.6439E+15
Organic I (atoms)	0.0000E+00	2.9826E+14
Aerosols (kg)	0.0000E+00	9.5072E-06

Detailed model information at time (H) = 48.0000

EAB Doses:

Time (h) = 48.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 48.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.7642E-07	1.9815E-04	1.4088E-05
Accumulated dose (rem)	9.8918E-06	4.1586E-03	2.6392E-04

Control Room Doses:

Time (h) = 48.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.1368E-11	8.5065E-07	5.9072E-08
Accumulated dose (rem)	6.7908E-08	3.4977E-04	1.5999E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 48.0000	Ci	kg	Atoms	Decay
Co-58	1.3224E+03	4.1588E-05	4.3181E+20	8.3220E+18
Co-60	1.6129E+03	1.4269E-03	1.4321E+22	1.0057E+19
Rb-86	5.3373E+04	6.5595E-04	4.5932E+21	3.4655E+20
Sr-89	1.9208E+06	6.6116E-02	4.4737E+23	1.2134E+22
Sr-90	2.2421E+05	1.6437E+00	1.0998E+25	1.3976E+21
Sr-91	8.0810E+04	2.2292E-05	1.4752E+20	4.3388E+21
Sr-92	1.3200E+01	1.0501E-09	6.8740E+15	1.0912E+21
Y-90	9.0932E+04	1.6713E-04	1.1183E+21	3.0766E+20
Y-91	3.0405E+04	1.2398E-03	8.2047E+21	1.8057E+20
Y-92	7.0962E+02	7.3747E-08	4.8274E+17	1.1095E+21
Y-93	1.1848E+03	3.5511E-07	2.2995E+18	5.4789E+19
Zr-95	3.0995E+04	1.4428E-03	9.1460E+21	1.9525E+20
Zr-97	4.5885E+03	2.4002E-06	1.4902E+19	8.6685E+19
Nb-95	3.1805E+04	8.1337E-04	5.1560E+21	1.9829E+20
Mo-99	2.7054E+05	5.6408E-04	3.4313E+21	2.1778E+21
Tc-99m	2.7684E+05	5.2649E-05	3.2026E+20	2.0501E+21
Ru-103	3.5776E+05	1.1085E-02	6.4812E+22	2.2688E+21
Ru-105	1.4279E+02	2.1241E-08	1.2183E+17	1.8161E+20
Ru-106	1.5201E+05	4.5437E-02	2.5814E+23	9.4925E+20
Rh-105	1.0912E+05	1.2928E-04	7.4146E+20	1.0877E+21
Sb-127	3.5638E+05	1.3345E-03	6.3280E+21	2.6612E+21
Sb-129	6.8886E+02	1.2250E-07	5.7187E+17	1.0445E+21
Te-127	4.0457E+05	1.5330E-04	7.2692E+20	2.7784E+21
Te-127m	6.8118E+04	7.2216E-03	3.4244E+22	4.2438E+20
Te-129	1.8792E+05	8.9731E-06	4.1889E+19	1.9587E+21
Te-129m	2.1620E+05	7.1766E-03	3.3503E+22	1.3738E+21
Te-131m	2.2514E+05	2.8234E-04	1.2979E+21	2.5288E+21
Te-132	4.4045E+06	1.4508E-02	6.6189E+22	3.4024E+22
I-131	2.3993E+07	1.9353E-01	8.8968E+23	1.6334E+23
I-132	5.2573E+06	5.0932E-04	2.3236E+21	4.9818E+22
I-133	1.1878E+07	1.0485E-02	4.7475E+22	1.7961E+23
I-134	2.1495E-09	8.0575E-20	3.6211E+05	5.3123E+21
I-135	3.5809E+05	1.0196E-04	4.5485E+20	6.2249E+22
Xe-133	7.0645E+06	3.7742E-02	1.7089E+23	3.1839E+22
Xe-135	2.7043E+06	1.0589E-03	4.7238E+21	6.9472E+22
Cs-134	6.4092E+06	4.9536E+00	2.2262E+25	4.0156E+22
Cs-136	1.6083E+06	2.1944E-02	9.7168E+22	1.0608E+22
Cs-137	4.0020E+06	4.6010E+01	2.0225E+26	2.5053E+22
Ba-139	1.1789E-04	7.2076E-15	3.1227E+10	5.3075E+20
Ba-140	3.0984E+06	4.2323E-02	1.8205E+23	2.0375E+22
La-140	1.8239E+06	3.2814E-03	1.4115E+22	6.5335E+21
La-141	6.8925E+00	1.2187E-09	5.2053E+15	2.0045E+19
La-142	1.3559E-05	9.4721E-16	4.0171E+09	5.6162E+18
Ce-141	7.6134E+04	2.6720E-03	1.1412E+22	4.8445E+20
Ce-143	2.8494E+04	4.2907E-05	1.8069E+20	3.0217E+20
Ce-144	6.3125E+04	1.9792E-02	8.2769E+22	3.9440E+20
Pr-143	3.1984E+04	4.7498E-04	2.0003E+21	1.9638E+20
Nd-147	1.1431E+04	1.4130E-04	5.7885E+20	7.5819E+19
Np-239	5.2844E+05	2.2779E-03	5.7396E+21	4.4492E+21
Pu-238	3.1688E+02	1.8509E-02	4.6835E+22	1.9749E+18
Pu-239	2.1281E+01	3.4239E-01	8.6272E+23	1.3233E+17

Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.4162E+17
Pu-241	1.0902E+04	1.0583E-01	2.6446E+23	6.7963E+19
Am-241	6.8172E+00	1.9863E-03	4.9633E+21	4.2197E+16
Cm-242	1.6707E+03	5.0409E-04	1.2544E+21	1.0457E+19
Cm-244	1.8356E+02	2.2689E-03	5.5998E+21	1.1443E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 48.0000	Atmosphere	Sump	
Noble gases (atoms)	1.7561E+23	0.0000E+00	
Elemental I (atoms)	4.5587E+22	0.0000E+00	
Organic I (atoms)	1.4099E+21	0.0000E+00	
Aerosols (kg)	5.3625E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.6229E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.9732E-03
Total I (Ci)			4.1486E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 48.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.9103E+16
Elemental I (atoms)	0.0000E+00	1.0849E+16
Organic I (atoms)	0.0000E+00	3.3554E+14
Aerosols (kg)	0.0000E+00	1.0899E-05

Detailed model information at time (H) = 54.0000

EAB Doses:

Time (h) = 54.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 54.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.6172E-07	1.9119E-04	1.3848E-05
Accumulated dose (rem)	1.0154E-05	4.3498E-03	2.7777E-04

Control Room Doses:

Time (h) = 54.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.8875E-11	8.2079E-07	5.8103E-08
Accumulated dose (rem)	6.7947E-08	3.5059E-04	1.6058E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 54.0000	Ci	kg	Atoms	Decay
Co-58	1.3192E+03	4.1487E-05	4.3076E+20	9.3776E+18
Co-60	1.6128E+03	1.4267E-03	1.4320E+22	1.1346E+19
Rb-86	5.2879E+04	6.4988E-04	4.5508E+21	3.8901E+20
Sr-89	1.9142E+06	6.5889E-02	4.4584E+23	1.3667E+22
Sr-90	2.2421E+05	1.6437E+00	1.0998E+25	1.5768E+21
Sr-91	5.2160E+04	1.4389E-05	9.5223E+19	4.3911E+21
Sr-92	2.8450E+00	2.2634E-10	1.4816E+15	1.0912E+21
Y-90	9.9393E+04	1.8269E-04	1.2224E+21	3.8278E+20
Y-91	3.0396E+04	1.2395E-03	8.2024E+21	2.0486E+20
Y-92	2.2363E+02	2.3241E-08	1.5213E+17	1.1098E+21
Y-93	7.8488E+02	2.3525E-07	1.5234E+18	5.5565E+19
Zr-95	3.0912E+04	1.4389E-03	9.1213E+21	2.1999E+20
Zr-97	3.5875E+03	1.8766E-06	1.1651E+19	8.9935E+19
Nb-95	3.1800E+04	8.1323E-04	5.1551E+21	2.2370E+20
Mo-99	2.5402E+05	5.2963E-04	3.2217E+21	2.3874E+21
Tc-99m	2.6017E+05	4.9478E-05	3.0097E+20	2.2538E+21
Ru-103	3.5619E+05	1.1036E-02	6.4527E+22	2.5541E+21
Ru-105	5.5961E+01	8.3251E-09	4.7747E+16	1.8168E+20
Ru-106	1.5194E+05	4.5416E-02	2.5802E+23	1.0707E+21
Rh-105	9.7020E+04	1.1495E-04	6.5925E+20	1.1700E+21
Sb-127	3.4070E+05	1.2758E-03	6.0495E+21	2.9397E+21
Sb-129	2.6305E+02	4.6778E-08	2.1837E+17	1.0449E+21
Te-127	3.9045E+05	1.4795E-04	7.0155E+20	3.0855E+21
Te-127m	6.8110E+04	7.2207E-03	3.4239E+22	4.7881E+20
Te-129	1.8636E+05	8.8986E-06	4.1541E+19	2.0714E+21
Te-129m	2.1509E+05	7.1397E-03	3.3330E+22	1.5461E+21
Te-131m	1.9599E+05	2.4579E-04	1.1299E+21	2.6968E+21

Te-132	4.1764E+06	1.3757E-02	6.2761E+22	3.7453E+22
I-131	2.3485E+07	1.8943E-01	8.7084E+23	1.8231E+23
I-132	4.9850E+06	4.8294E-04	2.2033E+21	5.3366E+22
I-133	9.7250E+06	8.5849E-03	3.8872E+22	1.8822E+23
I-135	1.9087E+05	5.4350E-05	2.4245E+20	6.2461E+22
Xe-133	7.1751E+06	3.8332E-02	1.7356E+23	3.7511E+22
Xe-135	1.7955E+06	7.0311E-04	3.1365E+21	7.1239E+22
Cs-134	6.4077E+06	4.9525E+00	2.2257E+25	4.5277E+22
Cs-136	1.5872E+06	2.1656E-02	9.5891E+22	1.1884E+22
Cs-137	4.0019E+06	4.6009E+01	2.0224E+26	2.8251E+22
Ba-139	5.7688E-06	3.5268E-16	1.5280E+09	5.3075E+20
Ba-140	3.0566E+06	4.1752E-02	1.7960E+23	2.2834E+22
La-140	1.9495E+06	3.5073E-03	1.5087E+22	8.0213E+21
La-141	2.3921E+00	4.2299E-10	1.8066E+15	2.0048E+19
La-142	9.1340E-07	6.3807E-17	2.7060E+08	5.6162E+18
Ce-141	7.5729E+04	2.6578E-03	1.1351E+22	5.4513E+20
Ce-143	2.5120E+04	3.7826E-05	1.5930E+20	3.2357E+20
Ce-144	6.3086E+04	1.9779E-02	8.2718E+22	4.4483E+20
Pr-143	3.1918E+04	4.7400E-04	1.9961E+21	2.2189E+20
Nd-147	1.1252E+04	1.3908E-04	5.6978E+20	8.4883E+19
Np-239	4.9096E+05	2.1163E-03	5.3324E+21	4.8563E+21
Pu-238	3.1688E+02	1.8510E-02	4.6836E+22	2.2282E+18
Pu-239	2.1292E+01	3.4255E-01	8.6312E+23	1.4935E+17
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.5978E+17
Pu-241	1.0902E+04	1.0583E-01	2.6445E+23	7.6676E+19
Am-241	6.8292E+00	1.9898E-03	4.9720E+21	4.7649E+16
Cm-242	1.6689E+03	5.0355E-04	1.2531E+21	1.1791E+19
Cm-244	1.8355E+02	2.2688E-03	5.5997E+21	1.2910E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 54.0000	Atmosphere	Sump	
Noble gases (atoms)	1.7670E+23	0.0000E+00	
Elemental I (atoms)	4.4240E+22	0.0000E+00	
Organic I (atoms)	1.3682E+21	0.0000E+00	
Aerosols (kg)	5.3616E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.4007E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.6913E-03
Total I (Ci)			3.8386E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 54.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.3676E+16
Elemental I (atoms)	0.0000E+00	1.2017E+16
Organic I (atoms)	0.0000E+00	3.7167E+14
Aerosols (kg)	0.0000E+00	1.2291E-05

Detailed model information at time (H) = 60.0000

EAB Doses:

Time (h) = 60.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 60.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.4990E-07	1.8488E-04	1.3631E-05
Accumulated dose (rem)	1.0403E-05	4.5347E-03	2.9140E-04

Control Room Doses:

Time (h) = 60.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.6914E-11	7.9367E-07	5.7223E-08
Accumulated dose (rem)	6.7984E-08	3.5139E-04	1.6115E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 60.0000	Ci	kg	Atoms	Decay
Co-58	1.3160E+03	4.1385E-05	4.2970E+20	1.0431E+19
Co-60	1.6126E+03	1.4266E-03	1.4319E+22	1.2635E+19
Rb-86	5.2390E+04	6.4387E-04	4.5087E+21	4.3107E+20
Sr-89	1.9077E+06	6.5664E-02	4.4431E+23	1.5194E+22

Sr-90	2.2420E+05	1.6436E+00	1.0998E+25	1.7560E+21
Sr-91	3.3668E+04	9.2877E-06	6.1463E+19	4.4249E+21
Sr-92	6.1318E-01	4.8784E-11	3.1933E+14	1.0912E+21
Y-90	1.0732E+05	1.9726E-04	1.3199E+21	4.6444E+20
Y-91	3.0359E+04	1.2379E-03	8.1923E+21	2.2914E+20
Y-92	7.0032E+01	7.2781E-09	4.7641E+16	1.1099E+21
Y-93	5.1997E+02	1.5585E-07	1.0092E+18	5.6080E+19
Zr-95	3.0828E+04	1.4350E-03	9.0966E+21	2.4466E+20
Zr-97	2.8049E+03	1.4673E-06	9.1093E+18	9.2477E+19
Nb-95	3.1794E+04	8.1307E-04	5.1541E+21	2.4910E+20
Mo-99	2.3851E+05	4.9728E-04	3.0250E+21	2.5841E+21
Tc-99m	2.4439E+05	4.6478E-05	2.8273E+20	2.4452E+21
Ru-103	3.5462E+05	1.0988E-02	6.4243E+22	2.8381E+21
Ru-105	2.1933E+01	3.2628E-09	1.8713E+16	1.8171E+20
Ru-106	1.5187E+05	4.5394E-02	2.5790E+23	1.1921E+21
Rh-105	8.6258E+04	1.0220E-04	5.8613E+20	1.2431E+21
Sb-127	3.2570E+05	1.2196E-03	5.7833E+21	3.2060E+21
Sb-129	1.0045E+02	1.7862E-08	8.3388E+16	1.0450E+21
Te-127	3.7672E+05	1.4275E-04	6.7688E+20	3.3819E+21
Te-127m	6.8097E+04	7.2193E-03	3.4233E+22	5.3323E+20
Te-129	1.8517E+05	8.8420E-06	4.1277E+19	2.1832E+21
Te-129m	2.1398E+05	7.1030E-03	3.3159E+22	1.7176E+21
Te-131m	1.7062E+05	2.1397E-04	9.8364E+20	2.8431E+21
Te-132	3.9601E+06	1.3044E-02	5.9510E+22	4.0703E+22
I-131	2.2987E+07	1.8542E-01	8.5239E+23	2.0088E+23
I-132	4.7268E+06	4.5793E-04	2.0892E+21	5.6731E+22
I-133	7.9626E+06	7.0291E-03	3.1827E+22	1.9526E+23
I-135	1.0174E+05	2.8970E-05	1.2923E+20	6.2574E+22
Xe-133	7.2204E+06	3.8574E-02	1.7466E+23	4.3249E+22
Xe-135	1.1812E+06	4.6253E-04	2.0633E+21	7.2409E+22
Cs-134	6.4062E+06	4.9514E+00	2.2252E+25	5.0398E+22
Cs-136	1.5663E+06	2.1371E-02	9.4631E+22	1.3145E+22
Cs-137	4.0019E+06	4.6008E+01	2.0224E+26	3.1450E+22
Ba-139	2.8228E-07	1.7257E-17	7.4767E+07	5.3075E+20
Ba-140	3.0153E+06	4.1187E-02	1.7717E+23	2.5260E+22
La-140	2.0586E+06	3.7036E-03	1.5931E+22	9.6030E+21
La-141	8.3023E-01	1.4680E-10	6.2700E+14	2.0049E+19
La-142	6.1530E-08	4.2983E-18	1.8229E+07	5.6162E+18
Ce-141	7.5326E+04	2.6436E-03	1.1291E+22	6.0550E+20
Ce-143	2.2145E+04	3.3347E-05	1.4043E+20	3.4243E+20
Ce-144	6.3048E+04	1.9767E-02	8.2668E+22	4.9524E+20
Pr-143	3.1813E+04	4.7243E-04	1.9896E+21	2.4734E+20
Nd-147	1.1076E+04	1.3691E-04	5.6086E+20	9.3805E+19
Np-239	4.5613E+05	1.9661E-03	4.9541E+21	5.2346E+21
Pu-238	3.1689E+02	1.8510E-02	4.6837E+22	2.4814E+18
Pu-239	2.1301E+01	3.4270E-01	8.6350E+23	1.6637E+17
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.7793E+17
Pu-241	1.0901E+04	1.0583E-01	2.6444E+23	8.5388E+19
Am-241	6.8411E+00	1.9932E-03	4.9807E+21	5.3111E+16
Cm-242	1.6671E+03	5.0301E-04	1.2517E+21	1.3124E+19
Cm-244	1.8355E+02	2.2688E-03	5.5995E+21	1.4376E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 60.0000	Atmosphere	Sump	
Noble gases (atoms)	1.7672E+23	0.0000E+00	
Elemental I (atoms)	4.2992E+22	0.0000E+00	
Organic I (atoms)	1.3296E+21	0.0000E+00	
Aerosols (kg)	5.3607E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.1982E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.4404E-03
Total I (Ci)			3.5779E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 60.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.8264E+16
Elemental I (atoms)	0.0000E+00	1.3152E+16
Organic I (atoms)	0.0000E+00	4.0676E+14
Aerosols (kg)	0.0000E+00	1.3683E-05

Detailed model information at time (H) = 66.0000

EAB Doses:

Time (h) = 66.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 66.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.4012E-07	1.7909E-04	1.3434E-05
Accumulated dose (rem)	1.0644E-05	4.7138E-03	3.0483E-04

Control Room Doses:

Time (h) = 66.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.5327E-11	7.6883E-07	5.6417E-08
Accumulated dose (rem)	6.8019E-08	3.5216E-04	1.6171E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 66.0000	Ci	kg	Atoms	Decay
Co-58	1.3128E+03	4.1284E-05	4.2865E+20	1.1481E+19
Co-60	1.6125E+03	1.4265E-03	1.4317E+22	1.3923E+19
Rb-86	5.1906E+04	6.3792E-04	4.4670E+21	4.7275E+20
Sr-89	1.9011E+06	6.5439E-02	4.4279E+23	1.6716E+22
Sr-90	2.2420E+05	1.6436E+00	1.0998E+25	1.9352E+21
Sr-91	2.1732E+04	5.9949E-06	3.9673E+19	4.4467E+21
Sr-92	1.3216E-01	1.0514E-11	6.8826E+13	1.0912E+21
Y-90	1.1475E+05	2.1092E-04	1.4113E+21	5.5224E+20
Y-91	3.0303E+04	1.2357E-03	8.1772E+21	2.5337E+20
Y-92	2.1838E+01	2.2695E-09	1.4856E+16	1.1099E+21
Y-93	3.4447E+02	1.0325E-07	6.6857E+17	5.6420E+19
Zr-95	3.0745E+04	1.4311E-03	9.0720E+21	2.6927E+20
Zr-97	2.1930E+03	1.1472E-06	7.1221E+18	9.4464E+19
Nb-95	3.1787E+04	8.1291E-04	5.1531E+21	2.7450E+20
Mo-99	2.2394E+05	4.6692E-04	2.8402E+21	2.7689E+21
Tc-99m	2.2953E+05	4.3651E-05	2.6553E+20	2.6250E+21
Ru-103	3.5306E+05	1.0939E-02	6.3960E+22	3.1209E+21
Ru-105	8.5959E+00	1.2788E-09	7.3342E+15	1.8172E+20
Ru-106	1.5180E+05	4.5373E-02	2.5777E+23	1.3135E+21
Rh-105	7.6689E+04	9.0857E-05	5.2110E+20	1.3081E+21
Sb-127	3.1137E+05	1.1659E-03	5.5287E+21	3.4605E+21
Sb-129	3.8357E+01	6.8209E-09	3.1842E+16	1.0451E+21
Te-127	3.6344E+05	1.3771E-04	6.5302E+20	3.6678E+21
Te-127m	6.8080E+04	7.2175E-03	3.4224E+22	5.8764E+20
Te-129	1.8413E+05	8.7923E-06	4.1045E+19	2.2943E+21
Te-129m	2.1288E+05	7.0664E-03	3.2988E+22	1.8882E+21
Te-131m	1.4854E+05	1.8627E-04	8.5631E+20	2.9704E+21
Te-132	3.7550E+06	1.2369E-02	5.6428E+22	4.3785E+22
I-131	2.2500E+07	1.8149E-01	8.3431E+23	2.1906E+23
I-132	4.4820E+06	4.3421E-04	1.9810E+21	5.9922E+22
I-133	6.5196E+06	5.7552E-03	2.6059E+22	2.0103E+23
I-135	5.4230E+04	1.5442E-05	6.8884E+19	6.2635E+22
Xe-133	7.2137E+06	3.8539E-02	1.7450E+23	4.9004E+22
Xe-135	7.7142E+05	3.0207E-04	1.3475E+21	7.3176E+22
Cs-134	6.4047E+06	4.9502E+00	2.2247E+25	5.5517E+22
Cs-136	1.5457E+06	2.1090E-02	9.3388E+22	1.4388E+22
Cs-137	4.0018E+06	4.6008E+01	2.0224E+26	3.4648E+22
Ba-139	1.3812E-08	8.4443E-19	3.6585E+06	5.3075E+20
Ba-140	2.9745E+06	4.0631E-02	1.7478E+23	2.7654E+22
La-140	2.1530E+06	3.8734E-03	1.6662E+22	1.1266E+22
La-141	2.8814E-01	5.0951E-11	2.1761E+14	2.0050E+19
La-142	4.1449E-09	2.8955E-19	1.2279E+06	5.6162E+18
Ce-141	7.4926E+04	2.6296E-03	1.1231E+22	6.6554E+20
Ce-143	1.9523E+04	2.9399E-05	1.2381E+20	3.5906E+20
Ce-144	6.3010E+04	1.9755E-02	8.2618E+22	5.4561E+20
Pr-143	3.1674E+04	4.7036E-04	1.9808E+21	2.7270E+20
Nd-147	1.0902E+04	1.3476E-04	5.5208E+20	1.0259E+20
Np-239	4.2377E+05	1.8267E-03	4.6027E+21	5.5861E+21
Pu-238	3.1690E+02	1.8511E-02	4.6838E+22	2.7347E+18
Pu-239	2.1310E+01	3.4284E-01	8.6385E+23	1.8339E+17
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	1.9609E+17
Pu-241	1.0901E+04	1.0582E-01	2.6443E+23	9.4101E+19
Am-241	6.8531E+00	1.9967E-03	4.9894E+21	5.8582E+16
Cm-242	1.6654E+03	5.0248E-04	1.2504E+21	1.4456E+19
Cm-244	1.8354E+02	2.2687E-03	5.5994E+21	1.5843E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 66.0000	Atmosphere	Sump	
Noble gases (atoms)	1.7585E+23	0.0000E+00	
Elemental I (atoms)	4.1827E+22	0.0000E+00	
Organic I (atoms)	1.2936E+21	0.0000E+00	
Aerosols (kg)	5.3598E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.0122E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.2148E-03
Total I (Ci)			3.3556E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 66.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.2844E+16
Elemental I (atoms)	0.0000E+00	1.4255E+16
Organic I (atoms)	0.0000E+00	4.4088E+14
Aerosols (kg)	0.0000E+00	1.5074E-05

Detailed model information at time (H) = 72.0000

EAB Doses:

Time (h) = 72.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 72.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.3181E-07	1.7375E-04	1.3252E-05
Accumulated dose (rem)	1.0875E-05	4.8875E-03	3.1809E-04

Control Room Doses:

Time (h) = 72.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.4008E-11	7.4590E-07	5.5672E-08
Accumulated dose (rem)	6.8053E-08	3.5290E-04	1.6227E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 72.0000	Ci	kg	Atoms	Decay
Co-58	1.3095E+03	4.1183E-05	4.2761E+20	1.2529E+19
Co-60	1.6123E+03	1.4263E-03	1.4316E+22	1.5212E+19
Rb-86	5.1426E+04	6.3203E-04	4.4258E+21	5.1404E+20
Sr-89	1.8946E+06	6.5214E-02	4.4127E+23	1.8233E+22
Sr-90	2.2420E+05	1.6436E+00	1.0998E+25	2.1143E+21
Sr-91	1.4027E+04	3.8695E-06	2.5608E+19	4.4607E+21
Sr-92	2.8485E-02	2.2662E-12	1.4834E+13	1.0912E+21
Y-90	1.2172E+05	2.2371E-04	1.4969E+21	6.4579E+20
Y-91	3.0235E+04	1.2329E-03	8.1589E+21	2.7756E+20
Y-92	6.7896E+00	7.0561E-10	4.6188E+15	1.1100E+21
Y-93	2.2820E+02	6.8399E-08	4.4291E+17	5.6646E+19
Zr-95	3.0661E+04	1.4273E-03	9.0475E+21	2.9380E+20
Zr-97	1.7146E+03	8.9693E-07	5.5685E+18	9.6018E+19
Nb-95	3.1781E+04	8.1274E-04	5.1520E+21	2.9989E+20
Mo-99	2.1026E+05	4.3840E-04	2.6668E+21	2.9423E+21
Tc-99m	2.1554E+05	4.0991E-05	2.4934E+20	2.7938E+21
Ru-103	3.5151E+05	1.0891E-02	6.3679E+22	3.4025E+21
Ru-105	3.3690E+00	5.0118E-10	2.8745E+15	1.8172E+20
Ru-106	1.5173E+05	4.5351E-02	2.5765E+23	1.4347E+21
Rh-105	6.8180E+04	8.0776E-05	4.6328E+20	1.3660E+21
Sb-127	2.9767E+05	1.1146E-03	5.2854E+21	3.7039E+21
Sb-129	1.4647E+01	2.6046E-09	1.2159E+16	1.0451E+21
Te-127	3.5065E+05	1.3287E-04	6.3004E+20	3.9436E+21
Te-127m	6.8059E+04	7.2153E-03	3.4214E+22	6.4203E+20
Te-129	1.8315E+05	8.7455E-06	4.0827E+19	2.4049E+21
Te-129m	2.1178E+05	7.0301E-03	3.2819E+22	2.0579E+21
Te-131m	1.2931E+05	1.6216E-04	7.4546E+20	3.0813E+21
Te-132	3.5605E+06	1.1728E-02	5.3505E+22	4.6708E+22
I-131	2.2022E+07	1.7764E-01	8.1661E+23	2.3685E+23
I-132	4.2498E+06	4.1172E-04	1.8784E+21	6.2947E+22
I-133	5.3381E+06	4.7122E-03	2.1337E+22	2.0575E+23
I-135	2.8906E+04	8.2310E-06	3.6717E+19	6.2667E+22
Xe-133	7.1660E+06	3.8284E-02	1.7335E+23	5.4740E+22

Xe-135	5.0094E+05	1.9616E-04	8.7503E+20	7.3676E+22
Cs-134	6.4033E+06	4.9491E+00	2.2242E+25	6.0635E+22
Cs-136	1.5254E+06	2.0813E-02	9.2161E+22	1.5615E+22
Cs-137	4.0018E+06	4.6007E+01	2.0223E+26	3.7846E+22
Ba-139	6.7586E-10	4.1320E-20	1.7902E+05	5.3075E+20
Ba-140	2.9344E+06	4.0082E-02	1.7241E+23	3.0015E+22
La-140	2.2341E+06	4.0193E-03	1.7289E+22	1.3000E+22
La-141	1.0001E-01	1.7683E-11	7.5526E+13	2.0050E+19
La-142	2.7921E-10	1.9505E-20	8.2719E+04	5.6162E+18
Ce-141	7.4527E+04	2.6156E-03	1.1171E+22	7.2526E+20
Ce-143	1.7211E+04	2.5918E-05	1.0915E+20	3.7372E+20
Ce-144	6.2971E+04	1.9743E-02	8.2567E+22	5.9595E+20
Pr-143	3.1505E+04	4.6785E-04	1.9703E+21	2.9793E+20
Nd-147	1.0731E+04	1.3265E-04	5.4344E+20	1.1123E+20
Np-239	3.9371E+05	1.6971E-03	4.2762E+21	5.9126E+21
Pu-238	3.1691E+02	1.8511E-02	4.6839E+22	2.9880E+18
Pu-239	2.1318E+01	3.4297E-01	8.6418E+23	2.0043E+17
Pu-240	2.2720E+01	9.9709E-02	2.5019E+23	2.1425E+17
Pu-241	1.0901E+04	1.0582E-01	2.6442E+23	1.0281E+20
Am-241	6.8650E+00	2.0002E-03	4.9981E+21	6.4063E+16
Cm-242	1.6636E+03	5.0194E-04	1.2491E+21	1.5786E+19
Cm-244	1.8354E+02	2.2686E-03	5.5992E+21	1.7310E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 72.0000	Atmosphere	Sump	
Noble gases (atoms)	1.7422E+23	0.0000E+00	
Elemental I (atoms)	4.0733E+22	0.0000E+00	
Organic I (atoms)	1.2598E+21	0.0000E+00	
Aerosols (kg)	5.3590E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.8401E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.0101E-03
Total I (Ci)			3.1639E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 72.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.7392E+16
Elemental I (atoms)	0.0000E+00	1.5329E+16
Organic I (atoms)	0.0000E+00	4.7409E+14
Aerosols (kg)	0.0000E+00	1.6465E-05

Detailed model information at time (H) = 78.0000

EAB Doses:

Time (h) = 78.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 78.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.2460E-07	1.6879E-04	1.3084E-05
Accumulated dose (rem)	1.1100E-05	5.0563E-03	3.3117E-04

Control Room Doses:

Time (h) = 78.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.2886E-11	7.2460E-07	5.4980E-08
Accumulated dose (rem)	6.8086E-08	3.5363E-04	1.6282E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 78.0000	Ci	kg	Atoms	Decay
Co-58	1.3063E+03	4.1083E-05	4.2656E+20	1.3574E+19
Co-60	1.6122E+03	1.4262E-03	1.4315E+22	1.6501E+19
Rb-86	5.0951E+04	6.2618E-04	4.3848E+21	5.5495E+20
Sr-89	1.8881E+06	6.4991E-02	4.3976E+23	1.9744E+22
Sr-90	2.2419E+05	1.6436E+00	1.0997E+25	2.2935E+21
Sr-91	9.0540E+03	2.4977E-06	1.6529E+19	4.4698E+21
Sr-92	6.1394E-03	4.8844E-13	3.1972E+12	1.0912E+21
Y-90	1.2824E+05	2.3571E-04	1.5772E+21	7.4473E+20
Y-91	3.0160E+04	1.2298E-03	8.1386E+21	3.0170E+20
Y-92	2.1067E+00	2.1894E-10	1.4331E+15	1.1100E+21

Y-93	1.5118E+02	4.5313E-08	2.9342E+17	5.6795E+19
Zr-95	3.0579E+04	1.4234E-03	9.0230E+21	3.1828E+20
Zr-97	1.3406E+03	7.0126E-07	4.3537E+18	9.7233E+19
Nb-95	3.1773E+04	8.1255E-04	5.1508E+21	3.2528E+20
Mo-99	1.9742E+05	4.1163E-04	2.5039E+21	3.1052E+21
Tc-99m	2.0239E+05	3.8490E-05	2.3413E+20	2.9523E+21
Ru-103	3.4996E+05	1.0843E-02	6.3398E+22	3.6828E+21
Ru-105	1.3204E+00	1.9643E-10	1.1266E+15	1.8173E+20
Ru-106	1.5166E+05	4.5330E-02	2.5753E+23	1.5560E+21
Rh-105	6.0615E+04	7.1814E-05	4.1188E+20	1.4174E+21
Sb-127	2.8456E+05	1.0656E-03	5.0528E+21	3.9365E+21
Sb-129	5.5930E+00	9.9460E-10	4.6431E+15	1.0451E+21
Te-127	3.3836E+05	1.2821E-04	6.0795E+20	4.2097E+21
Te-127m	6.8034E+04	7.2126E-03	3.4201E+22	6.9641E+20
Te-129	1.8220E+05	8.6999E-06	4.0614E+19	2.5148E+21
Te-129m	2.1069E+05	6.9939E-03	3.2650E+22	2.2267E+21
Te-131m	1.1257E+05	1.4117E-04	6.4896E+20	3.1778E+21
Te-132	3.3761E+06	1.1120E-02	5.0734E+22	4.9479E+22
I-131	2.1555E+07	1.7387E-01	7.9927E+23	2.5426E+23
I-132	4.0297E+06	3.9040E-04	1.7811E+21	6.5815E+22
I-133	4.3707E+06	3.8583E-03	1.7470E+22	2.0962E+23
I-135	1.5408E+04	4.3874E-06	1.9571E+19	6.2684E+22
Xe-133	7.0860E+06	3.7856E-02	1.7141E+23	6.0426E+22
Xe-135	3.2381E+05	1.2680E-04	5.6563E+20	7.4000E+22
Cs-134	6.4018E+06	4.9479E+00	2.2237E+25	6.5752E+22
Cs-136	1.5054E+06	2.0539E-02	9.0950E+22	1.6826E+22
Cs-137	4.0017E+06	4.6006E+01	2.0223E+26	4.1044E+22
Ba-140	2.8947E+06	3.9541E-02	1.7008E+23	3.2344E+22
La-140	2.3033E+06	4.1438E-03	1.7825E+22	1.4793E+22
La-141	3.4708E-02	6.1373E-12	2.6212E+13	2.0050E+19
Ce-141	7.4131E+04	2.6017E-03	1.1112E+22	7.8466E+20
Ce-143	1.5173E+04	2.2849E-05	9.6222E+19	3.8664E+20
Ce-144	6.2933E+04	1.9731E-02	8.2517E+22	6.4626E+20
Pr-143	3.1310E+04	4.6496E-04	1.9581E+21	3.2302E+20
Nd-147	1.0563E+04	1.3058E-04	5.3493E+20	1.1974E+20
Np-239	3.6578E+05	1.5767E-03	3.9728E+21	6.2159E+21
Pu-238	3.1691E+02	1.8512E-02	4.6840E+22	3.2412E+18
Pu-239	2.1325E+01	3.4309E-01	8.6448E+23	2.1746E+17
Pu-240	2.2720E+01	9.9710E-02	2.5019E+23	2.3241E+17
Pu-241	1.0900E+04	1.0582E-01	2.6441E+23	1.1152E+20
Am-241	6.8770E+00	2.0037E-03	5.0068E+21	6.9554E+16
Cm-242	1.6618E+03	5.0141E-04	1.2478E+21	1.7115E+19
Cm-244	1.8353E+02	2.2686E-03	5.5991E+21	1.8777E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 78.0000	Atmosphere	Sump	
Noble gases (atoms)	1.7197E+23	0.0000E+00	
Elemental I (atoms)	3.9699E+22	0.0000E+00	
Organic I (atoms)	1.2278E+21	0.0000E+00	
Aerosols (kg)	5.3582E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.6796E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.8229E-03
Total I (Ci)			2.9971E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 78.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	5.1890E+16
Elemental I (atoms)	0.0000E+00	1.6375E+16
Organic I (atoms)	0.0000E+00	5.0644E+14
Aerosols (kg)	0.0000E+00	1.7856E-05

Detailed model information at time (H) = 84.0000

EAB Doses:

Time (h) = 84.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 84.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.1825E-07	1.6415E-04	1.2927E-05

Accumulated dose (rem)	1.1318E-05	5.2205E-03	3.4410E-04

Control Room Doses:

Time (h) = 84.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.1912E-11	7.0468E-07	5.4332E-08
Accumulated dose (rem)	6.8118E-08	3.5433E-04	1.6336E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 84.0000	Ci	kg	Atoms	Decay
Co-58	1.3032E+03	4.0982E-05	4.2552E+20	1.4617E+19
Co-60	1.6120E+03	1.4261E-03	1.4313E+22	1.7789E+19
Rb-86	5.0480E+04	6.2040E-04	4.3443E+21	5.9548E+20
Sr-89	1.8817E+06	6.4768E-02	4.3825E+23	2.1251E+22
Sr-90	2.2419E+05	1.6435E+00	1.0997E+25	2.4727E+21
Sr-91	5.8441E+03	1.6122E-06	1.0669E+19	4.4757E+21
Sr-92	1.3232E-03	1.0528E-13	6.8911E+11	1.0912E+21
Y-90	1.3435E+05	2.4694E-04	1.6524E+21	8.4872E+20
Y-91	3.0080E+04	1.2266E-03	8.1170E+21	3.2577E+20
Y-92	6.5278E-01	6.7840E-11	4.4407E+14	1.1100E+21
Y-93	1.0015E+02	3.0019E-08	1.9438E+17	5.6894E+19
Zr-95	3.0496E+04	1.4195E-03	8.9986E+21	3.4268E+20
Zr-97	1.0481E+03	5.4829E-07	3.4040E+18	9.8182E+19
Nb-95	3.1766E+04	8.1236E-04	5.1496E+21	3.5066E+20
Mo-99	1.8537E+05	3.8649E-04	2.3510E+21	3.2581E+21
Tc-99m	1.9004E+05	3.6141E-05	2.1984E+20	3.1012E+21
Ru-103	3.4842E+05	1.0796E-02	6.3119E+22	3.9618E+21
Ru-105	5.1749E-01	7.6984E-11	4.4153E+14	1.8173E+20
Ru-106	1.5158E+05	4.5309E-02	2.5741E+23	1.6772E+21
Rh-105	5.3889E+04	6.3845E-05	3.6618E+20	1.4631E+21
Sb-127	2.7204E+05	1.0187E-03	4.8304E+21	4.1589E+21
Sb-129	2.1358E+00	3.7980E-10	1.7730E+15	1.0451E+21
Te-127	3.2656E+05	1.2374E-04	5.8675E+20	4.4665E+21
Te-127m	6.8005E+04	7.2096E-03	3.4187E+22	7.5077E+20
Te-129	1.8125E+05	8.6550E-06	4.0404E+19	2.6242E+21
Te-129m	2.0961E+05	6.9579E-03	3.2482E+22	2.3946E+21
Te-131m	9.7997E+04	1.2289E-04	5.6495E+20	3.2618E+21
Te-132	3.2012E+06	1.0545E-02	4.8107E+22	5.2107E+22
I-131	2.1097E+07	1.7017E-01	7.8229E+23	2.7130E+23
I-132	3.8210E+06	3.7018E-04	1.6888E+21	6.8535E+22
I-133	3.5786E+06	3.1591E-03	1.4304E+22	2.1279E+23
I-135	8.2128E+03	2.3386E-06	1.0432E+19	6.2693E+22
Xe-133	6.9808E+06	3.7294E-02	1.6887E+23	6.6041E+22
Xe-135	2.0855E+05	8.1663E-05	3.6429E+20	7.4209E+22
Cs-134	6.4003E+06	4.9468E+00	2.2232E+25	7.0868E+22
Cs-136	1.4856E+06	2.0270E-02	8.9754E+22	1.8021E+22
Cs-137	4.0016E+06	4.6005E+01	2.0223E+26	4.4243E+22
Ba-140	2.8556E+06	3.9006E-02	1.6779E+23	3.4642E+22
La-140	2.3618E+06	4.2491E-03	1.8278E+22	1.6638E+22
La-141	1.2046E-02	2.1300E-12	9.0974E+12	2.0050E+19
Ce-141	7.3737E+04	2.5879E-03	1.1053E+22	8.4375E+20
Ce-143	1.3377E+04	2.0143E-05	8.4829E+19	3.9804E+20
Ce-144	6.2894E+04	1.9719E-02	8.2467E+22	6.9654E+20
Pr-143	3.1094E+04	4.6175E-04	1.9446E+21	3.4794E+20
Nd-147	1.0398E+04	1.2853E-04	5.2655E+20	1.2812E+20
Np-239	3.3983E+05	1.4648E-03	3.6910E+21	6.4978E+21
Pu-238	3.1692E+02	1.8512E-02	4.6841E+22	3.4945E+18
Pu-239	2.1332E+01	3.4320E-01	8.6476E+23	2.3451E+17
Pu-240	2.2720E+01	9.9710E-02	2.5019E+23	2.5057E+17
Pu-241	1.0900E+04	1.0581E-01	2.6441E+23	1.2024E+20
Am-241	6.8890E+00	2.0072E-03	5.0155E+21	7.5054E+16
Cm-242	1.6600E+03	5.0088E-04	1.2464E+21	1.8443E+19
Cm-244	1.8353E+02	2.2685E-03	5.5989E+21	2.0244E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 84.0000	Atmosphere	Sump	
Noble gases (atoms)	1.6923E+23	0.0000E+00	
Elemental I (atoms)	3.8717E+22	0.0000E+00	
Organic I (atoms)	1.1974E+21	0.0000E+00	
Aerosols (kg)	5.3574E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.5291E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.6504E-03
Total I (Ci)			2.8505E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 84.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	5.6325E+16
Elemental I (atoms)	0.0000E+00	1.7394E+16
Organic I (atoms)	0.0000E+00	5.3797E+14
Aerosols (kg)	0.0000E+00	1.9246E-05

Detailed model information at time (H) = 90.0000

EAB Doses:

Time (h) = 90.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 90.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.1256E-07	1.5978E-04	1.2779E-05
Accumulated dose (rem)	1.1531E-05	5.3802E-03	3.5688E-04

Control Room Doses:

Time (h) = 90.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.1051E-11	6.8594E-07	5.3722E-08
Accumulated dose (rem)	6.8149E-08	3.5502E-04	1.6390E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 90.0000	Ci	kg	Atoms	Decay
Co-58	1.3000E+03	4.0882E-05	4.2448E+20	1.5657E+19
Co-60	1.6119E+03	1.4260E-03	1.4312E+22	1.9077E+19
Rb-86	5.0013E+04	6.1466E-04	4.3042E+21	6.3564E+20
Sr-89	1.8752E+06	6.4547E-02	4.3675E+23	2.2752E+22
Sr-90	2.2418E+05	1.6435E+00	1.0997E+25	2.6519E+21
Sr-91	3.7722E+03	1.0406E-06	6.8865E+18	4.4795E+21
Sr-92	2.8520E-04	2.2690E-14	1.4853E+11	1.0912E+21
Y-90	1.4008E+05	2.5747E-04	1.7228E+21	9.5743E+20
Y-91	2.9997E+04	1.2232E-03	8.0946E+21	3.4978E+20
Y-92	2.0207E-01	2.1000E-11	1.3746E+14	1.1100E+21
Y-93	6.6348E+01	1.9887E-08	1.2877E+17	5.6960E+19
Zr-95	3.0413E+04	1.4157E-03	8.9743E+21	3.6702E+20
Zr-97	8.1950E+02	4.2868E-07	2.6614E+18	9.8925E+19
Nb-95	3.1758E+04	8.1216E-04	5.1483E+21	3.7603E+20
Mo-99	1.7405E+05	3.6289E-04	2.2074E+21	3.4017E+21
Tc-99m	1.7844E+05	3.3935E-05	2.0642E+20	3.2409E+21
Ru-103	3.4689E+05	1.0748E-02	6.2842E+22	4.2397E+21
Ru-105	2.0282E-01	3.0172E-11	1.7305E+14	1.8173E+20
Ru-106	1.5151E+05	4.5287E-02	2.5729E+23	1.7983E+21
Rh-105	4.7909E+04	5.6761E-05	3.2554E+20	1.5037E+21
Sb-127	2.6007E+05	9.7384E-04	4.6178E+21	4.3715E+21
Sb-129	8.1556E-01	1.4503E-10	6.7704E+14	1.0451E+21
Te-127	3.1525E+05	1.1945E-04	5.6644E+20	4.7144E+21
Te-127m	6.7973E+04	7.2062E-03	3.4171E+22	8.0510E+20
Te-129	1.8032E+05	8.6103E-06	4.0196E+19	2.7330E+21
Te-129m	2.0853E+05	6.9221E-03	3.2315E+22	2.5617E+21
Te-131m	8.5311E+04	1.0699E-04	4.9182E+20	3.3349E+21
Te-132	3.0354E+06	9.9984E-03	4.5615E+22	5.4598E+22
I-131	2.0649E+07	1.6656E-01	7.6567E+23	2.8798E+23
I-132	3.6231E+06	3.5100E-04	1.6014E+21	7.1114E+22
I-133	2.9301E+06	2.5866E-03	1.1712E+22	2.1538E+23
I-135	4.3776E+03	1.2465E-06	5.5606E+18	6.2698E+22
Xe-133	6.8564E+06	3.6630E-02	1.6586E+23	7.1564E+22
Xe-135	1.3391E+05	5.2436E-05	2.3391E+20	7.4343E+22
Cs-134	6.3988E+06	4.9457E+00	2.2226E+25	7.5982E+22
Cs-136	1.4661E+06	2.0003E-02	8.8575E+22	1.9201E+22
Cs-137	4.0016E+06	4.6005E+01	2.0222E+26	4.7441E+22
Ba-140	2.8170E+06	3.8479E-02	1.6552E+23	3.6909E+22
La-140	2.4107E+06	4.3371E-03	1.8656E+22	1.8526E+22
La-141	4.1808E-03	7.3926E-13	3.1574E+12	2.0050E+19
Ce-141	7.3345E+04	2.5741E-03	1.0994E+22	9.0252E+20
Ce-143	1.1793E+04	1.7758E-05	7.4784E+19	4.0808E+20
Ce-144	6.2856E+04	1.9707E-02	8.2417E+22	7.4679E+20

Pr-143	3.0859E+04	4.5826E-04	1.9299E+21	3.7269E+20
Nd-147	1.0235E+04	1.2652E-04	5.1831E+20	1.3636E+20
Np-239	3.1572E+05	1.3609E-03	3.4291E+21	6.7596E+21
Pu-238	3.1693E+02	1.8512E-02	4.6842E+22	3.7478E+18
Pu-239	2.1338E+01	3.4330E-01	8.6503E+23	2.5156E+17
Pu-240	2.2720E+01	9.9710E-02	2.5019E+23	2.6873E+17
Pu-241	1.0900E+04	1.0581E-01	2.6440E+23	1.2895E+20
Am-241	6.9009E+00	2.0107E-03	5.0243E+21	8.0564E+16
Cm-242	1.6583E+03	5.0034E-04	1.2451E+21	1.9769E+19
Cm-244	1.8352E+02	2.2685E-03	5.5988E+21	2.1711E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 90.0000	Atmosphere	Sump	
Noble gases (atoms)	1.6609E+23	0.0000E+00	
Elemental I (atoms)	3.7781E+22	0.0000E+00	
Organic I (atoms)	1.1685E+21	0.0000E+00	
Aerosols (kg)	5.3566E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.3871E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.4902E-03
Total I (Ci)			2.7206E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 90.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	6.0684E+16
Elemental I (atoms)	0.0000E+00	1.8389E+16
Organic I (atoms)	0.0000E+00	5.6874E+14
Aerosols (kg)	0.0000E+00	2.0637E-05

Detailed model information at time (H) = 96.0000

EAB Doses:

Time (h) = 96.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 96.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.0741E-07	1.5566E-04	1.2640E-05
Accumulated dose (rem)	1.1738E-05	5.5359E-03	3.6952E-04

Control Room Doses:

Time (h) = 96.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.0278E-11	6.6824E-07	5.3144E-08
Accumulated dose (rem)	6.8179E-08	3.5569E-04	1.6443E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 96.0000	Ci	kg	Atoms	Decay
Co-58	1.2968E+03	4.0782E-05	4.2344E+20	1.6695E+19
Co-60	1.6117E+03	1.4258E-03	1.4311E+22	2.0365E+19
Rb-86	4.9551E+04	6.0898E-04	4.2644E+21	6.7543E+20
Sr-89	1.8688E+06	6.4325E-02	4.3525E+23	2.4248E+22
Sr-90	2.2418E+05	1.6435E+00	1.0997E+25	2.8310E+21
Sr-91	2.4348E+03	6.7168E-07	4.4450E+18	4.4819E+21
Sr-92	6.1471E-05	4.8905E-15	3.2012E+10	1.0912E+21
Y-90	1.4545E+05	2.6734E-04	1.7888E+21	1.0706E+21
Y-91	2.9912E+04	1.2197E-03	8.0717E+21	3.7372E+20
Y-92	6.2510E-02	6.4964E-12	4.2524E+13	1.1100E+21
Y-93	4.3954E+01	1.3174E-08	8.5310E+16	5.7003E+19
Zr-95	3.0331E+04	1.4119E-03	8.9500E+21	3.9129E+20
Zr-97	6.4073E+02	3.3516E-07	2.0808E+18	9.9505E+19
Nb-95	3.1750E+04	8.1195E-04	5.1470E+21	4.0140E+20
Mo-99	1.6342E+05	3.4073E-04	2.0726E+21	3.5365E+21
Tc-99m	1.6754E+05	3.1863E-05	1.9382E+20	3.3722E+21
Ru-103	3.4536E+05	1.0701E-02	6.2565E+22	4.5163E+21
Ru-105	7.9489E-02	1.1825E-11	6.7822E+13	1.8173E+20
Ru-106	1.5144E+05	4.5266E-02	2.5717E+23	1.9193E+21
Rh-105	4.2593E+04	5.0462E-05	2.8942E+20	1.5398E+21
Sb-127	2.4862E+05	9.3098E-04	4.4146E+21	4.5747E+21
Sb-129	3.1143E-01	5.5381E-11	2.5853E+14	1.0451E+21

Te-127	3.0442E+05	1.1535E-04	5.4698E+20	4.9538E+21
Te-127m	6.7938E+04	7.2025E-03	3.4153E+22	8.5941E+20
Te-129	1.7939E+05	8.5660E-06	3.9989E+19	2.8413E+21
Te-129m	2.0746E+05	6.8865E-03	3.2149E+22	2.7279E+21
Te-131m	7.4268E+04	9.3137E-05	4.2816E+20	3.3986E+21
Te-132	2.8782E+06	9.4805E-03	4.3252E+22	5.6961E+22
I-131	2.0210E+07	1.6302E-01	7.4939E+23	3.0431E+23
I-132	3.4355E+06	3.3282E-04	1.5184E+21	7.3560E+22
I-133	2.3991E+06	2.1178E-03	9.5893E+21	2.1750E+23
I-135	2.3334E+03	6.6444E-07	2.9639E+18	6.2701E+22
Xe-133	6.7175E+06	3.5888E-02	1.6250E+23	7.6983E+22
Xe-135	8.5772E+04	3.3587E-05	1.4983E+20	7.4430E+22
Cs-134	6.3974E+06	4.9445E+00	2.2221E+25	8.1096E+22
Cs-136	1.4468E+06	1.9740E-02	8.7411E+22	2.0365E+22
Cs-137	4.0015E+06	4.6004E+01	2.0222E+26	5.0639E+22
Ba-140	2.7790E+06	3.7960E-02	1.6328E+23	3.9145E+22
La-140	2.4510E+06	4.4097E-03	1.8968E+22	2.0450E+22
La-141	1.4510E-03	2.5657E-13	1.0958E+12	2.0050E+19
Ce-141	7.2955E+04	2.5604E-03	1.0936E+22	9.6098E+20
Ce-143	1.0396E+04	1.5655E-05	6.5929E+19	4.1694E+20
Ce-144	6.2818E+04	1.9695E-02	8.2366E+22	7.9701E+20
Pr-143	3.0608E+04	4.5453E-04	1.9142E+21	3.9724E+20
Nd-147	1.0075E+04	1.2454E-04	5.1019E+20	1.4448E+20
Np-239	2.9332E+05	1.2644E-03	3.1859E+21	7.0029E+21
Pu-238	3.1693E+02	1.8513E-02	4.6843E+22	4.0011E+18
Pu-239	2.1344E+01	3.4340E-01	8.6527E+23	2.6862E+17
Pu-240	2.2721E+01	9.9710E-02	2.5019E+23	2.8688E+17
Pu-241	1.0899E+04	1.0581E-01	2.6439E+23	1.3766E+20
Am-241	6.9129E+00	2.0141E-03	5.0330E+21	8.6083E+16
Cm-242	1.6565E+03	4.9981E-04	1.2438E+21	2.1093E+19
Cm-244	1.8352E+02	2.2684E-03	5.5986E+21	2.3177E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 96.0000	Atmosphere	Sump	
Noble gases (atoms)	1.6265E+23	0.0000E+00	
Elemental I (atoms)	3.6884E+22	0.0000E+00	
Organic I (atoms)	1.1408E+21	0.0000E+00	
Aerosols (kg)	5.3559E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.2526E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.3405E-03
Total I (Ci)			2.6047E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 96.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	6.4959E+16
Elemental I (atoms)	0.0000E+00	1.9360E+16
Organic I (atoms)	0.0000E+00	5.9876E+14
Aerosols (kg)	0.0000E+00	2.2027E-05

Detailed model information at time (H) = 144.0000

EAB Doses:

Time (h) = 144.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 144.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.2507E-07	3.1369E-04	2.7172E-05
Accumulated dose (rem)	1.2163E-05	5.8496E-03	3.9669E-04

Control Room Doses:

Time (h) = 144.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.4231E-11	9.6186E-07	8.1461E-08
Accumulated dose (rem)	6.8224E-08	3.5665E-04	1.6524E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 144.0000	Ci	kg	Atoms	Decay
Co-58	1.2716E+03	3.9991E-05	4.1523E+20	2.4905E+19

Co-60	1.6106E+03	1.4248E-03	1.4301E+22	3.0666E+19
Rb-86	4.6003E+04	5.6538E-04	3.9590E+21	9.8075E+20
Sr-89	1.8182E+06	6.2584E-02	4.2347E+23	3.6034E+22
Sr-90	2.2415E+05	1.6433E+00	1.0995E+25	4.2643E+21
Sr-91	7.3363E+01	2.0238E-08	1.3393E+17	4.4862E+21
Sr-92	2.8627E-10	2.2775E-20	1.4908E+05	1.0912E+21
Y-90	1.7785E+05	3.2690E-04	2.1874E+21	2.1053E+21
Y-91	2.9218E+04	1.1914E-03	7.8844E+21	5.6274E+20
Y-92	5.1957E-06	5.3996E-16	3.5345E+09	1.1100E+21
Y-93	1.6306E+00	4.8876E-10	3.1649E+15	5.7086E+19
Zr-95	2.9681E+04	1.3816E-03	8.7581E+21	5.8313E+20
Zr-97	8.9470E+01	4.6802E-08	2.9056E+17	1.0130E+20
Nb-95	3.1671E+04	8.0994E-04	5.1343E+21	6.0408E+20
Mo-99	9.8712E+04	2.0581E-04	1.2520E+21	4.3571E+21
Tc-99m	1.0120E+05	1.9247E-05	1.1708E+20	4.1711E+21
Ru-103	3.3338E+05	1.0330E-02	6.0395E+22	6.6859E+21
Ru-105	4.4251E-05	6.5831E-15	3.7756E+10	1.8173E+20
Ru-106	1.5087E+05	4.5096E-02	2.5620E+23	2.8858E+21
Rh-105	1.6623E+04	1.9694E-05	1.1295E+20	1.7163E+21
Sb-127	1.7344E+05	6.4948E-04	3.0797E+21	5.9096E+21
Sb-129	1.4079E-04	2.5037E-14	1.1688E+11	1.0451E+21
Te-127	2.3298E+05	8.8281E-05	4.1861E+20	6.6012E+21
Te-127m	6.7554E+04	7.1618E-03	3.3960E+22	1.2926E+21
Te-129	1.7214E+05	8.2198E-06	3.8373E+19	3.6875E+21
Te-129m	1.9907E+05	6.6082E-03	3.0849E+22	4.0274E+21
Te-131m	2.4499E+04	3.0724E-05	1.4124E+20	3.6855E+21
Te-132	1.8808E+06	6.1952E-03	2.8264E+22	7.1949E+22
I-131	1.7014E+07	1.3724E-01	6.3091E+23	4.2302E+23
I-132	2.2450E+06	2.1749E-04	9.9224E+20	8.9074E+22
I-133	4.8457E+05	4.2776E-04	1.9369E+21	2.2515E+23
I-135	1.5205E+01	4.3297E-09	1.9314E+16	6.2704E+22
Xe-133	5.4186E+06	2.8948E-02	1.3108E+23	1.1583E+23
Xe-135	2.3123E+03	9.0546E-07	4.0391E+18	7.4578E+22
Cs-134	6.3856E+06	4.9354E+00	2.2180E+25	1.2196E+23
Cs-136	1.3015E+06	1.7758E-02	7.8633E+22	2.9142E+22
Cs-137	4.0010E+06	4.5998E+01	2.0219E+26	7.6221E+22
Ba-140	2.4925E+06	3.4046E-02	1.4645E+23	5.5980E+22
La-140	2.5552E+06	4.5970E-03	1.9774E+22	3.6480E+22
La-141	3.0547E-07	5.4014E-17	2.3070E+08	2.0050E+19
Ce-141	6.9908E+04	2.4535E-03	1.0479E+22	1.4176E+21
Ce-143	3.7933E+03	5.7122E-06	2.4056E+19	4.5881E+20
Ce-144	6.2512E+04	1.9599E-02	8.1966E+22	1.1977E+21
Pr-143	2.8265E+04	4.1974E-04	1.7677E+21	5.8563E+20
Nd-147	8.8799E+03	1.0977E-04	4.4968E+20	2.0499E+20
Np-239	1.6282E+05	7.0182E-04	1.7684E+21	8.4203E+21
Pu-238	3.1699E+02	1.8516E-02	4.6852E+22	6.0276E+18
Pu-239	2.1379E+01	3.4396E-01	8.6669E+23	4.0521E+17
Pu-240	2.2721E+01	9.9710E-02	2.5019E+23	4.3215E+17
Pu-241	1.0896E+04	1.0578E-01	2.6432E+23	2.0733E+20
Am-241	7.0085E+00	2.0420E-03	5.1026E+21	1.3058E+17
Cm-242	1.6425E+03	4.9557E-04	1.2332E+21	3.1639E+19
Cm-244	1.8348E+02	2.2679E-03	5.5975E+21	3.4910E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 144.0000	Atmosphere	Sump	
Noble gases (atoms)	1.3108E+23	0.0000E+00	
Elemental I (atoms)	3.0741E+22	0.0000E+00	
Organic I (atoms)	9.5075E+20	0.0000E+00	
Aerosols (kg)	5.3505E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.3560E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		4.3857E-03
Total I (Ci)			1.9744E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 144.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	9.5567E+16
Elemental I (atoms)	0.0000E+00	2.6367E+16
Organic I (atoms)	0.0000E+00	8.1548E+14
Aerosols (kg)	0.0000E+00	3.3142E-05

Detailed model information at time (H) = 192.0000

EAB Doses:

Time (h) = 192.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 192.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.7147E-07	2.6128E-04	2.5390E-05
Accumulated dose (rem)	1.2535E-05	6.1109E-03	4.2208E-04

Control Room Doses:

Time (h) = 192.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.7019E-11	7.6811E-07	7.3193E-08
Accumulated dose (rem)	6.8261E-08	3.5742E-04	1.6598E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 192.0000	Ci	kg	Atoms	Decay
Co-58	1.2470E+03	3.9216E-05	4.0718E+20	3.2957E+19
Co-60	1.6094E+03	1.4238E-03	1.4290E+22	4.0960E+19
Rb-86	4.2709E+04	5.2490E-04	3.6756E+21	1.2642E+21
Sr-89	1.7690E+06	6.0889E-02	4.1200E+23	4.7501E+22
Sr-90	2.2412E+05	1.6430E+00	1.0994E+25	5.6973E+21
Sr-91	2.2105E+00	6.0978E-10	4.0354E+15	4.4863E+21
Y-90	1.9711E+05	3.6229E-04	2.4242E+21	3.3015E+21
Y-91	2.8534E+04	1.1635E-03	7.6999E+21	7.4736E+20
Y-92	4.3049E-10	4.4738E-20	2.9285E+05	1.1100E+21
Y-93	6.0495E-02	1.8132E-11	1.1741E+14	5.7089E+19
Zr-95	2.9045E+04	1.3520E-03	8.5704E+21	7.7086E+20
Zr-97	1.2493E+01	6.5353E-09	4.0574E+16	1.0155E+20
Nb-95	3.1571E+04	8.0737E-04	5.1180E+21	8.0618E+20
Mo-99	5.9626E+04	1.2432E-04	7.5624E+20	4.8528E+21
Tc-99m	6.1131E+04	1.1626E-05	7.0719E+19	4.6537E+21
Ru-103	3.2182E+05	9.9716E-03	5.8301E+22	8.7802E+21
Ru-105	2.4635E-08	3.6648E-18	2.1019E+07	1.8173E+20
Ru-106	1.5031E+05	4.4927E-02	2.5524E+23	3.8486E+21
Rh-105	6.4873E+03	7.6859E-06	4.4081E+19	1.7852E+21
Sb-127	1.2100E+05	4.5309E-04	2.1485E+21	6.8408E+21
Sb-129	6.3650E-08	1.1319E-17	5.2840E+07	1.0451E+21
Te-127	1.8285E+05	6.9283E-05	3.2853E+20	7.8766E+21
Te-127m	6.7032E+04	7.1064E-03	3.3698E+22	1.7229E+21
Te-129	1.6518E+05	7.8875E-06	3.6822E+19	4.4996E+21
Te-129m	1.9103E+05	6.3411E-03	2.9602E+22	5.2743E+21
Te-131m	8.0817E+03	1.0135E-05	4.6591E+19	3.7801E+21
Te-132	1.2291E+06	4.0484E-03	1.8470E+22	8.1744E+22
I-131	1.4322E+07	1.1552E-01	5.3105E+23	5.2295E+23
I-132	1.4670E+06	1.4212E-04	6.4840E+20	9.9212E+22
I-133	9.7875E+04	8.6401E-05	3.9121E+20	2.2670E+23
I-135	9.9082E-02	2.8214E-11	1.2586E+14	6.2704E+22
Xe-133	4.2129E+06	2.2507E-02	1.0191E+23	1.4649E+23
Xe-135	6.0178E+01	2.3565E-08	1.0512E+17	7.4582E+22
Cs-134	6.3739E+06	4.9263E+00	2.2140E+25	1.6275E+23
Cs-136	1.1708E+06	1.5975E-02	7.0737E+22	3.7039E+22
Cs-137	4.0005E+06	4.5992E+01	2.0217E+26	1.0180E+23
Ba-140	2.2355E+06	3.0536E-02	1.3135E+23	7.1079E+22
La-140	2.4479E+06	4.4041E-03	1.8944E+22	5.2409E+22
La-141	6.4308E-11	1.1371E-20	4.8567E+04	2.0050E+19
Ce-141	6.6989E+04	2.3510E-03	1.0041E+22	1.8552E+21
Ce-143	1.3841E+03	2.0842E-06	8.7771E+18	4.7409E+20
Ce-144	6.2208E+04	1.9504E-02	8.1567E+22	1.5964E+21
Pr-143	2.5749E+04	3.8237E-04	1.6103E+21	7.5827E+20
Nd-147	7.8266E+03	9.6746E-05	3.9634E+20	2.5833E+20
Np-239	9.0374E+04	3.8956E-04	9.8158E+20	9.2072E+21
Pu-238	3.1705E+02	1.8520E-02	4.6860E+22	8.0545E+18
Pu-239	2.1399E+01	3.4427E-01	8.6747E+23	5.4196E+17
Pu-240	2.2721E+01	9.9710E-02	2.5020E+23	5.7742E+17
Pu-241	1.0894E+04	1.0575E-01	2.6425E+23	2.7699E+20
Am-241	7.1041E+00	2.0699E-03	5.1722E+21	1.7569E+17
Cm-242	1.6285E+03	4.9137E-04	1.2228E+21	4.2096E+19
Cm-244	1.8344E+02	2.2675E-03	5.5963E+21	4.6639E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 192.0000	Atmosphere	Sump

Noble gases (atoms)	1.0191E+23	0.0000E+00	
Elemental I (atoms)	2.5806E+22	0.0000E+00	
Organic I (atoms)	7.9814E+20	0.0000E+00	
Aerosols (kg)	5.3458E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.6528E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.6666E-03
Total I (Ci)			1.5886E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 192.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.1973E+17
Elemental I (atoms)	0.0000E+00	3.2232E+16
Organic I (atoms)	0.0000E+00	9.9687E+14
Aerosols (kg)	0.0000E+00	4.4247E-05

Detailed model information at time (H) = 240.0000

EAB Doses:

Time (h) = 240.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 240.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.3227E-07	2.1935E-04	2.3956E-05
Accumulated dose (rem)	1.2867E-05	6.3302E-03	4.4603E-04

Control Room Doses:

Time (h) = 240.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.3062E-11	6.4485E-07	6.9092E-08
Accumulated dose (rem)	6.8294E-08	3.5806E-04	1.6667E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 240.0000	Ci	kg	Atoms	Decay
Co-58	1.2228E+03	3.8455E-05	3.9928E+20	4.0852E+19
Co-60	1.6083E+03	1.4228E-03	1.4280E+22	5.1246E+19
Rb-86	3.9651E+04	4.8731E-04	3.4124E+21	1.5274E+21
Sr-89	1.7211E+06	5.9240E-02	4.0085E+23	5.8657E+22
Sr-90	2.2409E+05	1.6428E+00	1.0993E+25	7.1302E+21
Sr-91	6.6602E-02	1.8373E-11	1.2159E+14	4.4863E+21
Y-90	2.0855E+05	3.8331E-04	2.5648E+21	4.5937E+21
Y-91	2.7866E+04	1.1363E-03	7.5196E+21	9.2765E+20
Y-93	2.2443E-03	6.7269E-13	4.3560E+12	5.7089E+19
Zr-95	2.8422E+04	1.3230E-03	8.3867E+21	9.5456E+20
Zr-97	1.7445E+00	9.1258E-10	5.6656E+15	1.0158E+20
Nb-95	3.1450E+04	8.0429E-04	5.0985E+21	1.0076E+21
Mo-99	3.6017E+04	7.5095E-05	4.5680E+20	5.1523E+21
Tc-99m	3.6926E+04	7.0225E-06	4.2718E+19	4.9452E+21
Ru-103	3.1066E+05	9.6258E-03	5.6279E+22	1.0802E+22
Ru-105	1.3714E-11	2.0402E-21	1.1701E+04	1.8173E+20
Ru-106	1.4974E+05	4.4758E-02	2.5428E+23	4.8078E+21
Rh-105	2.5318E+03	2.9995E-06	1.7203E+19	1.8121E+21
Sb-127	8.4411E+04	3.1609E-04	1.4988E+21	7.4904E+21
Sb-129	2.8775E-11	5.1171E-21	2.3888E+04	1.0451E+21
Te-127	1.4761E+05	5.5932E-05	2.6522E+20	8.8907E+21
Te-127m	6.6416E+04	7.0411E-03	3.3388E+22	2.1495E+21
Te-129	1.5851E+05	7.5687E-06	3.5333E+19	5.2788E+21
Te-129m	1.8331E+05	6.0848E-03	2.8406E+22	6.4708E+21
Te-131m	2.6660E+03	3.3433E-06	1.5369E+19	3.8114E+21
Te-132	8.0315E+05	2.6455E-03	1.2069E+22	8.8144E+22
I-131	1.2054E+07	9.7229E-02	4.4697E+23	6.0706E+23
I-132	9.5865E+05	9.2873E-05	4.2371E+20	1.0584E+23
I-133	1.9769E+04	1.7451E-05	7.9019E+19	2.2701E+23
I-135	6.4565E-04	1.8385E-13	8.2012E+11	6.2704E+22
Xe-133	3.2450E+06	1.7336E-02	7.8497E+22	1.7021E+23
Xe-135	1.5527E+00	6.0802E-10	2.7123E+15	7.4582E+22
Cs-134	6.3621E+06	4.9173E+00	2.2099E+25	2.0346E+23
Cs-136	1.0532E+06	1.4371E-02	6.3634E+22	4.4142E+22
Cs-137	4.0000E+06	4.5986E+01	2.0214E+26	1.2738E+23

Ba-140	2.0050E+06	2.7387E-02	1.1781E+23	8.4622E+22
La-140	2.2639E+06	4.0730E-03	1.7520E+22	6.7376E+22
Ce-141	6.4192E+04	2.2529E-03	9.6220E+21	2.2745E+21
Ce-143	5.0501E+02	7.6046E-07	3.2025E+18	4.7966E+20
Ce-144	6.1906E+04	1.9409E-02	8.1170E+22	1.9931E+21
Pr-143	2.3330E+04	3.4646E-04	1.4591E+21	9.1508E+20
Nd-147	6.8983E+03	8.5271E-05	3.4933E+20	3.0534E+20
Np-239	5.0164E+04	2.1623E-04	5.4484E+20	9.6439E+21
Pu-238	3.1711E+02	1.8523E-02	4.6869E+22	1.0082E+19
Pu-239	2.1410E+01	3.4445E-01	8.6791E+23	6.7882E+17
Pu-240	2.2721E+01	9.9711E-02	2.5020E+23	7.2268E+17
Pu-241	1.0891E+04	1.0572E-01	2.6418E+23	3.4663E+20
Am-241	7.1997E+00	2.0977E-03	5.2418E+21	2.2141E+17
Cm-242	1.6147E+03	4.8720E-04	1.2124E+21	5.2464E+19
Cm-244	1.8340E+02	2.2670E-03	5.5951E+21	5.8367E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 240.0000	Atmosphere	Sump	
Noble gases (atoms)	7.8497E+22	0.0000E+00	
Elemental I (atoms)	2.1702E+22	0.0000E+00	
Organic I (atoms)	6.7120E+20	0.0000E+00	
Aerosols (kg)	5.3416E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.0714E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.0792E-03
Total I (Ci)			1.3032E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 240.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.3841E+17
Elemental I (atoms)	0.0000E+00	3.7161E+16
Organic I (atoms)	0.0000E+00	1.1493E+15
Aerosols (kg)	0.0000E+00	5.5343E-05

Detailed model information at time (H) = 288.0000

EAB Doses:

Time (h) = 288.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 288.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.0161E-07	1.8475E-04	2.2765E-05
Accumulated dose (rem)	1.3169E-05	6.5150E-03	4.6880E-04

Control Room Doses:

Time (h) = 288.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.9969E-11	5.4312E-07	6.5678E-08
Accumulated dose (rem)	6.8324E-08	3.5860E-04	1.6732E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 288.0000	Ci	kg	Atoms	Decay
Co-58	1.1991E+03	3.7710E-05	3.9154E+20	4.8594E+19
Co-60	1.6071E+03	1.4217E-03	1.4270E+22	6.1525E+19
Rb-86	3.6812E+04	4.5242E-04	3.1681E+21	1.7717E+21
Sr-89	1.6745E+06	5.7636E-02	3.8999E+23	6.9511E+22
Sr-90	2.2406E+05	1.6426E+00	1.0991E+25	8.5628E+21
Sr-91	2.0068E-03	5.5359E-13	3.6635E+12	4.4863E+21
Y-90	2.1534E+05	3.9579E-04	2.6483E+21	5.9429E+21
Y-91	2.7214E+04	1.1097E-03	7.3435E+21	1.1037E+21
Y-93	8.3262E-05	2.4956E-14	1.6160E+11	5.7089E+19
Zr-95	2.7813E+04	1.2947E-03	8.2069E+21	1.1343E+21
Zr-97	2.4360E-01	1.2743E-10	7.9114E+14	1.0159E+20
Nb-95	3.1311E+04	8.0072E-04	5.0759E+21	1.2082E+21
Mo-99	2.1756E+04	4.5361E-05	2.7593E+20	5.3332E+21
Tc-99m	2.2305E+04	4.2419E-06	2.5803E+19	5.1213E+21
Ru-103	2.9989E+05	9.2920E-03	5.4328E+22	1.2754E+22
Ru-106	1.4918E+05	4.4589E-02	2.5332E+23	5.7633E+21
Rh-105	9.8807E+02	1.1706E-06	6.7139E+18	1.8225E+21

Sb-127	5.8887E+04	2.2051E-04	1.0456E+21	7.9436E+21
Te-127	1.2278E+05	4.6523E-05	2.2060E+20	9.7210E+21
Te-127m	6.5738E+04	6.9692E-03	3.3047E+22	2.5720E+21
Te-129	1.5210E+05	7.2628E-06	3.3905E+19	6.0265E+21
Te-129m	1.7590E+05	5.8388E-03	2.7258E+22	7.6189E+21
Te-131m	8.7945E+02	1.1029E-06	5.0700E+18	3.8217E+21
Te-132	5.2483E+05	1.7287E-03	7.8869E+21	9.2326E+22
I-131	1.0145E+07	8.1831E-02	3.7618E+23	6.7785E+23
I-132	6.2645E+05	6.0689E-05	2.7688E+20	1.1017E+23
I-133	3.9930E+03	3.5249E-06	1.5960E+19	2.2707E+23
I-135	4.2073E-06	1.1980E-15	5.3442E+09	6.2704E+22
Xe-133	2.4935E+06	1.3321E-02	6.0317E+22	1.8845E+23
Xe-135	3.9977E-02	1.5655E-11	6.9832E+13	7.4582E+22
Cs-134	6.3504E+06	4.9082E+00	2.2058E+25	2.4410E+23
Cs-136	9.4748E+05	1.2928E-02	5.7244E+22	5.0532E+22
Cs-137	3.9995E+06	4.5981E+01	2.0212E+26	1.5295E+23
Ba-140	1.7983E+06	2.4564E-02	1.0566E+23	9.6768E+22
La-140	2.0604E+06	3.7069E-03	1.5945E+22	8.1097E+22
Ce-141	6.1511E+04	2.1588E-03	9.2202E+21	2.6763E+21
Ce-143	1.8426E+02	2.7747E-07	1.1685E+18	4.8170E+20
Ce-144	6.1604E+04	1.9315E-02	8.0775E+22	2.3880E+21
Pr-143	2.1094E+04	3.1325E-04	1.3192E+21	1.0570E+21
Nd-147	6.0801E+03	7.5157E-05	3.0789E+20	3.4677E+20
Np-239	2.7845E+04	1.2002E-04	3.0243E+20	9.8863E+21
Pu-238	3.1716E+02	1.8526E-02	4.6877E+22	1.2109E+19
Pu-239	2.1416E+01	3.4454E-01	8.6815E+23	8.1572E+17
Pu-240	2.2721E+01	9.9711E-02	2.5020E+23	8.6795E+17
Pu-241	1.0888E+04	1.0569E-01	2.6411E+23	4.1625E+20
Am-241	7.2953E+00	2.1256E-03	5.3114E+21	2.6774E+17
Cm-242	1.6010E+03	4.8307E-04	1.2021E+21	6.2744E+19
Cm-244	1.8337E+02	2.2665E-03	5.5939E+21	7.0092E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 288.0000	Atmosphere	Sump	
Noble gases (atoms)	6.0317E+22	0.0000E+00	
Elemental I (atoms)	1.8259E+22	0.0000E+00	
Organic I (atoms)	5.6471E+20	0.0000E+00	
Aerosols (kg)	5.3378E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.5842E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.5891E-03
Total I (Ci)			1.0775E+07

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 288.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.5278E+17
Elemental I (atoms)	0.0000E+00	4.1307E+16
Organic I (atoms)	0.0000E+00	1.2775E+15
Aerosols (kg)	0.0000E+00	6.6431E-05

Detailed model information at time (H) = 336.0000

EAB Doses:

Time (h) = 336.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 336.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.7707E-07	1.5592E-04	2.1764E-05
Accumulated dose (rem)	1.3446E-05	6.6709E-03	4.9056E-04

Control Room Doses:

Time (h) = 336.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.7495E-11	4.5837E-07	6.2809E-08
Accumulated dose (rem)	6.8351E-08	3.5906E-04	1.6795E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 336.0000	Ci	kg	Atoms	Decay
Co-58	1.1758E+03	3.6979E-05	3.8395E+20	5.6186E+19

Co-60	1.6059E+03	1.4207E-03	1.4259E+22	7.1797E+19
Rb-86	3.4177E+04	4.2003E-04	2.9412E+21	1.9986E+21
Sr-89	1.6291E+06	5.6075E-02	3.7943E+23	8.0071E+22
Sr-90	2.2403E+05	1.6424E+00	1.0990E+25	9.9953E+21
Sr-91	6.0464E-05	1.6680E-14	1.1038E+11	4.4863E+21
Y-90	2.1936E+05	4.0319E-04	2.6978E+21	7.3259E+21
Y-91	2.6576E+04	1.0837E-03	7.1716E+21	1.2757E+21
Y-93	3.0889E-06	9.2585E-16	5.9953E+09	5.7089E+19
Zr-95	2.7217E+04	1.2669E-03	8.0310E+21	1.3102E+21
Zr-97	3.4016E-02	1.7794E-11	1.1047E+14	1.0159E+20
Nb-95	3.1154E+04	7.9670E-04	5.0504E+21	1.4078E+21
Mo-99	1.3141E+04	2.7400E-05	1.6667E+20	5.4424E+21
Tc-99m	1.3473E+04	2.5623E-06	1.5586E+19	5.2276E+21
Ru-103	2.8949E+05	8.9698E-03	5.2444E+22	1.4637E+22
Ru-106	1.4862E+05	4.4422E-02	2.5237E+23	6.7153E+21
Rh-105	3.8561E+02	4.5685E-07	2.6202E+18	1.8266E+21
Sb-127	4.1081E+04	1.5383E-04	7.2945E+20	8.2598E+21
Te-127	1.0520E+05	3.9863E-05	1.8903E+20	1.0422E+22
Te-127m	6.5019E+04	6.8931E-03	3.2686E+22	2.9900E+21
Te-129	1.4595E+05	6.9692E-06	3.2535E+19	6.7440E+21
Te-129m	1.6879E+05	5.6028E-03	2.6156E+22	8.7206E+21
Te-131m	2.9011E+02	3.6382E-07	1.6725E+18	3.8251E+21
Te-132	3.4296E+05	1.1297E-03	5.1539E+21	9.5059E+22
I-131	8.5383E+06	6.8872E-02	3.1661E+23	7.3743E+23
I-132	4.0936E+05	3.9659E-05	1.8093E+20	1.1300E+23
I-133	8.0653E+02	7.1197E-07	3.2238E+18	2.2709E+23
I-135	2.7416E-08	7.8067E-18	3.4825E+07	6.2704E+22
Xe-133	1.9148E+06	1.0229E-02	4.6318E+22	2.0246E+23
Xe-135	1.0287E-03	4.0283E-13	1.7970E+12	7.4582E+22
Cs-134	6.3388E+06	4.8992E+00	2.2018E+25	2.8467E+23
Cs-136	8.5234E+05	1.1629E-02	5.1496E+22	5.6280E+22
Cs-137	3.9990E+06	4.5975E+01	2.0209E+26	1.7852E+23
Ba-140	1.6129E+06	2.2031E-02	9.4767E+22	1.0766E+23
La-140	1.8611E+06	3.3483E-03	1.4403E+22	9.3533E+22
Ce-141	5.8943E+04	2.0686E-03	8.8352E+21	3.0613E+21
Ce-143	6.7232E+01	1.0124E-07	4.2635E+17	4.8244E+20
Ce-144	6.1305E+04	1.9221E-02	8.0382E+22	2.7809E+21
Pr-143	1.9055E+04	2.8297E-04	1.1917E+21	1.1852E+21
Nd-147	5.3589E+03	6.6242E-05	2.7137E+20	3.8329E+20
Np-239	1.5456E+04	6.6622E-05	1.6787E+20	1.0021E+22
Pu-238	3.1722E+02	1.8529E-02	4.6885E+22	1.4137E+19
Pu-239	2.1419E+01	3.4460E-01	8.6829E+23	9.5265E+17
Pu-240	2.2721E+01	9.9712E-02	2.5020E+23	1.0132E+18
Pu-241	1.0885E+04	1.0567E-01	2.6404E+23	4.8586E+20
Am-241	7.3908E+00	2.1534E-03	5.3809E+21	3.1468E+17
Cm-242	1.5875E+03	4.7898E-04	1.1919E+21	7.2937E+19
Cm-244	1.8333E+02	2.2660E-03	5.5928E+21	8.1814E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 336.0000	Atmosphere	Sump	
Noble gases (atoms)	4.6318E+22	0.0000E+00	
Elemental I (atoms)	1.5364E+22	0.0000E+00	
Organic I (atoms)	4.7519E+20	0.0000E+00	
Aerosols (kg)	5.3343E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.1746E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.1778E-03
Total I (Ci)			8.9485E+06

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 336.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.6381E+17
Elemental I (atoms)	0.0000E+00	4.4795E+16
Organic I (atoms)	0.0000E+00	1.3854E+15
Aerosols (kg)	0.0000E+00	7.7511E-05

Detailed model information at time (H) = 384.0000

EAB Doses:

Time (h) = 384.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 384.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.5713E-07	1.3182E-04	2.0920E-05
Accumulated dose (rem)	1.3703E-05	6.8027E-03	5.1148E-04

Control Room Doses:

Time (h) = 384.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.5488E-11	3.8751E-07	6.0386E-08
Accumulated dose (rem)	6.8377E-08	3.5945E-04	1.6856E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 384.0000	Ci	kg	Atoms	Decay
Co-58	1.1530E+03	3.6262E-05	3.7650E+20	6.3631E+19
Co-60	1.6048E+03	1.4197E-03	1.4249E+22	8.2061E+19
Rb-86	3.1730E+04	3.8995E-04	2.7307E+21	2.2091E+21
Sr-89	1.5850E+06	5.4557E-02	3.6916E+23	9.0345E+22
Sr-90	2.2401E+05	1.6422E+00	1.0988E+25	1.1428E+22
Sr-91	1.8218E-06	5.0257E-16	3.3259E+09	4.4863E+21
Y-90	2.2174E+05	4.0757E-04	2.7271E+21	8.7289E+21
Y-91	2.5954E+04	1.0583E-03	7.0037E+21	1.4436E+21
Y-93	1.1460E-07	3.4348E-17	2.2242E+08	5.7089E+19
Zr-95	2.6633E+04	1.2397E-03	7.8589E+21	1.4824E+21
Zr-97	4.7500E-03	2.4847E-12	1.5426E+13	1.0159E+20
Nb-95	3.0980E+04	7.9226E-04	5.0222E+21	1.6063E+21
Mo-99	7.9380E+03	1.6551E-05	1.0068E+20	5.5084E+21
Tc-99m	8.1384E+03	1.5477E-06	9.4149E+18	5.2919E+21
Ru-103	2.7945E+05	8.6587E-03	5.0625E+22	1.6456E+22
Ru-106	1.4806E+05	4.4255E-02	2.5142E+23	7.6637E+21
Rh-105	1.5049E+02	1.7830E-07	1.0226E+18	1.8282E+21
Sb-127	2.8659E+04	1.0732E-04	5.0888E+20	8.4804E+21
Te-127	9.2696E+04	3.5124E-05	1.6655E+20	1.1030E+22
Te-127m	6.4276E+04	6.8143E-03	3.2312E+22	3.4034E+21
Te-129	1.4005E+05	6.6875E-06	3.1220E+19	7.4325E+21
Te-129m	1.6197E+05	5.3764E-03	2.5099E+22	9.7778E+21
Te-131m	9.5700E+01	1.2001E-07	5.5171E+17	3.8262E+21
Te-132	2.2412E+05	7.3821E-04	3.3679E+21	9.6845E+22
I-131	7.1861E+06	5.7964E-02	2.6646E+23	7.8757E+23
I-132	2.6751E+05	2.5916E-05	1.1823E+20	1.1484E+23
I-133	1.6291E+02	1.4381E-07	6.5114E+17	2.2709E+23
I-135	1.7865E-10	5.0871E-20	2.2693E+05	6.2704E+22
Xe-133	1.4701E+06	7.8540E-03	3.5562E+22	2.1322E+23
Xe-135	2.6468E-05	1.0364E-14	4.6234E+10	7.4582E+22
Cs-134	6.3271E+06	4.8902E+00	2.1977E+25	3.2516E+23
Cs-136	7.6675E+05	1.0462E-02	4.6325E+22	6.1451E+22
Cs-137	3.9985E+06	4.5969E+01	2.0207E+26	2.0408E+23
Ba-140	1.4466E+06	1.9760E-02	8.4996E+22	1.1743E+23
La-140	1.6749E+06	3.0134E-03	1.2962E+22	1.0474E+23
Ce-141	5.6482E+04	1.9823E-03	8.4663E+21	3.4302E+21
Ce-143	2.4531E+01	3.6940E-08	1.5556E+17	4.8271E+20
Ce-144	6.1006E+04	1.9127E-02	7.9991E+22	3.1719E+21
Pr-143	1.7207E+04	2.5553E-04	1.0761E+21	1.3011E+21
Nd-147	4.7233E+03	5.8385E-05	2.3919E+20	4.1548E+20
Np-239	8.5790E+03	3.6980E-05	9.3179E+19	1.0096E+22
Pu-238	3.1727E+02	1.8533E-02	4.6893E+22	1.6166E+19
Pu-239	2.1421E+01	3.4463E-01	8.6836E+23	1.0896E+18
Pu-240	2.2721E+01	9.9712E-02	2.5020E+23	1.1585E+18
Pu-241	1.0882E+04	1.0564E-01	2.6397E+23	5.5544E+20
Am-241	7.4863E+00	2.1812E-03	5.4505E+21	3.6224E+17
Cm-242	1.5740E+03	4.7492E-04	1.1818E+21	8.3044E+19
Cm-244	1.8329E+02	2.2656E-03	5.5916E+21	9.3534E+18

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 384.0000	Atmosphere	Sump	
Noble gases (atoms)	3.5562E+22	0.0000E+00	
Elemental I (atoms)	1.2929E+22	0.0000E+00	
Organic I (atoms)	3.9987E+20	0.0000E+00	
Aerosols (kg)	5.3310E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.8301E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.8321E-03
Total I (Ci)			7.4537E+06

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 384.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.7229E+17
Elemental I (atoms)	0.0000E+00	4.7731E+16
Organic I (atoms)	0.0000E+00	1.4762E+15
Aerosols (kg)	0.0000E+00	8.8583E-05

Detailed model information at time (H) = 432.0000

EAB Doses:

Time (h) = 432.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 432.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.4072E-07	1.1164E-04	2.0206E-05
Accumulated dose (rem)	1.3944E-05	6.9143E-03	5.3169E-04

Control Room Doses:

Time (h) = 432.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.3839E-11	3.2817E-07	5.8334E-08
Accumulated dose (rem)	6.8400E-08	3.5978E-04	1.6914E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 432.0000	Ci	kg	Atoms	Decay
Co-58	1.1307E+03	3.5558E-05	3.6920E+20	7.0931E+19
Co-60	1.6036E+03	1.4187E-03	1.4239E+22	9.2317E+19
Rb-86	2.9458E+04	3.6203E-04	2.5351E+21	2.4047E+21
Sr-89	1.5421E+06	5.3080E-02	3.5916E+23	1.0034E+23
Sr-90	2.2398E+05	1.6420E+00	1.0987E+25	1.2860E+22
Sr-91	5.4892E-08	1.5143E-17	1.0021E+08	4.4863E+21
Y-90	2.2315E+05	4.1015E-04	2.7444E+21	1.0144E+22
Y-91	2.5346E+04	1.0335E-03	6.8397E+21	1.6076E+21
Y-93	4.2514E-09	1.2743E-18	8.2515E+06	5.7089E+19
Zr-95	2.6063E+04	1.2132E-03	7.6904E+21	1.6508E+21
Zr-97	6.6328E-04	3.4696E-13	2.1541E+12	1.0159E+20
Nb-95	3.0791E+04	7.8743E-04	4.9916E+21	1.8038E+21
Mo-99	4.7949E+03	9.9975E-06	6.0814E+19	5.5483E+21
Tc-99m	4.9160E+03	9.3491E-07	5.6870E+18	5.3307E+21
Ru-103	2.6976E+05	8.3584E-03	4.8870E+22	1.8212E+22
Ru-106	1.4750E+05	4.4089E-02	2.5048E+23	8.6086E+21
Rh-105	5.8732E+01	6.9583E-08	3.9908E+17	1.8289E+21
Sb-127	1.9993E+04	7.4866E-05	3.5500E+20	8.6343E+21
Te-127	8.3726E+04	3.1725E-05	1.5044E+20	1.1573E+22
Te-127m	6.3518E+04	6.7339E-03	3.1931E+22	3.8119E+21
Te-129	1.3439E+05	6.4172E-06	2.9958E+19	8.0931E+21
Te-129m	1.5542E+05	5.1591E-03	2.4084E+22	1.0792E+22
Te-131m	3.1569E+01	3.9590E-08	1.8200E+17	3.8265E+21
Te-132	1.4645E+05	4.8240E-04	2.2008E+21	9.8013E+22
I-131	6.0480E+06	4.8784E-02	2.2426E+23	8.2977E+23
I-132	1.7481E+05	1.6935E-05	7.7261E+19	1.1605E+23
I-133	3.2904E+01	2.9046E-08	1.3152E+17	2.2709E+23
Xe-133	1.1287E+06	6.0299E-03	2.7303E+22	2.2148E+23
Xe-135	6.8097E-07	2.6666E-16	1.1895E+09	7.4582E+22
Cs-134	6.3155E+06	4.8812E+00	2.1937E+25	3.6557E+23
Cs-136	6.8975E+05	9.4111E-03	4.1673E+22	6.6103E+22
Cs-137	3.9980E+06	4.5963E+01	2.0204E+26	2.2965E+23
Ba-140	1.2974E+06	1.7722E-02	7.6233E+22	1.2620E+23
La-140	1.5047E+06	2.7072E-03	1.1645E+22	1.1483E+23
Ce-141	5.4123E+04	1.8995E-03	8.1128E+21	3.7837E+21
Ce-143	8.9506E+00	1.3478E-08	5.6760E+16	4.8281E+20
Ce-144	6.0710E+04	1.9034E-02	7.9602E+22	3.5610E+21
Pr-143	1.5537E+04	2.3072E-04	9.7164E+20	1.4056E+21
Nd-147	4.1630E+03	5.1460E-05	2.1082E+20	4.4385E+20
Np-239	4.7619E+03	2.0526E-05	5.1721E+19	1.0137E+22
Pu-238	3.1732E+02	1.8536E-02	4.6901E+22	1.8194E+19
Pu-239	2.1422E+01	3.4464E-01	8.6840E+23	1.2266E+18
Pu-240	2.2721E+01	9.9712E-02	2.5020E+23	1.3038E+18
Pu-241	1.0879E+04	1.0561E-01	2.6390E+23	6.2501E+20

Am-241	7.5818E+00	2.2090E-03	5.5200E+21	4.1040E+17
Cm-242	1.5607E+03	4.7089E-04	1.1718E+21	9.3065E+19
Cm-244	1.8325E+02	2.2651E-03	5.5904E+21	1.0525E+19

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 432.0000	Atmosphere	Sump	
Noble gases (atoms)	2.7303E+22	0.0000E+00	
Elemental I (atoms)	1.0880E+22	0.0000E+00	
Organic I (atoms)	3.3651E+20	0.0000E+00	
Aerosols (kg)	5.3280E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.5402E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.5415E-03
Total I (Ci)			6.2228E+06

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 432.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.7880E+17
Elemental I (atoms)	0.0000E+00	5.0201E+16
Organic I (atoms)	0.0000E+00	1.5526E+15
Aerosols (kg)	0.0000E+00	9.9650E-05

Detailed model information at time (H) = 480.0000

EAB Doses:

Time (h) = 480.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 480.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.2706E-07	9.4721E-05	1.9599E-05
Accumulated dose (rem)	1.4171E-05	7.0091E-03	5.5129E-04

Control Room Doses:

Time (h) = 480.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.2467E-11	2.7841E-07	5.6590E-08
Accumulated dose (rem)	6.8423E-08	3.6006E-04	1.6971E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 480.0000	Ci	kg	Atoms	Decay
Co-58	1.1088E+03	3.4869E-05	3.6204E+20	7.8090E+19
Co-60	1.6025E+03	1.4176E-03	1.4229E+22	1.0257E+20
Rb-86	2.7349E+04	3.3611E-04	2.3536E+21	2.5862E+21
Sr-89	1.5003E+06	5.1642E-02	3.4944E+23	1.1007E+23
Sr-90	2.2395E+05	1.6418E+00	1.0985E+25	1.4292E+22
Sr-91	1.6539E-09	4.5626E-19	3.0194E+06	4.4863E+21
Y-90	2.2397E+05	4.1166E-04	2.7545E+21	1.1566E+22
Y-91	2.4753E+04	1.0093E-03	6.6795E+21	1.7677E+21
Y-93	1.5772E-10	4.7275E-20	3.0612E+05	5.7089E+19
Zr-95	2.5504E+04	1.1872E-03	7.5256E+21	1.8157E+21
Zr-97	9.2619E-05	4.8449E-14	3.0079E+11	1.0159E+20
Nb-95	3.0588E+04	7.8223E-04	4.9586E+21	1.9999E+21
Mo-99	2.8964E+03	6.0389E-06	3.6735E+19	5.5724E+21
Tc-99m	2.9695E+03	5.6473E-07	3.4352E+18	5.3541E+21
Ru-103	2.6041E+05	8.0686E-03	4.7175E+22	1.9906E+22
Ru-106	1.4695E+05	4.3923E-02	2.4954E+23	9.5499E+21
Rh-105	2.2921E+01	2.7156E-08	1.5575E+17	1.8291E+21
Sb-127	1.3948E+04	5.2229E-05	2.4766E+20	8.7416E+21
Te-127	7.7228E+04	2.9263E-05	1.3876E+20	1.2068E+22
Te-127m	6.2754E+04	6.6529E-03	3.1547E+22	4.2156E+21
Te-129	1.2896E+05	6.1579E-06	2.8747E+19	8.7271E+21
Te-129m	1.4914E+05	4.9505E-03	2.3111E+22	1.1766E+22
Te-131m	1.0414E+01	1.3060E-08	6.0037E+16	3.8267E+21
Te-132	9.5702E+04	3.1523E-04	1.4382E+21	9.8775E+22
I-131	5.0901E+06	4.1058E-02	1.8874E+23	8.6529E+23
I-132	1.1423E+05	1.1067E-05	5.0488E+19	1.1684E+23
I-133	6.6461E+00	5.8669E-09	2.6565E+16	2.2709E+23
Xe-133	8.6654E+05	4.6294E-03	2.0962E+22	2.2782E+23
Xe-135	1.7520E-08	6.8605E-18	3.0604E+07	7.4582E+22

Cs-134	6.3038E+06	4.8722E+00	2.1896E+25	4.0592E+23
Cs-136	6.2049E+05	8.4661E-03	3.7488E+22	7.0288E+22
Cs-137	3.9974E+06	4.5957E+01	2.0202E+26	2.5521E+23
Ba-140	1.1637E+06	1.5895E-02	6.8373E+22	1.3406E+23
La-140	1.3507E+06	2.4301E-03	1.0453E+22	1.2388E+23
Ce-141	5.1863E+04	1.8202E-03	7.7740E+21	4.1225E+21
Ce-143	3.2658E+00	4.9178E-09	2.0710E+16	4.8285E+20
Ce-144	6.0414E+04	1.8942E-02	7.9215E+22	3.9482E+21
Pr-143	1.4027E+04	2.0831E-04	8.7725E+20	1.5001E+21
Nd-147	3.6693E+03	4.5356E-05	1.8581E+20	4.6885E+20
Np-239	2.6432E+03	1.1394E-05	2.8709E+19	1.0160E+22
Pu-238	3.1738E+02	1.8539E-02	4.6909E+22	2.0223E+19
Pu-239	2.1422E+01	3.4465E-01	8.6842E+23	1.3635E+18
Pu-240	2.2721E+01	9.9713E-02	2.5020E+23	1.4490E+18
Pu-241	1.0876E+04	1.0558E-01	2.6383E+23	6.9456E+20
Am-241	7.6773E+00	2.2369E-03	5.5895E+21	4.5917E+17
Cm-242	1.5474E+03	4.6690E-04	1.1619E+21	1.0300E+20
Cm-244	1.8321E+02	2.2646E-03	5.5893E+21	1.1697E+19

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 480.0000	Atmosphere	Sump	
Noble gases (atoms)	2.0962E+22	0.0000E+00	
Elemental I (atoms)	9.1565E+21	0.0000E+00	
Organic I (atoms)	2.8319E+20	0.0000E+00	
Aerosols (kg)	5.3252E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.2962E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.2970E-03
Total I (Ci)			5.2043E+06

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 480.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.8379E+17
Elemental I (atoms)	0.0000E+00	5.2280E+16
Organic I (atoms)	0.0000E+00	1.6169E+15
Aerosols (kg)	0.0000E+00	1.1071E-04

Detailed model information at time (H) = 528.0000

EAB Doses:

Time (h) = 528.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 528.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.1554E-07	8.0520E-05	1.9082E-05
Accumulated dose (rem)	1.4386E-05	7.0896E-03	5.7037E-04

Control Room Doses:

Time (h) = 528.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.1313E-11	2.3666E-07	5.5103E-08
Accumulated dose (rem)	6.8444E-08	3.6029E-04	1.7026E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 528.0000	Ci	kg	Atoms	Decay
Co-58	1.0873E+03	3.4193E-05	3.5502E+20	8.5110E+19
Co-60	1.6013E+03	1.4166E-03	1.4218E+22	1.1281E+20
Rb-86	2.5390E+04	3.1205E-04	2.1851E+21	2.7547E+21
Sr-89	1.4597E+06	5.0244E-02	3.3997E+23	1.1953E+23
Sr-90	2.2392E+05	1.6415E+00	1.0984E+25	1.5723E+22
Sr-91	4.9834E-11	1.3747E-20	9.0976E+04	4.4863E+21
Y-90	2.2445E+05	4.1254E-04	2.7604E+21	1.2991E+22
Y-91	2.4173E+04	9.8570E-04	6.5231E+21	1.9241E+21
Y-93	5.8514E-12	1.7538E-21	1.1357E+04	5.7089E+19
Zr-95	2.4957E+04	1.1617E-03	7.3643E+21	1.9770E+21
Zr-97	1.2933E-05	6.7653E-15	4.2002E+10	1.0159E+20
Nb-95	3.0371E+04	7.7669E-04	4.9235E+21	2.1947E+21
Mo-99	1.7495E+03	3.6478E-06	2.2189E+19	5.5869E+21
Tc-99m	1.7937E+03	3.4112E-07	2.0750E+18	5.3683E+21

Ru-103	2.5138E+05	7.7888E-03	4.5539E+22	2.1542E+22
Ru-106	1.4640E+05	4.3758E-02	2.4860E+23	1.0488E+22
Rh-105	8.9453E+00	1.0598E-08	6.0784E+16	1.8292E+21
Sb-127	9.7303E+03	3.6436E-05	1.7277E+20	8.8165E+21
Te-127	7.2457E+04	2.7455E-05	1.3019E+20	1.2529E+22
Te-127m	6.1987E+04	6.5716E-03	3.1162E+22	4.6143E+21
Te-129	1.2375E+05	5.9090E-06	2.7585E+19	9.3354E+21
Te-129m	1.4311E+05	4.7504E-03	2.2177E+22	1.2700E+22
Te-131m	3.4353E+00	4.3081E-09	1.9805E+16	3.8267E+21
Te-132	6.2538E+04	2.0599E-04	9.3979E+20	9.9274E+22
I-131	4.2839E+06	3.4555E-02	1.5885E+23	8.9518E+23
I-132	7.4646E+04	7.2316E-06	3.2992E+19	1.1736E+23
I-133	1.3424E+00	1.1850E-09	5.3657E+15	2.2709E+23
Xe-133	6.6528E+05	3.5542E-03	1.6093E+22	2.3269E+23
Xe-135	4.5075E-10	1.7651E-19	7.8737E+05	7.4582E+22
Cs-134	6.2922E+06	4.8633E+00	2.1856E+25	4.4618E+23
Cs-136	5.5818E+05	7.6160E-03	3.3724E+22	7.4052E+22
Cs-137	3.9969E+06	4.5951E+01	2.0199E+26	2.8076E+23
Ba-140	1.0437E+06	1.4256E-02	6.1323E+22	1.4111E+23
La-140	1.2119E+06	2.1804E-03	9.3789E+21	1.3200E+23
Ce-141	4.9697E+04	1.7442E-03	7.4494E+21	4.4471E+21
Ce-143	1.1916E+00	1.7943E-09	7.5565E+15	4.8286E+20
Ce-144	6.0121E+04	1.8850E-02	7.8830E+22	4.3335E+21
Pr-143	1.2664E+04	1.8807E-04	7.9201E+20	1.5853E+21
Nd-147	3.2340E+03	3.9977E-05	1.6377E+20	4.9089E+20
Np-239	1.4672E+03	6.3242E-06	1.5935E+19	1.0173E+22
Pu-238	3.1743E+02	1.8542E-02	4.6917E+22	2.2253E+19
Pu-239	2.1423E+01	3.4466E-01	8.6844E+23	1.5005E+18
Pu-240	2.2721E+01	9.9713E-02	2.5020E+23	1.5943E+18
Pu-241	1.0873E+04	1.0555E-01	2.6376E+23	7.6409E+20
Am-241	7.7727E+00	2.2647E-03	5.6590E+21	5.0856E+17
Cm-242	1.5343E+03	4.6294E-04	1.1520E+21	1.1285E+20
Cm-244	1.8317E+02	2.2641E-03	5.5881E+21	1.2868E+19

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 528.0000	Atmosphere	Sump	
Noble gases (atoms)	1.6093E+22	0.0000E+00	
Elemental I (atoms)	7.7059E+21	0.0000E+00	
Organic I (atoms)	2.3833E+20	0.0000E+00	
Aerosols (kg)	5.3226E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.0909E-03
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.0914E-03
Total I (Ci)			4.3586E+06

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 528.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.8763E+17
Elemental I (atoms)	0.0000E+00	5.4029E+16
Organic I (atoms)	0.0000E+00	1.6710E+15
Aerosols (kg)	0.0000E+00	1.2177E-04

Detailed model information at time (H) = 576.0000

EAB Doses:

Time (h) = 576.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 576.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.0574E-07	6.8595E-05	1.8639E-05
Accumulated dose (rem)	1.4592E-05	7.1582E-03	5.8901E-04

Control Room Doses:

Time (h) = 576.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.0332E-11	2.0159E-07	5.3832E-08
Accumulated dose (rem)	6.8465E-08	3.6049E-04	1.7079E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 576.0000	Ci	kg	Atoms	Decay
Co-58	1.0662E+03	3.3530E-05	3.4814E+20	9.1994E+19
Co-60	1.6002E+03	1.4156E-03	1.4208E+22	1.2304E+20
Rb-86	2.3572E+04	2.8970E-04	2.0286E+21	2.9111E+21
Sr-89	1.4202E+06	4.8884E-02	3.3077E+23	1.2873E+23
Sr-90	2.2389E+05	1.6413E+00	1.0983E+25	1.7155E+22
Y-90	2.2472E+05	4.1304E-04	2.7637E+21	1.4420E+22
Y-91	2.3607E+04	9.6262E-04	6.3704E+21	2.0769E+21
Zr-95	2.4422E+04	1.1368E-03	7.2064E+21	2.1348E+21
Zr-97	1.8060E-06	9.4470E-16	5.8651E+09	1.0159E+20
Nb-95	3.0142E+04	7.7083E-04	4.8864E+21	2.3881E+21
Mo-99	1.0568E+03	2.2034E-06	1.3403E+19	5.5957E+21
Tc-99m	1.0835E+03	2.0605E-07	1.2534E+18	5.3769E+21
Ru-103	2.4266E+05	7.5187E-03	4.3960E+22	2.3121E+22
Ru-106	1.4585E+05	4.3593E-02	2.4767E+23	1.1422E+22
Rh-105	3.4911E+00	4.1361E-09	2.3722E+16	1.8292E+21
Sb-127	6.7881E+03	2.5418E-05	1.2053E+20	8.8687E+21
Te-127	6.8893E+04	2.6105E-05	1.2379E+20	1.2964E+22
Te-127m	6.1223E+04	6.4906E-03	3.0777E+22	5.0082E+21
Te-129	1.1875E+05	5.6701E-06	2.6470E+19	9.9192E+21
Te-129m	1.3732E+05	4.5584E-03	2.1280E+22	1.3596E+22
Te-131m	1.1332E+00	1.4212E-09	6.5331E+15	3.8267E+21
Te-132	4.0867E+04	1.3461E-04	6.1412E+20	9.9599E+22
I-131	3.6055E+06	2.9082E-02	1.3369E+23	9.2034E+23
I-132	4.8779E+04	4.7256E-06	2.1559E+19	1.1769E+23
I-133	2.7114E-01	2.3935E-10	1.0838E+15	2.2709E+23
Xe-133	5.1076E+05	2.7287E-03	1.2355E+22	2.3643E+23
Xe-135	1.1597E-11	4.5411E-21	2.0257E+04	7.4582E+22
Cs-134	6.2807E+06	4.8543E+00	2.1816E+25	4.8638E+23
Cs-136	5.0213E+05	6.8512E-03	3.0337E+22	7.7438E+22
Cs-137	3.9964E+06	4.5946E+01	2.0196E+26	3.0632E+23
Ba-140	9.3607E+05	1.2786E-02	5.5001E+22	1.4743E+23
La-140	1.0872E+06	1.9560E-03	8.4136E+21	1.3929E+23
Ce-141	4.7622E+04	1.6713E-03	7.1383E+21	4.7582E+21
Ce-143	4.3478E-01	6.5470E-10	2.7571E+15	4.8286E+20
Ce-144	5.9828E+04	1.8758E-02	7.8446E+22	4.7170E+21
Pr-143	1.1434E+04	1.6979E-04	7.1504E+20	1.6623E+21
Nd-147	2.8505E+03	3.5235E-05	1.4435E+20	5.1032E+20
Np-239	8.1438E+02	3.5104E-06	8.8452E+18	1.0180E+22
Pu-238	3.1748E+02	1.8545E-02	4.6924E+22	2.4282E+19
Pu-239	2.1423E+01	3.4466E-01	8.6844E+23	1.6375E+18
Pu-240	2.2721E+01	9.9714E-02	2.5020E+23	1.7396E+18
Pu-241	1.0871E+04	1.0553E-01	2.6369E+23	8.3360E+20
Am-241	7.8681E+00	2.2925E-03	5.7284E+21	5.5855E+17
Cm-242	1.5213E+03	4.5901E-04	1.1422E+21	1.2262E+20
Cm-244	1.8314E+02	2.2637E-03	5.5869E+21	1.4039E+19

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 576.0000	Atmosphere	Sump	
Noble gases (atoms)	1.2355E+22	0.0000E+00	
Elemental I (atoms)	6.4851E+21	0.0000E+00	
Organic I (atoms)	2.0057E+20	0.0000E+00	
Aerosols (kg)	5.3201E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.1807E-04
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.1844E-04
Total I (Ci)			3.6542E+06

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 576.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.9057E+17
Elemental I (atoms)	0.0000E+00	5.5502E+16
Organic I (atoms)	0.0000E+00	1.7165E+15
Aerosols (kg)	0.0000E+00	1.3281E-04

Detailed model information at time (H) = 624.0000

EAB Doses:

Time (h) = 624.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 624.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.9734E-07	5.8574E-05	1.8260E-05
Accumulated dose (rem)	1.4789E-05	7.2168E-03	6.0727E-04

Control Room Doses:

Time (h) = 624.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.9492E-11	1.7212E-07	5.2742E-08
Accumulated dose (rem)	6.8484E-08	3.6067E-04	1.7132E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 624.0000	Ci	kg	Atoms	Decay
Co-58	1.0455E+03	3.2880E-05	3.4139E+20	9.8744E+19
Co-60	1.5990E+03	1.4146E-03	1.4198E+22	1.3327E+20
Rb-86	2.1885E+04	2.6896E-04	1.8834E+21	3.0564E+21
Sr-89	1.3817E+06	4.7560E-02	3.2181E+23	1.3769E+23
Sr-90	2.2386E+05	1.6411E+00	1.0981E+25	1.8586E+22
Y-90	2.2487E+05	4.1331E-04	2.7656E+21	1.5849E+22
Y-91	2.3054E+04	9.4008E-04	6.2212E+21	2.2260E+21
Zr-95	2.3899E+04	1.1125E-03	7.0520E+21	2.2893E+21
Zr-97	2.5218E-07	1.3192E-16	8.1898E+08	1.0159E+20
Nb-95	2.9902E+04	7.6469E-04	4.8474E+21	2.5800E+21
Mo-99	6.3835E+02	1.3310E-06	8.0962E+18	5.6010E+21
Tc-99m	6.5446E+02	1.2446E-07	7.5711E+17	5.3820E+21
Ru-103	2.3424E+05	7.2580E-03	4.2435E+22	2.4646E+22
Ru-106	1.4530E+05	4.3430E-02	2.4673E+23	1.2353E+22
Rh-105	1.3624E+00	1.6142E-09	9.2579E+15	1.8292E+21
Sb-127	4.7355E+03	1.7733E-05	8.4085E+19	8.9052E+21
Te-127	6.6176E+04	2.5075E-05	1.1890E+20	1.3380E+22
Te-127m	6.0462E+04	6.4099E-03	3.0395E+22	5.3972E+21
Te-129	1.1395E+05	5.4409E-06	2.5400E+19	1.0479E+22
Te-129m	1.3177E+05	4.3742E-03	2.0420E+22	1.4456E+22
Te-131m	3.7383E-01	4.6881E-10	2.1551E+15	3.8267E+21
Te-132	2.6705E+04	8.7964E-05	4.0131E+20	9.9812E+22
I-131	3.0344E+06	2.4476E-02	1.1252E+23	9.4152E+23
I-132	3.1875E+04	3.0880E-06	1.4088E+19	1.1792E+23
I-133	5.4766E-02	4.8345E-11	2.1890E+14	2.2709E+23
Xe-133	3.9213E+05	2.0949E-03	9.4856E+21	2.3930E+23
Cs-134	6.2691E+06	4.8454E+00	2.1776E+25	5.2649E+23
Cs-136	4.5171E+05	6.1632E-03	2.7291E+22	8.0485E+22
Cs-137	3.9959E+06	4.5940E+01	2.0194E+26	3.3187E+23
Ba-140	8.3956E+05	1.1468E-02	4.9330E+22	1.5310E+23
La-140	9.7517E+05	1.7545E-03	7.5468E+21	1.4583E+23
Ce-141	4.5634E+04	1.6015E-03	6.8402E+21	5.0563E+21
Ce-143	1.5864E-01	2.3888E-10	1.0060E+15	4.8286E+20
Ce-144	5.9537E+04	1.8667E-02	7.8065E+22	5.0986E+21
Pr-143	1.0322E+04	1.5329E-04	6.4555E+20	1.7318E+21
Nd-147	2.5124E+03	3.1056E-05	1.2723E+20	5.2744E+20
Np-239	4.5204E+02	1.9485E-06	4.9097E+18	1.0184E+22
Pu-238	3.1754E+02	1.8548E-02	4.6932E+22	2.6312E+19
Pu-239	2.1423E+01	3.4466E-01	8.6845E+23	1.7744E+18
Pu-240	2.2721E+01	9.9714E-02	2.5020E+23	1.8848E+18
Pu-241	1.0868E+04	1.0550E-01	2.6362E+23	9.0309E+20
Am-241	7.9635E+00	2.3202E-03	5.7979E+21	6.0915E+17
Cm-242	1.5084E+03	4.5512E-04	1.1326E+21	1.3231E+20
Cm-244	1.8310E+02	2.2632E-03	5.5857E+21	1.5210E+19

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 624.0000	Atmosphere	Sump	
Noble gases (atoms)	9.4856E+21	0.0000E+00	
Elemental I (atoms)	5.4578E+21	0.0000E+00	
Organic I (atoms)	1.6880E+20	0.0000E+00	
Aerosols (kg)	5.3177E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.7265E-04
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.7289E-04
Total I (Ci)			3.0663E+06

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 624.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.9283E+17
Elemental I (atoms)	0.0000E+00	5.6741E+16

Organic I (atoms)	0.0000E+00	1.7549E+15
Aerosols (kg)	0.0000E+00	1.4386E-04

Detailed model information at time (H) = 672.0000

EAB Doses:

Time (h) = 672.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 672.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.9007E-07	5.0151E-05	1.7934E-05
Accumulated dose (rem)	1.4979E-05	7.2669E-03	6.2520E-04

Control Room Doses:

Time (h) = 672.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.8767E-11	1.4735E-07	5.1805E-08
Accumulated dose (rem)	6.8503E-08	3.6081E-04	1.7184E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 672.0000	Ci	kg	Atoms	Decay
Co-58	1.0252E+03	3.2242E-05	3.3477E+20	1.0536E+20
Co-60	1.5979E+03	1.4136E-03	1.4188E+22	1.4349E+20
Rb-86	2.0318E+04	2.4970E-04	1.7485E+21	3.1912E+21
Sr-89	1.3443E+06	4.6272E-02	3.1310E+23	1.4641E+23
Sr-90	2.2383E+05	1.6409E+00	1.0980E+25	2.0017E+22
Y-90	2.2494E+05	4.1345E-04	2.7665E+21	1.7279E+22
Y-91	2.2515E+04	9.1807E-04	6.0755E+21	2.3717E+21
Zr-95	2.3387E+04	1.0886E-03	6.9008E+21	2.4405E+21
Zr-97	3.5214E-08	1.8420E-17	1.1436E+08	1.0159E+20
Nb-95	2.9651E+04	7.5827E-04	4.8067E+21	2.7703E+21
Mo-99	3.8559E+02	8.0396E-07	4.8905E+18	5.6042E+21
Tc-99m	3.9532E+02	7.5182E-08	4.5733E+17	5.3851E+21
Ru-103	2.2612E+05	7.0063E-03	4.0964E+22	2.6117E+22
Ru-106	1.4475E+05	4.3266E-02	2.4581E+23	1.3280E+22
Rh-105	5.3172E-01	6.2996E-10	3.6130E+15	1.8293E+21
Sb-127	3.3036E+03	1.2371E-05	5.8659E+19	8.9306E+21
Te-127	6.4051E+04	2.4270E-05	1.1508E+20	1.3781E+22
Te-127m	5.9707E+04	6.3299E-03	3.0015E+22	5.7814E+21
Te-129	1.0934E+05	5.2210E-06	2.4373E+19	1.1017E+22
Te-129m	1.2645E+05	4.1974E-03	1.9595E+22	1.5282E+22
Te-131m	1.2332E-01	1.5465E-10	7.1093E+14	3.8267E+21
Te-132	1.7451E+04	5.7481E-05	2.6224E+20	9.9951E+22
I-131	2.5538E+06	2.0600E-02	9.4698E+22	9.5934E+23
I-132	2.0830E+04	2.0179E-06	9.2063E+18	1.1806E+23
I-133	1.1062E-02	9.7649E-12	4.4215E+13	2.2709E+23
Xe-133	3.0105E+05	1.6083E-03	7.2824E+21	2.4150E+23
Cs-134	6.2576E+06	4.8365E+00	2.1736E+25	5.6654E+23
Cs-136	4.0635E+05	5.5443E-03	2.4550E+22	8.3225E+22
Cs-137	3.9954E+06	4.5934E+01	2.0191E+26	3.5741E+23
Ba-140	7.5300E+05	1.0286E-02	4.4244E+22	1.5819E+23
La-140	8.7467E+05	1.5736E-03	6.7690E+21	1.5169E+23
Ce-141	4.3728E+04	1.5347E-03	6.5546E+21	5.3419E+21
Ce-143	5.7882E-02	8.7161E-11	3.6706E+14	4.8287E+20
Ce-144	5.9247E+04	1.8576E-02	7.7685E+22	5.4783E+21
Pr-143	9.3193E+03	1.3839E-04	5.8282E+20	1.7945E+21
Nd-147	2.2144E+03	2.7372E-05	1.1214E+20	5.4253E+20
Np-239	2.5091E+02	1.0816E-06	2.7252E+18	1.0186E+22
Pu-238	3.1759E+02	1.8551E-02	4.6940E+22	2.8343E+19
Pu-239	2.1423E+01	3.4466E-01	8.6845E+23	1.9114E+18
Pu-240	2.2722E+01	9.9714E-02	2.5021E+23	2.0301E+18
Pu-241	1.0865E+04	1.0547E-01	2.6355E+23	9.7256E+20
Am-241	8.0588E+00	2.3480E-03	5.8673E+21	6.6037E+17
Cm-242	1.4956E+03	4.5126E-04	1.1230E+21	1.4191E+20
Cm-244	1.8306E+02	2.2627E-03	5.5846E+21	1.6380E+19

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 672.0000	Atmosphere	Sump
Noble gases (atoms)	7.2824E+21	0.0000E+00
Elemental I (atoms)	4.5933E+21	0.0000E+00

Organic I (atoms)	1.4206E+20	0.0000E+00	
Aerosols (kg)	5.3154E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.5027E-04
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.5043E-04
Total I (Ci)			2.5747E+06

ECCS Fluid to Reactor Building Transport Group Inventory:

Time (h) = 672.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.9457E+17
Elemental I (atoms)	0.0000E+00	5.7784E+16
Organic I (atoms)	0.0000E+00	1.7871E+15
Aerosols (kg)	0.0000E+00	1.5490E-04

Detailed model information at time (H) = 720.0000

EAB Doses:

Time (h) = 720.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	9.8228E-06	3.3758E-03	1.9941E-04

LPZ Doses:

Time (h) = 720.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.8375E-07	4.3068E-05	1.7652E-05
Accumulated dose (rem)	1.5163E-05	7.3100E-03	6.4286E-04

Control Room Doses:

Time (h) = 720.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.8137E-11	1.2652E-07	5.0996E-08
Accumulated dose (rem)	6.8521E-08	3.6094E-04	1.7235E-05

ECCS Fluid (Torus) Compartment Nuclide Inventory:

Time (h) = 720.0000	Ci	kg	Atoms	Decay
Co-58	1.0054E+03	3.1617E-05	3.2828E+20	1.1185E+20
Co-60	1.5967E+03	1.4125E-03	1.4178E+22	1.5370E+20
Rb-86	1.8863E+04	2.3182E-04	1.6234E+21	3.3164E+21
Sr-89	1.3079E+06	4.5019E-02	3.0462E+23	1.5488E+23
Sr-90	2.2380E+05	1.6407E+00	1.0978E+25	2.1448E+22
Y-90	2.2498E+05	4.1352E-04	2.7669E+21	1.8710E+22
Y-91	2.1987E+04	8.9657E-04	5.9333E+21	2.5139E+21
Zr-95	2.2885E+04	1.0653E-03	6.7529E+21	2.5884E+21
Zr-97	4.9172E-09	2.5722E-18	1.5969E+07	1.0159E+20
Nb-95	2.9390E+04	7.5160E-04	4.7645E+21	2.9590E+21
Mo-99	2.3291E+02	4.8563E-07	2.9541E+18	5.6061E+21
Tc-99m	2.3879E+02	4.5413E-08	2.7625E+17	5.3870E+21
Ru-103	2.1828E+05	6.7633E-03	3.9543E+22	2.7538E+22
Ru-106	1.4421E+05	4.3104E-02	2.4488E+23	1.4204E+22
Rh-105	2.0751E-01	2.4585E-10	1.4101E+15	1.8293E+21
Sb-127	2.3047E+03	8.6300E-06	4.0922E+19	8.9483E+21
Te-127	6.2343E+04	2.3623E-05	1.1201E+20	1.4170E+22
Te-127m	5.8959E+04	6.2505E-03	2.9639E+22	6.1607E+21
Te-129	1.0492E+05	5.0100E-06	2.3388E+19	1.1533E+22
Te-129m	1.2134E+05	4.0277E-03	1.8803E+22	1.6074E+22
Te-131m	4.0680E-02	5.1015E-11	2.3452E+14	3.8267E+21
Te-132	1.1404E+04	3.7562E-05	1.7137E+20	1.0004E+23
I-131	2.1494E+06	1.7337E-02	7.9700E+22	9.7434E+23
I-132	1.3611E+04	1.3187E-06	6.0160E+18	1.1815E+23
I-133	2.2343E-03	1.9724E-12	8.9307E+12	2.2709E+23
Xe-133	2.3113E+05	1.2348E-03	5.5910E+21	2.4319E+23
Cs-134	6.2461E+06	4.8276E+00	2.1696E+25	6.0651E+23
Cs-136	3.6554E+05	4.9876E-03	2.2085E+22	8.5691E+22
Cs-137	3.9949E+06	4.5928E+01	2.0189E+26	3.8296E+23
Ba-140	6.7536E+05	9.2252E-03	3.9682E+22	1.6275E+23
La-140	7.8451E+05	1.4114E-03	6.0713E+21	1.5695E+23
Ce-141	4.1902E+04	1.4706E-03	6.2809E+21	5.6156E+21
Ce-143	2.1119E-02	3.1802E-11	1.3393E+14	4.8287E+20
Ce-144	5.8959E+04	1.8485E-02	7.7307E+22	5.8562E+21
Pr-143	8.4136E+03	1.2495E-04	5.2618E+20	1.8512E+21
Nd-147	1.9517E+03	2.4125E-05	9.8835E+19	5.5583E+20
Np-239	1.3927E+02	6.0035E-07	1.5127E+18	1.0187E+22

Pu-238	3.1764E+02	1.8554E-02	4.6947E+22	3.0373E+19
Pu-239	2.1423E+01	3.4466E-01	8.6845E+23	2.0484E+18
Pu-240	2.2722E+01	9.9715E-02	2.5021E+23	2.1754E+18
Pu-241	1.0862E+04	1.0544E-01	2.6348E+23	1.0420E+21
Am-241	8.1542E+00	2.3758E-03	5.9367E+21	7.1219E+17
Cm-242	1.4829E+03	4.4743E-04	1.1134E+21	1.5143E+20
Cm-244	1.8302E+02	2.2622E-03	5.5834E+21	1.7551E+19

ECCS Fluid (Torus) Transport Group Inventory:

Time (h) = 720.0000	Atmosphere	Sump	
Noble gases (atoms)	5.5910E+21	0.0000E+00	
Elemental I (atoms)	3.8657E+21	0.0000E+00	
Organic I (atoms)	1.1956E+20	0.0000E+00	
Aerosols (kg)	5.3132E+01	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.4728E-04
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.4738E-04
Total I (Ci)			2.1630E+06

ECCS Fluid to Reactor Building Transport Group Inventory:

	Pathway	
Time (h) = 720.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.9590E+17
Elemental I (atoms)	0.0000E+00	5.8661E+16
Organic I (atoms)	0.0000E+00	1.8143E+15
Aerosols (kg)	0.0000E+00	1.6593E-04

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I-131 Summary

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Time (hr)	ECCS Fluid (Torus) I-131 (Curies)	Reactor Building I-131 (Curies)	Environment I-131 (Curies)
0.000	5.2665E+03	3.7959E-12	6.3246E-09
0.250	2.3679E+06	1.7072E-09	1.2806E-03
0.500	4.7318E+06	3.4115E-09	5.1194E-03
0.750	8.6677E+06	6.2493E-09	1.2364E-02
1.000	1.2597E+07	9.0823E-09	2.3862E-02
1.250	1.6520E+07	1.1911E-08	3.9605E-02
1.500	2.0436E+07	1.4734E-08	5.9586E-02
1.750	2.4346E+07	1.7553E-08	8.3798E-02
2.000	2.8249E+07	2.0367E-08	1.1223E-01
2.300	2.8219E+07	2.0345E-08	1.4887E-01
2.600	2.8189E+07	2.0324E-08	1.8546E-01
2.900	2.8159E+07	2.0302E-08	2.2202E-01
3.200	2.8129E+07	2.0281E-08	2.5854E-01
3.500	2.8100E+07	2.0259E-08	2.9502E-01
3.800	2.8070E+07	2.0238E-08	3.3146E-01
4.100	2.8040E+07	2.0216E-08	3.6786E-01
4.400	2.8011E+07	2.0195E-08	4.0423E-01
4.700	2.7981E+07	2.0174E-08	4.4055E-01
5.000	2.7951E+07	2.0152E-08	4.7684E-01
5.300	2.7922E+07	2.0131E-08	5.1309E-01
5.600	2.7892E+07	2.0110E-08	5.4930E-01
5.900	2.7863E+07	2.0088E-08	5.8547E-01
6.000	2.7853E+07	2.0081E-08	5.9752E-01
6.300	2.7823E+07	2.0060E-08	6.3364E-01
6.600	2.7794E+07	2.0039E-08	6.6972E-01
6.900	2.7764E+07	2.0018E-08	7.0576E-01
7.200	2.7735E+07	1.9996E-08	7.4177E-01
7.500	2.7705E+07	1.9975E-08	7.7774E-01
7.800	2.7676E+07	1.9954E-08	8.1367E-01
8.000	2.7657E+07	1.9940E-08	8.3760E-01
8.300	2.7627E+07	1.9919E-08	8.7347E-01
8.600	2.7598E+07	1.9898E-08	9.0930E-01
8.900	2.7569E+07	1.9876E-08	9.4509E-01
9.200	2.7539E+07	1.9855E-08	9.8084E-01
9.500	2.7510E+07	1.9834E-08	1.0166E+00
9.800	2.7481E+07	1.9813E-08	1.0522E+00
10.100	2.7452E+07	1.9792E-08	1.0879E+00
10.400	2.7423E+07	1.9771E-08	1.1235E+00
24.000	2.6132E+07	1.8841E-08	2.6962E+00
96.000	2.0210E+07	1.4571E-08	9.8623E+00

720.000	2.1494E+06	1.5497E-09	3.1583E+01

Time (hr)	Control Room I-131 (Curies)
0.000	5.7870E-12
0.250	1.0326E-06
0.500	7.0395E-07
0.750	4.8810E-07
1.000	3.4980E-07
1.250	2.6385E-07
1.500	2.1322E-07
1.750	1.8643E-07
2.000	1.7571E-07
2.300	1.0967E-07
2.600	6.8466E-08
2.900	4.2749E-08
3.200	2.6700E-08
3.500	1.6685E-08
3.800	1.0435E-08
4.100	6.5343E-09
4.400	4.1002E-09
4.700	2.5812E-09
5.000	1.6333E-09
5.300	1.0417E-09
5.600	6.7245E-10
5.900	4.4202E-10
6.000	3.8638E-10
6.300	2.6346E-10
6.600	1.8673E-10
6.900	1.3882E-10
7.200	1.0890E-10
7.500	9.0208E-11
7.800	7.8518E-11
8.000	7.3270E-11
8.300	6.7908E-11
8.600	6.4539E-11
8.900	6.2413E-11
9.200	6.1062E-11
9.500	6.0196E-11
9.800	5.9632E-11
10.100	5.9257E-11
10.400	5.8999E-11
24.000	5.5914E-11
96.000	6.3133E-10
720.000	1.9361E-11

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Cumulative Dose Summary

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	EAB		LPZ		Control Room	
Time (hr)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)
0.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.250	2.9065E-04	1.3991E-05	3.2895E-05	1.5835E-06	3.6407E-05	1.5812E-06
0.500	3.9899E-04	1.9169E-05	6.8667E-05	3.2932E-06	1.1897E-04	5.1661E-06
0.750	6.0544E-04	3.0065E-05	1.3684E-04	6.8910E-06	1.7545E-04	7.6204E-06
1.000	6.6085E-04	3.3232E-05	1.9212E-04	1.0051E-05	2.1507E-04	9.3553E-06
1.250	7.3689E-04	3.7724E-05	2.6799E-04	1.4533E-05	2.4408E-04	1.0651E-05
1.500	8.3341E-04	4.3529E-05	3.6429E-04	2.0324E-05	2.6668E-04	1.1696E-05
1.750	9.5025E-04	5.0634E-05	4.8087E-04	2.7414E-05	2.8569E-04	1.2617E-05
2.000	1.0873E-03	5.9032E-05	6.1759E-04	3.5793E-05	3.0300E-04	1.3498E-05
2.300	1.2634E-03	6.9850E-05	6.9564E-04	4.0587E-05	3.1919E-04	1.4343E-05
2.600	1.4387E-03	8.0608E-05	7.7335E-04	4.5355E-05	3.2926E-04	1.4869E-05
2.900	1.6133E-03	9.1310E-05	8.5072E-04	5.0098E-05	3.3553E-04	1.5196E-05
3.200	1.7871E-03	1.0196E-04	9.2776E-04	5.4819E-05	3.3943E-04	1.5400E-05
3.500	1.9602E-03	1.1257E-04	1.0045E-03	5.9518E-05	3.4186E-04	1.5528E-05
3.800	2.1326E-03	1.2313E-04	1.0809E-03	6.4198E-05	3.4337E-04	1.5607E-05
4.100	2.3043E-03	1.3364E-04	1.1569E-03	6.8860E-05	3.4431E-04	1.5657E-05
4.400	2.4752E-03	1.4412E-04	1.2327E-03	7.3504E-05	3.4491E-04	1.5688E-05
4.700	2.6455E-03	1.5456E-04	1.3082E-03	7.8131E-05	3.4527E-04	1.5708E-05
5.000	2.8151E-03	1.6497E-04	1.3834E-03	8.2743E-05	3.4551E-04	1.5720E-05
5.300	2.9841E-03	1.7534E-04	1.4582E-03	8.7339E-05	3.4565E-04	1.5728E-05
5.600	3.1524E-03	1.8568E-04	1.5328E-03	9.1921E-05	3.4575E-04	1.5733E-05
5.900	3.3201E-03	1.9598E-04	1.6072E-03	9.6488E-05	3.4581E-04	1.5736E-05

6.000	3.3758E-03	1.9941E-04	1.6319E-03	9.8007E-05	3.4583E-04	1.5737E-05
6.300	3.3758E-03	1.9941E-04	1.7058E-03	1.0256E-04	3.4586E-04	1.5739E-05
6.600	3.3758E-03	1.9941E-04	1.7795E-03	1.0709E-04	3.4589E-04	1.5740E-05
6.900	3.3758E-03	1.9941E-04	1.8529E-03	1.1162E-04	3.4590E-04	1.5741E-05
7.200	3.3758E-03	1.9941E-04	1.9260E-03	1.1613E-04	3.4592E-04	1.5742E-05
7.500	3.3758E-03	1.9941E-04	1.9988E-03	1.2063E-04	3.4593E-04	1.5742E-05
7.800	3.3758E-03	1.9941E-04	2.0714E-03	1.2512E-04	3.4594E-04	1.5743E-05
8.000	3.3758E-03	1.9941E-04	2.1197E-03	1.2810E-04	3.4594E-04	1.5743E-05
8.300	3.3758E-03	1.9941E-04	2.1439E-03	1.2964E-04	3.4595E-04	1.5744E-05
8.600	3.3758E-03	1.9941E-04	2.1680E-03	1.3117E-04	3.4596E-04	1.5744E-05
8.900	3.3758E-03	1.9941E-04	2.1921E-03	1.3270E-04	3.4597E-04	1.5745E-05
9.200	3.3758E-03	1.9941E-04	2.2160E-03	1.3423E-04	3.4597E-04	1.5745E-05
9.500	3.3758E-03	1.9941E-04	2.2399E-03	1.3575E-04	3.4598E-04	1.5745E-05
9.800	3.3758E-03	1.9941E-04	2.2637E-03	1.3727E-04	3.4599E-04	1.5746E-05
10.100	3.3758E-03	1.9941E-04	2.2874E-03	1.3878E-04	3.4599E-04	1.5746E-05
10.400	3.3758E-03	1.9941E-04	2.3110E-03	1.4029E-04	3.4600E-04	1.5747E-05
24.000	3.3758E-03	1.9941E-04	3.3155E-03	2.0579E-04	3.4627E-04	1.5764E-05
96.000	3.3758E-03	1.9941E-04	5.5359E-03	3.6952E-04	3.5569E-04	1.6443E-05
720.000	3.3758E-03	1.9941E-04	7.3100E-03	6.4286E-04	3.6094E-04	1.7235E-05

##

Worst Two-Hour Doses

##

EAB

Time (hr)	Whole Body (rem)	Thyroid (rem)	TEDE (rem)
2.0	3.0606E-06	1.1597E-03	7.1105E-05

```
Nuclide Inventory Name:  Source Terms per this calculation
Limerick (LGS)- in Ci/MW
Power Level:
 0.1000E+01
Nuclides:
 60
Nuclide 001:
Co-58
  7
 0.6117120000E+07
 0.5800E+02
 0.1529E+03
none      0.0000E+00
none      0.0000E+00
none      0.0000E+00
Nuclide 002:
Co-60
  7
 0.1663401096E+09
 0.6000E+02
 0.1830E+03
none      0.0000E+00
none      0.0000E+00
none      0.0000E+00
Nuclide 003:
Kr-85
  1
 0.3382974720E+09
 0.8500E+02
 0.0000E+00
none      0.0000E+00
none      0.0000E+00
none      0.0000E+00
Nuclide 004:
Kr-85m
  1
 0.1612800000E+05
 0.8500E+02
 0.0000E+00
Kr-85     0.2100E+00
none      0.0000E+00
none      0.0000E+00
Nuclide 005:
Kr-87
  1
 0.4578000000E+04
 0.8700E+02
 0.0000E+00
Rb-87     0.1000E+01
none      0.0000E+00
none      0.0000E+00
Nuclide 006:
Kr-88
  1
 0.1022400000E+05
 0.8800E+02
 0.0000E+00
Rb-88     0.1000E+01
none      0.0000E+00
none      0.0000E+00
Nuclide 007:
Rb-86
  3
 0.1612224000E+07
 0.8600E+02
 0.6518E+02
none      0.0000E+00
none      0.0000E+00
none      0.0000E+00
Nuclide 008:
Sr-89
  5
 0.4363200000E+07
 0.8900E+02
 0.2798E+05
```

```
none      0.0000E+00
none      0.0000E+00
none      0.0000E+00
Nuclide 009:
Sr-90
  5
 0.9189573120E+09
 0.9000E+02
 0.3178E+04
Y-90      0.1000E+01
none      0.0000E+00
none      0.0000E+00
Nuclide 010:
Sr-91
  5
 0.3420000000E+05
 0.9100E+02
 0.3801E+05
Y-91m     0.5800E+00
Y-91      0.4200E+00
none      0.0000E+00
Nuclide 011:
Sr-92
  5
 0.9756000000E+04
 0.9200E+02
 0.4017E+05
Y-92      0.1000E+01
none      0.0000E+00
none      0.0000E+00
Nuclide 012:
Y-90
  9
 0.2304000000E+06
 0.9000E+02
 0.3272E+04
none      0.0000E+00
none      0.0000E+00
none      0.0000E+00
Nuclide 013:
Y-91
  9
 0.5055264000E+07
 0.9100E+02
 0.3448E+05
none      0.0000E+00
none      0.0000E+00
none      0.0000E+00
Nuclide 014:
Y-92
  9
 0.1274400000E+05
 0.9200E+02
 0.4029E+05
none      0.0000E+00
none      0.0000E+00
none      0.0000E+00
Nuclide 015:
Y-93
  9
 0.3636000000E+05
 0.9300E+02
 0.4526E+05
Zr-93     0.1000E+01
none      0.0000E+00
none      0.0000E+00
Nuclide 016:
Zr-95
  9
 0.5527872000E+07
 0.9500E+02
 0.4489E+05
Nb-95m    0.7000E-02
Nb-95     0.9900E+00
none      0.0000E+00
```

```
Nuclide 017:
Zr-97
  9
 0.6084000000E+05
 0.9700E+02
 0.4657E+05
Nb-97m   0.9500E+00
Nb-97    0.5300E-01
none     0.0000E+00
Nuclide 018:
Nb-95
  9
 0.3036960000E+07
 0.9500E+02
 0.4512E+05
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 019:
Mo-99
  7
 0.2376000000E+06
 0.9900E+02
 0.5078+05
Tc-99m   0.8800E+00
Tc-99    0.1200E+00
none     0.0000E+00
Nuclide 020:
Tc-99m
  7
 0.2167200000E+05
 0.9900E+02
 0.4447E+05
Tc-99    0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 021:
Ru-103
  7
 0.3393792000E+07
 0.1030E+03
 0.4202E+05
Rh-103m  0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 022:
Ru-105
  7
 0.1598400000E+05
 0.1050E+03
 0.2908E+05
Rh-105   0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 023:
Ru-106
  7
 0.3181248000E+08
 0.1060E+03
 0.1730E+05
Rh-106   0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 024:
Rh-105
  7
 0.1272960000E+06
 0.1050E+03
 0.2752E+05
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 025:
Sb-127
  4
```

```
 0.3326400000E+06
 0.1270E+03
 0.2896E+04
Te-127m  0.1800E+00
Te-127   0.8200E+00
none     0.0000E+00
Nuclide 026:
Sb-129
  4
 0.1555200000E+05
 0.1290E+03
 0.8638E+04
Te-129m  0.2200E+00
Te-129   0.7700E+00
none     0.0000E+00
Nuclide 027:
Te-127
  4
 0.3366000000E+05
 0.1270E+03
 0.2873E+04
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 028:
Te-127m
  4
 0.9417600000E+07
 0.1270E+03
 0.3855E+03
Te-127   0.9800E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 029:
Te-129
  4
 0.4176000000E+04
 0.1290E+03
 0.8501E+04
I-129    0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 030:
Te-129m
  4
 0.2903040000E+07
 0.1290E+03
 0.1267E+04
Te-129   0.6500E+00
I-129    0.3500E+00
none     0.0000E+00
Nuclide 031:
Te-131m
  4
 0.1080000000E+06
 0.1310E+03
 0.3869E+04
Te-131   0.2200E+00
I-131    0.7800E+00
none     0.0000E+00
Nuclide 032:
Te-132
  4
 0.2815200000E+06
 0.1320E+03
 0.3821E+05
I-132    0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 033:
I-131
  2
 0.6946560000E+06
 0.1310E+03
 0.2687E+05
```

```
Xe-131m  0.1100E-01
none     0.0000E+00
none     0.0000E+00
Nuclide 034:
I-132
  2
 0.8280000000E+04
 0.1320E+03
 0.3881E+05
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 035:
I-133
  2
 0.7488000000E+05
 0.1330E+03
 0.5556E+05
Xe-133m  0.2900E-01
Xe-133   0.9700E+00
none     0.0000E+00
Nuclide 036:
I-134
  2
 0.3156000000E+04
 0.1340E+03
 0.6165E+05
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 037:
I-135
  2
 0.2379600000E+05
 0.1350E+03
 0.5192E+05
Xe-135m  0.1500E+00
Xe-135   0.8500E+00
none     0.0000E+00
Nuclide 038:
Xe-133
  1
 0.4531680000E+06
 0.1330E+03
 0.0000E+00
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 039:
Xe-135
  1
 0.3272400000E+05
 0.1350E+03
 0.0000E+00
Cs-135   0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 040:
Cs-134
  3
 0.6507177120E+08
 0.1340E+03
 0.7280E+04
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 041:
Cs-136
  3
 0.1131840000E+07
 0.1360E+03
 0.2027E+04
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
```

```
Nuclide 042:
Cs-137
  3
 0.9467280000E+09
 0.1370E+03
 0.4538E+04
Ba-137m  0.9500E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 043:
Ba-139
  6
 0.4962000000E+04
 0.1390E+03
 0.5084E+05
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 044:
Ba-140
  6
 0.1100736000E+07
 0.1400E+03
 0.4896E+05
La-140   0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 045:
La-140
  9
 0.1449792000E+06
 0.1400E+03
 0.5019E+05
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 046:
La-141
  9
 0.1414800000E+05
 0.1410E+03
 0.4640E+05
Ce-141   0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 047:
La-142
  9
 0.5550000000E+04
 0.1420E+03
 0.4532E+05
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 048:
Ce-141
  8
 0.2808086400E+07
 0.1410E+03
 0.4492E+05
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 049:
Ce-143
  8
 0.1188000000E+06
 0.1430E+03
 0.4427E+05
Pr-143   0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 050:
Ce-144
  8
```

```
 0.2456352000E+08
 0.1440E+03
 0.3596E+05
Pr-144m  0.1800E-01
Pr-144   0.9800E+00
none     0.0000E+00
Nuclide 051:
Pr-143
  9
 0.1171584000E+07
 0.1430E+03
 0.4293E+05
none     0.0000E+00
none     0.0000E+00
none     0.0000E+00
Nuclide 052:
Nd-147
  9
 0.9486720000E+06
 0.1470E+03
 0.1838E+05
Pm-147   0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 053:
Np-239
  8
 0.2034720000E+06
 0.2390E+03
 0.5397E+06
Pu-239   0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 054:
Pu-238
  8
 0.2768863824E+10
 0.2380E+03
 0.1796E+03
U-234    0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 055:
Pu-239
  8
 0.7594336440E+12
 0.2390E+03
 0.1200E+02
U-235    0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 056:
Pu-240
  8
 0.2062920312E+12
 0.2400E+03
 0.1288E+02
U-236    0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 057:
Pu-241
  8
 0.4544294400E+09
 0.2410E+03
 0.6182E+04
U-237    0.2400E-04
Am-241   0.1000E+01
none     0.0000E+00
Nuclide 058:
Am-241
  9
 0.1363919472E+11
 0.2410E+03
 0.9528E+01
```

```
Np-237   0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 059:
Cm-242
  9
 0.1406592000E+08
 0.2420E+03
 0.2388E+04
Pu-238   0.1000E+01
none     0.0000E+00
none     0.0000E+00
Nuclide 060:
Cm-244
  9
 0.5715081360E+09
 0.2440E+03
 0.2602E+03
Pu-240   0.1000E+01
none     0.0000E+00
none     0.0000E+00
End of Nuclear Inventory File
```

```
type
  isonametype = string[7];
  isotope = array[1..60] of isonametype;
  isodata = array[1..60,0..80] of real;
  hour    = array[0..80] of string[8];

const
  isotopes:isotope =
                    ('Co-58  ','Co-60  ','Kr-85  ','Kr-85m ','Kr-87  ',
                     'Kr-88  ','Rb-86  ','Sr-89  ','Sr-90  ','Sr-91  ',
                     'Sr-92  ','Y-90   ','Y-91   ','Y-92   ','Y-93   ',
                     'Zr-95  ','Zr-97  ','Nb-95  ','Mo-99  ','Tc-99m ',
                     'Ru-103 ','Ru-105 ','Ru-106 ','Rh-105 ','Sb-127 ',
                     'Sb-129 ','Te-127 ','Te-127m','Te-129 ','Te-129m',
                     'Te-131m','Te-132 ','I-131  ','I-132  ','I-133  ',
                     'I-134  ','I-135  ','Xe-133 ','Xe-135 ','Cs-134 ',
                     'Cs-136 ','Cs-137 ','Ba-139 ','Ba-140 ','La-140 ',
                     'La-141 ','La-142 ','Ce-141 ','Ce-143 ','Ce-144 ',
                     'Pr-143 ','Nd-147 ','Np-239 ','Pu-238 ','Pu-239 ',
                     'Pu-240 ','Pu-241 ','Am-241 ','Cm-242 ','Cm-244 ');

var
  line                :string[132];              {OUTPUT LINE READ IN}
  i,j,k,m,n           :integer;                  {COUNTERS}
  alldata             :isodata;                  {COMPARTMENT CURIE DATA}
  allintdata             :isodata;               {COMPARTMENT CURIE-HR DATA}
  currentisotope      :isonametype;              {CURRENT ISOTOPE}
  firstspace          :char;                     {BLANK CHARACTER}
  hours               :hour;                     {TIME DATA AS A STRING}
  hourvalue           :array[1..80] of real;     {TIME DATA AS A VALUE}
  wholepart           :integer;                  {WHOLE PART OF TIME DATA}
  fractionpart        :integer;                  {FRACTION PART OF TIME DATA}
  code                :integer;                  {USED BY VAL PROCEDURE}
  inputfile           :text;
  outputfile          :text;
begin


assign(inputfile,'lgscs.o1');
reset(inputfile);
assign(outputfile,'lgscs.out');
rewrite(outputfile);

{FILL DATA ARRAYS WITH ZEROS}
 for i := 1 to 60 do
   for j := 0 to 80 do
     begin
       alldata[i,j] := 0.0;
       allintdata[i,j] := 0.0;
     end;
 for j := 0 to 80 do
      hours[j] := ' no data';
 for j := 0 to 80 do
      hourvalue[j] := 0.0;

 j := 0;

 repeat
  readln(inputfile,line);

{CHECK IF START OF COMPARTMENT ISOTOPIC DATA}
  if copy(line,28,40)='Ci           kg         Atoms      Decay'
  then
    begin
      J:=J+1;                          {INCREMENT TO TIME PERIOD COUNT}
      hours[j] := copy(line,13,8);     {GETS TIME ASSOCIATED WITH DATA}
      val(copy(hours[j],1,3),wholepart,code);
      val(copy(hours[j],5,4),fractionpart,code);
      hourvalue[j] := wholepart+fractionpart/10000;
      for k := 1 to 60 do              {READ AND CHECK 60 LINES}
       begin
         read(inputfile,firstspace);                {READ BLANK SPACE}
         read(inputfile,currentisotope);            {READ ISOTOPE NAME?}
         for i := 1 to 60 do                      {SEE IF IN ISOTOPE LIST}
           begin
```

```
            if currentisotope = isotopes[i]
            then
               begin
                 read(inputfile,alldata[i,j]);      {IF SO, GET CURIE DATA}
                 readln(inputfile);                 {FINISH THAT LINE}
               end;
           end;                                  {END i}
       end;                                      {END k}
    end;                                         {DATA SET}
 until eof(inputfile);
 close(inputfile);

{OUTPUT COMPARTMENT CURIE DATA FOR VERIFICATION OF PROPER READIN}
 writeln(outputfile,'OUTPUT CURIE DATA FOR VERIFICATION OF PROPER READIN');
 writeln(outputfile);
 for j := 0 to 7 do
  begin
   write(outputfile,'time (hrs)');            {CURIE TIME COLUMN HEADING}
   for m:= (10*j+1) to (10*j+10) do        {  "     "     "      "   }
    write(outputfile,hours[m],'    ');        {  "     "     "      "   }
   writeln(outputfile);            {  "     "     "      "   }

   for k := 1 to 60 do                     {INCREMENT OVER 60 ISOTOPES}
    begin                                  {TO REGURGITATE CURIE DATA }
     write(outputfile,isotopes[k],'  ');
     for i := (10*j+1) to (10*j+10) do
       begin
        write(outputfile,alldata[k,i]:11,' ');
       end;
     writeln(outputfile);
    end;
   writeln(outputfile);
  end;

{DETERMINE COMPARTMENT TIME INTEGRATED (CURIE-HOUR) DATA}
 for i := 1 to 60 do
  for j := 1 to 80 do
   if hourvalue[j] > 0.0
   then  allintdata[i,j] := (hourvalue[j] - hourvalue[j-1]) *
                              (alldata[i,j]+alldata[i,j-1])/2 +
                                 allintdata[i,j-1]
   else  allintdata[i,j] := 0.0;


{OUTPUT COMPARTMENT CURIE HOUR DATA FOR MICROSHIELD INPUT}
 writeln(outputfile);
 writeln(outputfile,'*****************************************************');
 writeln(outputfile,' INTEGRATED SOURCE IN CURIE-HOURS');
 writeln;
 for j := 0 to 7 do
  begin
   write(outputfile,'          ');            {CURIE TIME COLUMN HEADING}
   for m:= (10*j+1) to (10*j+10) do        {  "     "     "      "   }
    write(outputfile,hours[m],'    ');        {  "     "     "      "   }
   writeln(outputfile);                      {  "     "     "      "   }

   for k := 1 to 60 do                     {INCREMENT OVER 60 ISOTOPES}
    begin                                  {INTEGRATED CURIE-HOUR DATA}
     write(outputfile,isotopes[k],'  ');
     for i := (10*j+1) to (10*j+10) do
       begin
       write(outputfile,allintdata[k,i]:11,' ');
       end;
     writeln(outputfile);
    end;
   writeln(outputfile);
  end;



 close(outputfile);


end.
```

OUTPUT CURIE DATA FOR VERIFICATION OF PROPER READIN

time (hrs)	0.2500	0.5000	0.7500	1.0000	1.2500	1.5000	1.7500	2.0000	2.5000	3.0000
Co-58	0.0000E+00	0.0000E+00	2.2469E+02	4.4934E+02	6.7395E+02	8.9850E+02	1.1230E+03	1.3475E+03	1.3472E+03	1.3469E+03
Co-60	0.0000E+00	0.0000E+00	2.6901E+02	5.3801E+02	8.0701E+02	1.0760E+03	1.3450E+03	1.6140E+03	1.6140E+03	1.6140E+03
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	5.7467E+03	1.1489E+04	1.9141E+04	2.6787E+04	3.4427E+04	4.2061E+04	4.9689E+04	5.7311E+04	5.7267E+04	5.7222E+04
Sr-89	0.0000E+00	0.0000E+00	3.2890E+05	6.5771E+05	9.8643E+05	1.3151E+06	1.6436E+06	1.9720E+06	1.9714E+06	1.9709E+06
Sr-90	0.0000E+00	0.0000E+00	3.7373E+04	7.4746E+04	1.1212E+05	1.4949E+05	1.8687E+05	2.2424E+05	2.2424E+05	2.2424E+05
Sr-91	0.0000E+00	0.0000E+00	4.2319E+05	8.3109E+05	1.2241E+06	1.6026E+06	1.9671E+06	2.3178E+06	2.2348E+06	2.1547E+06
Sr-92	0.0000E+00	0.0000E+00	3.8994E+05	7.3157E+05	1.0294E+06	1.2875E+06	1.5097E+06	1.6994E+06	1.4954E+06	1.3159E+06
Y-90	0.0000E+00	0.0000E+00	4.5278E+02	1.0054E+03	1.6576E+03	2.4091E+03	3.2597E+03	4.2090E+03	5.3980E+03	6.5805E+03
Y-91	0.0000E+00	0.0000E+00	4.0689E+03	8.1585E+03	1.2268E+04	1.6397E+04	2.0544E+04	2.4708E+04	2.4938E+04	2.5159E+04
Y-92	0.0000E+00	0.0000E+00	1.7719E+04	5.1944E+04	9.9670E+04	1.5825E+05	2.2534E+05	2.9890E+05	4.2111E+05	5.1391E+05
Y-93	0.0000E+00	0.0000E+00	5.0555E+03	9.9391E+03	1.4655E+04	1.9208E+04	2.3601E+04	2.7840E+04	2.6901E+04	2.5993E+04
Zr-95	0.0000E+00	0.0000E+00	5.2773E+03	1.0553E+04	1.5828E+04	2.1102E+04	2.6374E+04	3.1646E+04	3.1639E+04	3.1632E+04
Zr-97	0.0000E+00	0.0000E+00	5.3107E+03	1.0513E+04	1.5609E+04	2.0599E+04	2.5487E+04	3.0272E+04	2.9657E+04	2.9055E+04
Nb-95	0.0000E+00	0.0000E+00	5.3061E+03	1.0612E+04	1.5918E+04	2.1224E+04	2.6530E+04	3.1836E+04	3.1836E+04	3.1835E+04
Mo-99	0.0000E+00	0.0000E+00	7.4061E+04	1.4773E+05	2.2102E+05	2.9392E+05	3.6644E+05	4.3857E+05	4.3627E+05	4.3399E+05
Tc-99m	0.0000E+00	0.0000E+00	6.5404E+04	1.3081E+05	1.9620E+05	2.6156E+05	3.2689E+05	3.9216E+05	3.9188E+05	3.9150E+05
Ru-103	0.0000E+00	0.0000E+00	6.1735E+04	1.2345E+05	1.8514E+05	2.4681E+05	3.0845E+05	3.7007E+05	3.6994E+05	3.6980E+05
Ru-105	0.0000E+00	0.0000E+00	3.8024E+04	7.3138E+04	1.0551E+05	1.3529E+05	1.6264E+05	1.8770E+05	1.7361E+05	1.6057E+05
Ru-106	0.0000E+00	0.0000E+00	2.5430E+04	5.0858E+04	7.6286E+04	1.0171E+05	1.2714E+05	1.5256E+05	1.5256E+05	1.5255E+05
Rh-105	0.0000E+00	0.0000E+00	4.0453E+04	8.0876E+04	1.2125E+05	1.6155E+05	2.0176E+05	2.4186E+05	2.4127E+05	2.4054E+05
Sb-127	0.0000E+00	0.0000E+00	8.4665E+04	1.6901E+05	2.5304E+05	3.3676E+05	4.2016E+05	5.0325E+05	5.0136E+05	4.9949E+05
Sb-129	0.0000E+00	0.0000E+00	2.2516E+05	4.3262E+05	6.2342E+05	7.9854E+05	9.5893E+05	1.1055E+06	1.0202E+06	9.4159E+05
Te-127	0.0000E+00	0.0000E+00	8.4278E+04	1.6843E+05	2.5244E+05	3.3632E+05	4.2006E+05	5.0365E+05	5.0280E+05	5.0193E+05
Te-127m	0.0000E+00	0.0000E+00	1.1334E+04	2.2669E+04	3.4005E+04	4.5341E+04	5.6678E+04	6.8015E+04	6.8017E+04	6.8020E+04
Te-129	0.0000E+00	0.0000E+00	2.3668E+05	4.6299E+05	6.7824E+05	8.8201E+05	1.0741E+06	1.2545E+06	1.1864E+06	1.1191E+06
Te-129m	0.0000E+00	0.0000E+00	3.7260E+04	7.4524E+04	1.1179E+05	1.4906E+05	1.8634E+05	2.2361E+05	2.2361E+05	2.2361E+05
Te-131m	0.0000E+00	0.0000E+00	1.1179E+05	2.2230E+05	3.3153E+05	4.3950E+05	5.4621E+05	6.5167E+05	6.4419E+05	6.3679E+05
Te-132	0.0000E+00	0.0000E+00	1.1159E+06	2.2269E+06	3.3330E+06	4.4341E+06	5.5304E+06	6.6218E+06	6.5925E+06	6.5634E+06
I-131	2.3679E+06	4.7318E+06	8.6677E+06	1.2597E+07	1.6520E+07	2.0436E+07	2.4346E+07	2.8249E+07	2.8199E+07	2.8149E+07
I-132	3.2530E+06	6.2688E+06	1.1288E+07	1.6021E+07	2.0489E+07	2.4709E+07	2.8700E+07	3.2476E+07	2.8871E+07	2.5766E+07
I-133	4.8597E+06	9.6388E+06	1.7525E+07	2.5279E+07	3.2903E+07	4.0399E+07	4.7769E+07	5.5013E+07	5.4104E+07	5.3210E+07
I-134	4.4623E+06	7.3239E+06	1.1019E+07	1.3153E+07	1.4167E+07	1.4394E+07	1.4084E+07	1.3422E+07	9.0392E+06	6.0875E+06
I-135	4.4609E+06	8.6909E+06	1.5521E+07	2.1992E+07	2.8117E+07	3.3911E+07	3.9386E+07	4.4555E+07	4.2280E+07	4.0120E+07
Xe-133	6.5135E+03	2.5928E+04	1.4095E+05	3.0653E+05	5.2204E+05	7.8683E+05	1.1003E+06	1.4618E+06	1.6033E+06	1.7421E+06
Xe-135	7.2791E+04	2.8465E+05	1.5203E+06	3.2480E+06	5.4340E+06	8.0461E+06	1.1054E+07	1.4427E+07	1.5272E+07	1.6016E+07
Cs-134	6.4209E+05	1.2842E+06	2.1403E+06	2.9963E+06	3.8524E+06	4.7084E+06	5.5645E+06	6.4205E+06	6.4203E+06	6.4202E+06
Cs-136	1.7868E+05	3.5717E+05	5.9495E+05	8.3248E+05	1.0697E+06	1.3067E+06	1.5435E+06	1.7799E+06	1.7780E+06	1.7760E+06
Cs-137	4.0025E+05	8.0050E+05	1.3342E+06	1.8678E+06	2.4015E+06	2.9352E+06	3.4688E+06	4.0025E+06	4.0025E+06	4.0025E+06
Ba-139	0.0000E+00	0.0000E+00	4.1003E+05	7.2317E+05	9.5660E+05	1.1248E+06	1.2399E+06	1.3121E+06	1.0204E+06	7.9352E+05
Ba-140	0.0000E+00	0.0000E+00	5.7479E+05	1.1489E+06	1.7224E+06	2.2953E+06	2.8674E+06	3.4390E+06	3.4351E+06	3.4312E+06
La-140	0.0000E+00	0.0000E+00	7.5642E+03	1.7563E+04	2.9985E+04	4.4814E+04	6.2040E+04	8.1647E+04	1.1042E+05	1.3892E+05
La-141	0.0000E+00	0.0000E+00	4.7805E+03	9.1487E+03	1.3131E+04	1.6753E+04	2.0038E+04	2.3008E+04	2.1066E+04	1.9288E+04
La-142	0.0000E+00	0.0000E+00	3.8041E+03	6.7993E+03	9.1147E+03	1.0861E+04	1.2133E+04	1.3011E+04	1.0392E+04	8.2997E+03
Ce-141	0.0000E+00	0.0000E+00	1.3205E+04	2.6408E+04	3.9609E+04	5.2806E+04	6.6002E+04	7.9194E+04	7.9169E+04	7.9142E+04

Ce-143	0.0000E+00	0.0000E+00	1.2812E+04	2.5490E+04	3.8034E+04	5.0447E+04	6.2728E+04	7.4880E+04	7.4097E+04	7.3323E+04
Ce-144	0.0000E+00	0.0000E+00	1.0571E+04	2.1142E+04	3.1713E+04	4.2283E+04	5.2852E+04	6.3421E+04	6.3417E+04	6.3414E+04
Pr-143	0.0000E+00	0.0000E+00	5.0515E+03	1.0107E+04	1.5167E+04	2.0231E+04	2.5298E+04	3.0370E+04	3.0416E+04	3.0463E+04
Nd-147	0.0000E+00	0.0000E+00	2.1572E+03	4.3116E+03	6.4632E+03	8.6119E+03	1.0758E+04	1.2901E+04	1.2884E+04	1.2867E+04
Np-239	0.0000E+00	0.0000E+00	1.5722E+05	3.1348E+05	4.6877E+05	6.2312E+05	7.7651E+05	9.2896E+05	9.2329E+05	9.1764E+05
Pu-238	0.0000E+00	0.0000E+00	5.2803E+01	1.0561E+02	1.5841E+02	2.1121E+02	2.6402E+02	3.1682E+02	3.1682E+02	3.1682E+02
Pu-239	0.0000E+00	0.0000E+00	3.5284E+00	7.0570E+00	1.0586E+01	1.4115E+01	1.7645E+01	2.1174E+01	2.1176E+01	2.1177E+01
Pu-240	0.0000E+00	0.0000E+00	3.7867E+00	7.5734E+00	1.1360E+01	1.5147E+01	1.8934E+01	2.2720E+01	2.2720E+01	2.2720E+01
Pu-241	0.0000E+00	0.0000E+00	1.8175E+03	3.6350E+03	5.4525E+03	7.2700E+03	9.0875E+03	1.0905E+04	1.0905E+04	1.0905E+04
Am-241	0.0000E+00	0.0000E+00	1.1206E+00	2.2414E+00	3.3622E+00	4.4832E+00	5.6043E+00	6.7255E+00	6.7265E+00	6.7275E+00
Cm-242	0.0000E+00	0.0000E+00	2.8079E+02	5.6156E+02	8.4230E+02	1.1230E+03	1.4037E+03	1.6844E+03	1.6842E+03	1.6841E+03
Cm-244	0.0000E+00	0.0000E+00	3.0599E+01	6.1199E+01	9.1798E+01	1.2240E+02	1.5300E+02	1.8360E+02	1.8360E+02	1.8359E+02

time (hrs)	3.5000	4.0000	4.5000	5.0000	5.5000	6.0000	6.5000	7.0000	7.5000	8.0000
Co-58	1.3467E+03	1.3464E+03	1.3461E+03	1.3458E+03	1.3456E+03	1.3453E+03	1.3450E+03	1.3447E+03	1.3445E+03	1.3442E+03
Co-60	1.6140E+03	1.6140E+03	1.6140E+03	1.6139E+03	1.6139E+03	1.6139E+03	1.6139E+03	1.6139E+03	1.6139E+03	1.6139E+03
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	5.7178E+04	5.7134E+04	5.7090E+04	5.7046E+04	5.7001E+04	5.6957E+04	5.6913E+04	5.6869E+04	5.6825E+04	5.6781E+04
Sr-89	1.9703E+06	1.9698E+06	1.9692E+06	1.9686E+06	1.9681E+06	1.9675E+06	1.9669E+06	1.9664E+06	1.9658E+06	1.9653E+06
Sr-90	2.2424E+05	2.2424E+05	2.2424E+05	2.2424E+05	2.2424E+05	2.2424E+05	2.2424E+05	2.2424E+05	2.2424E+05	2.2423E+05
Sr-91	2.0775E+06	2.0031E+06	1.9314E+06	1.8622E+06	1.7955E+06	1.7311E+06	1.6691E+06	1.6093E+06	1.5517E+06	1.4961E+06
Sr-92	1.1579E+06	1.0189E+06	8.9659E+05	7.8896E+05	6.9425E+05	6.1090E+05	5.3757E+05	4.7303E+05	4.1625E+05	3.6628E+05
Y-90	7.7566E+03	8.9264E+03	1.0090E+04	1.1247E+04	1.2398E+04	1.3543E+04	1.4681E+04	1.5814E+04	1.6940E+04	1.8060E+04
Y-91	2.5372E+04	2.5578E+04	2.5775E+04	2.5965E+04	2.6148E+04	2.6325E+04	2.6494E+04	2.6658E+04	2.6815E+04	2.6966E+04
Y-92	5.8219E+05	6.3016E+05	6.6138E+05	6.7888E+05	6.8524E+05	6.8265E+05	6.7294E+05	6.5765E+05	6.3810E+05	6.1535E+05
Y-93	2.5116E+04	2.4269E+04	2.3450E+04	2.2659E+04	2.1895E+04	2.1156E+04	2.0443E+04	1.9753E+04	1.9087E+04	1.8443E+04
Zr-95	3.1624E+04	3.1617E+04	3.1610E+04	3.1603E+04	3.1596E+04	3.1589E+04	3.1582E+04	3.1574E+04	3.1567E+04	3.1560E+04
Zr-97	2.8466E+04	2.7888E+04	2.7322E+04	2.6767E+04	2.6224E+04	2.5692E+04	2.5170E+04	2.4659E+04	2.4159E+04	2.3668E+04
Nb-95	3.1835E+04	3.1835E+04	3.1835E+04	3.1835E+04	3.1834E+04	3.1834E+04	3.1834E+04	3.1834E+04	3.1833E+04	3.1833E+04
Mo-99	4.3172E+05	4.2945E+05	4.2721E+05	4.2497E+05	4.2274E+05	4.2053E+05	4.1833E+05	4.1613E+05	4.1396E+05	4.1179E+05
Tc-99m	3.9103E+05	3.9047E+05	3.8983E+05	3.8912E+05	3.8834E+05	3.8749E+05	3.8658E+05	3.8561E+05	3.8459E+05	3.8352E+05
Ru-103	3.6966E+05	3.6953E+05	3.6939E+05	3.6926E+05	3.6912E+05	3.6898E+05	3.6885E+05	3.6871E+05	3.6858E+05	3.6844E+05
Ru-105	1.4851E+05	1.3736E+05	1.2705E+05	1.1751E+05	1.0868E+05	1.0052E+05	9.2975E+04	8.5994E+04	7.9536E+04	7.3564E+04
Ru-106	1.5254E+05	1.5254E+05	1.5253E+05	1.5253E+05	1.5252E+05	1.5251E+05	1.5251E+05	1.5250E+05	1.5250E+05	1.5249E+05
Rh-105	2.3971E+05	2.3876E+05	2.3772E+05	2.3660E+05	2.3539E+05	2.3412E+05	2.3278E+05	2.3138E+05	2.2993E+05	2.2844E+05
Sb-127	4.9762E+05	4.9575E+05	4.9390E+05	4.9205E+05	4.9021E+05	4.8837E+05	4.8654E+05	4.8472E+05	4.8291E+05	4.8110E+05
Sb-129	8.6900E+05	8.0201E+05	7.4018E+05	6.8312E+05	6.3046E+05	5.8185E+05	5.3700E+05	4.9560E+05	4.5739E+05	4.2213E+05
Te-127	5.0103E+05	5.0011E+05	4.9916E+05	4.9820E+05	4.9721E+05	4.9621E+05	4.9519E+05	4.9415E+05	4.9309E+05	4.9202E+05
Te-127m	6.8023E+04	6.8026E+04	6.8029E+04	6.8032E+04	6.8034E+04	6.8037E+04	6.8040E+04	6.8042E+04	6.8045E+04	6.8047E+04
Te-129	1.0538E+06	9.9102E+05	9.3132E+05	8.7489E+05	8.2181E+05	7.7208E+05	7.2565E+05	6.8238E+05	6.4215E+05	6.0479E+05
Te-129m	2.2360E+05	2.2358E+05	2.2356E+05	2.2353E+05	2.2349E+05	2.2346E+05	2.2341E+05	2.2337E+05	2.2331E+05	2.2326E+05
Te-131m	6.2947E+05	6.2224E+05	6.1510E+05	6.0803E+05	6.0105E+05	5.9414E+05	5.8732E+05	5.8057E+05	5.7390E+05	5.6731E+05
Te-132	6.5344E+06	6.5055E+06	6.4767E+06	6.4480E+06	6.4195E+06	6.3911E+06	6.3629E+06	6.3347E+06	6.3067E+06	6.2788E+06
I-131	2.8100E+07	2.8050E+07	2.8001E+07	2.7951E+07	2.7902E+07	2.7853E+07	2.7804E+07	2.7754E+07	2.7705E+07	2.7657E+07
I-132	2.3092E+07	2.0788E+07	1.8802E+07	1.7089E+07	1.5612E+07	1.4338E+07	1.3238E+07	1.2288E+07	1.1466E+07	1.0756E+07
I-133	5.2331E+07	5.1466E+07	5.0616E+07	4.9779E+07	4.8957E+07	4.8148E+07	4.7352E+07	4.6570E+07	4.5800E+07	4.5043E+07
I-134	4.0997E+06	2.7610E+06	1.8594E+06	1.2522E+06	8.4332E+05	5.6794E+05	3.8248E+05	2.5759E+05	1.7347E+05	1.1683E+05
I-135	3.8071E+07	3.6126E+07	3.4281E+07	3.2529E+07	3.0868E+07	2.9291E+07	2.7795E+07	2.6375E+07	2.5028E+07	2.3749E+07

Xe-133	1.8781E+06	2.0113E+06	2.1420E+06	2.2700E+06	2.3954E+06	2.5184E+06	2.6388E+06	2.7568E+06	2.8725E+06	2.9857E+06
Xe-135	1.6664E+07	1.7224E+07	1.7703E+07	1.8107E+07	1.8441E+07	1.8711E+07	1.8921E+07	1.9078E+07	1.9184E+07	1.9245E+07
Cs-134	6.4201E+06	6.4200E+06	6.4199E+06	6.4197E+06	6.4196E+06	6.4195E+06	6.4194E+06	6.4192E+06	6.4191E+06	6.4190E+06
Cs-136	1.7741E+06	1.7721E+06	1.7702E+06	1.7682E+06	1.7663E+06	1.7643E+06	1.7624E+06	1.7604E+06	1.7585E+06	1.7566E+06
Cs-137	4.0025E+06	4.0025E+06	4.0025E+06	4.0025E+06	4.0025E+06	4.0025E+06	4.0024E+06	4.0024E+06	4.0024E+06	4.0024E+06
Ba-139	6.1710E+05	4.7991E+05	3.7321E+05	2.9024E+05	2.2571E+05	1.7553E+05	1.3651E+05	1.0616E+05	8.2557E+04	6.4203E+04
Ba-140	3.4273E+06	3.4234E+06	3.4196E+06	3.4157E+06	3.4118E+06	3.4079E+06	3.4041E+06	3.4002E+06	3.3964E+06	3.3925E+06
La-140	1.6714E+05	1.9509E+05	2.2276E+05	2.5016E+05	2.7729E+05	3.0416E+05	3.3077E+05	3.5711E+05	3.8319E+05	4.0902E+05
La-141	1.7660E+04	1.6169E+04	1.4804E+04	1.3555E+04	1.2410E+04	1.1363E+04	1.0404E+04	9.5256E+03	8.7215E+03	7.9853E+03
La-142	6.6287E+03	5.2942E+03	4.2283E+03	3.3770E+03	2.6971E+03	2.1541E+03	1.7204E+03	1.3741E+03	1.0974E+03	8.7649E+02
Ce-141	7.9115E+04	7.9088E+04	7.9059E+04	7.9031E+04	7.9001E+04	7.8971E+04	7.8941E+04	7.8911E+04	7.8880E+04	7.8848E+04
Ce-143	7.2557E+04	7.1799E+04	7.1049E+04	7.0307E+04	6.9572E+04	6.8845E+04	6.8126E+04	6.7414E+04	6.6710E+04	6.6013E+04
Ce-144	6.3411E+04	6.3408E+04	6.3404E+04	6.3401E+04	6.3398E+04	6.3395E+04	6.3392E+04	6.3388E+04	6.3385E+04	6.3382E+04
Pr-143	3.0508E+04	3.0552E+04	3.0596E+04	3.0638E+04	3.0680E+04	3.0721E+04	3.0761E+04	3.0801E+04	3.0839E+04	3.0877E+04
Nd-147	1.2850E+04	1.2833E+04	1.2816E+04	1.2799E+04	1.2783E+04	1.2766E+04	1.2749E+04	1.2732E+04	1.2716E+04	1.2699E+04
Np-239	9.1203E+05	9.0646E+05	9.0091E+05	8.9541E+05	8.8993E+05	8.8449E+05	8.7909E+05	8.7371E+05	8.6837E+05	8.6306E+05
Pu-238	3.1682E+02	3.1682E+02	3.1682E+02	3.1682E+02	3.1682E+02	3.1682E+02	3.1683E+02	3.1683E+02	3.1683E+02	3.1683E+02
Pu-239	2.1179E+01	2.1180E+01	2.1182E+01	2.1183E+01	2.1185E+01	2.1186E+01	2.1188E+01	2.1189E+01	2.1190E+01	2.1192E+01
Pu-240	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01
Pu-241	1.0905E+04	1.0905E+04	1.0905E+04	1.0905E+04	1.0905E+04	1.0905E+04	1.0905E+04	1.0905E+04	1.0905E+04	1.0905E+04
Am-241	6.7285E+00	6.7295E+00	6.7305E+00	6.7315E+00	6.7325E+00	6.7335E+00	6.7345E+00	6.7355E+00	6.7365E+00	6.7375E+00
Cm-242	1.6839E+03	1.6838E+03	1.6836E+03	1.6835E+03	1.6833E+03	1.6832E+03	1.6830E+03	1.6829E+03	1.6827E+03	1.6826E+03
Cm-244	1.8359E+02	1.8359E+02	1.8359E+02	1.8359E+02	1.8359E+02	1.8359E+02	1.8359E+02	1.8359E+02	1.8359E+02	1.8359E+02

time (hrs)	10.0000	12.0000	14.0000	16.0000	18.0000	20.0000	22.0000	24.0000	30.0000	36.0000
Co-58	1.3431E+03	1.3420E+03	1.3409E+03	1.3398E+03	1.3387E+03	1.3376E+03	1.3365E+03	1.3354E+03	1.3322E+03	1.3289E+03
Co-60	1.6138E+03	1.6138E+03	1.6137E+03	1.6137E+03	1.6136E+03	1.6136E+03	1.6135E+03	1.6135E+03	1.6133E+03	1.6132E+03
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	5.6606E+04	5.6431E+04	5.6256E+04	5.6083E+04	5.5909E+04	5.5736E+04	5.5564E+04	5.5392E+04	5.4880E+04	5.4373E+04
Sr-89	1.9630E+06	1.9608E+06	1.9585E+06	1.9563E+06	1.9540E+06	1.9518E+06	1.9496E+06	1.9474E+06	1.9407E+06	1.9340E+06
Sr-90	2.2423E+05	2.2423E+05	2.2423E+05	2.2423E+05	2.2423E+05	2.2423E+05	2.2423E+05	2.2423E+05	2.2422E+05	2.2422E+05
Sr-91	1.2930E+06	1.1174E+06	9.6568E+05	8.3456E+05	7.2125E+05	6.2332E+05	5.3868E+05	4.6554E+05	3.0049E+05	1.9396E+05
Sr-92	2.1961E+05	1.3167E+05	7.8945E+04	4.7333E+04	2.8379E+04	1.7015E+04	1.0202E+04	6.1166E+03	1.3183E+03	2.8414E+02
Y-90	2.2480E+04	2.6806E+04	3.1053E+04	3.5218E+04	3.9294E+04	4.3283E+04	4.7186E+04	5.1006E+04	6.1981E+04	7.2265E+04
Y-91	2.7517E+04	2.7988E+04	2.8391E+04	2.8736E+04	2.9029E+04	2.9279E+04	2.9490E+04	2.9669E+04	3.0050E+04	3.0263E+04
Y-92	5.0823E+05	3.9887E+05	3.0452E+05	2.2762E+05	1.6692E+05	1.2066E+05	8.6256E+04	6.1120E+04	2.0940E+04	6.9119E+03
Y-93	1.6078E+04	1.4016E+04	1.2218E+04	1.0651E+04	9.2850E+03	8.0942E+03	7.0561E+03	6.1511E+03	4.0750E+03	2.6996E+03
Zr-95	3.1532E+04	3.1503E+04	3.1475E+04	3.1446E+04	3.1418E+04	3.1390E+04	3.1361E+04	3.1333E+04	3.1248E+04	3.1164E+04
Zr-97	2.1804E+04	2.0087E+04	1.8505E+04	1.7048E+04	1.5705E+04	1.4468E+04	1.3329E+04	1.2279E+04	9.6005E+03	7.5062E+03
Nb-95	3.1832E+04	3.1831E+04	3.1830E+04	3.1829E+04	3.1828E+04	3.1827E+04	3.1825E+04	3.1824E+04	3.1820E+04	3.1816E+04
Mo-99	4.0323E+05	3.9485E+05	3.8664E+05	3.7860E+05	3.7073E+05	3.6303E+05	3.5548E+05	3.4809E+05	3.2684E+05	3.0688E+05
Tc-99m	3.7879E+05	3.7349E+05	3.6998E+05	3.6718E+05	3.6342E+05	3.5895E+05	3.5394E+05	3.4853E+05	3.3090E+05	3.1252E+05
Ru-103	3.6790E+05	3.6736E+05	3.6682E+05	3.6628E+05	3.6574E+05	3.6521E+05	3.6467E+05	3.6413E+05	3.6253E+05	3.6094E+05
Ru-105	5.3835E+04	3.9397E+04	2.8832E+04	2.1099E+04	1.5441E+04	1.1300E+04	8.2694E+03	6.0516E+03	2.3718E+03	9.2956E+02
Ru-106	1.5247E+05	1.5244E+05	1.5242E+05	1.5239E+05	1.5237E+05	1.5235E+05	1.5232E+05	1.5230E+05	1.5223E+05	1.5216E+05
Rh-105	2.2208E+05	2.1532E+05	2.0835E+05	2.0130E+05	1.9427E+05	1.8731E+05	1.8049E+05	1.7382E+05	1.5497E+05	1.3795E+05
Sb-127	4.7393E+05	4.6688E+05	4.5992E+05	4.5308E+05	4.4633E+05	4.3968E+05	4.3314E+05	4.2669E+05	4.0791E+05	3.8995E+05
Sb-129	3.0625E+05	2.2219E+05	1.6120E+05	1.1695E+05	8.4844E+04	6.1554E+04	4.4657E+04	3.2398E+04	1.2372E+04	4.7242E+03

Te-127	4.8759E+05	4.8296E+05	4.7940E+05	4.7638E+05	4.7299E+05	4.6928E+05	4.6531E+05	4.6112E+05	4.4766E+05	4.3344E+05
Te-127m	6.8057E+04	6.8065E+04	6.8074E+04	6.8081E+04	6.8088E+04	6.8094E+04	6.8100E+04	6.8105E+04	6.8116E+04	6.8122E+04
Te-129	4.8080E+05	3.9002E+05	3.6506E+05	3.4035E+05	3.0630E+05	2.7666E+05	2.5359E+05	2.3632E+05	2.0728E+05	1.9554E+05
Te-129m	2.2301E+05	2.2273E+05	2.2242E+05	2.2209E+05	2.2174E+05	2.2139E+05	2.2103E+05	2.2067E+05	2.1955E+05	2.1843E+05
Te-131m	5.4169E+05	5.1723E+05	4.9387E+05	4.7157E+05	4.5028E+05	4.2994E+05	4.1053E+05	3.9199E+05	3.4125E+05	2.9707E+05
Te-132	6.1685E+06	6.0601E+06	5.9536E+06	5.8490E+06	5.7463E+06	5.6453E+06	5.5461E+06	5.4486E+06	5.1664E+06	4.8988E+06
I-131	2.7462E+07	2.7268E+07	2.7076E+07	2.6885E+07	2.6695E+07	2.6506E+07	2.6319E+07	2.6132E+07	2.5581E+07	2.5041E+07
I-132	8.7443E+06	7.5931E+06	7.1602E+06	7.0109E+06	6.8749E+06	6.7471E+06	6.6247E+06	6.5062E+06	6.1671E+06	5.8474E+06
I-133	4.2139E+07	3.9422E+07	3.6880E+07	3.4502E+07	3.2278E+07	3.0197E+07	2.8250E+07	2.6428E+07	2.1639E+07	1.7717E+07
I-134	2.4031E+04	4.9433E+03	1.0169E+03	2.0917E+02	4.3027E+01	8.8507E+00	1.8206E+00	3.7450E-01	3.2597E-03	2.8372E-05
I-135	1.9256E+07	1.5613E+07	1.2659E+07	1.0264E+07	8.3222E+06	6.7476E+06	5.4710E+06	4.4359E+06	2.3645E+06	1.2603E+06
Xe-133	3.4161E+06	3.8118E+06	4.1759E+06	4.5102E+06	4.8164E+06	5.0963E+06	5.3516E+06	5.5842E+06	6.1595E+06	6.5789E+06
Xe-135	1.9101E+07	1.8490E+07	1.7604E+07	1.6537E+07	1.5352E+07	1.4116E+07	1.2878E+07	1.1671E+07	8.4288E+06	5.8899E+06
Cs-134	6.4185E+06	6.4180E+06	6.4175E+06	6.4170E+06	6.4165E+06	6.4160E+06	6.4155E+06	6.4151E+06	6.4136E+06	6.4121E+06
Cs-136	1.7488E+06	1.7411E+06	1.7335E+06	1.7258E+06	1.7183E+06	1.7107E+06	1.7032E+06	1.6957E+06	1.6734E+06	1.6514E+06
Cs-137	4.0024E+06	4.0024E+06	4.0024E+06	4.0023E+06	4.0023E+06	4.0023E+06	4.0023E+06	4.0023E+06	4.0022E+06	4.0021E+06
Ba-139	2.3483E+04	8.5891E+03	3.1415E+03	1.1491E+03	4.2028E+02	1.5372E+02	5.6225E+01	2.0565E+01	1.0063E+00	4.9239E-02
Ba-140	3.3772E+06	3.3619E+06	3.3467E+06	3.3316E+06	3.3165E+06	3.3015E+06	3.2866E+06	3.2717E+06	3.2275E+06	3.1839E+06
La-140	5.0981E+05	6.0668E+05	7.0025E+05	7.9052E+05	8.7721E+05	9.6046E+05	1.0404E+06	1.1171E+06	1.3290E+06	1.5158E+06
La-141	5.6117E+03	3.9437E+03	2.7714E+03	1.9476E+03	1.3687E+03	9.6187E+02	6.7596E+02	4.7503E+02	1.6487E+02	5.7220E+01
La-142	3.5663E+02	1.4511E+02	5.9043E+01	2.4024E+01	9.7751E+00	3.9774E+00	1.6183E+00	6.5848E-01	4.4358E-02	2.9881E-03
Ce-141	7.8720E+04	7.8589E+04	7.8455E+04	7.8320E+04	7.8184E+04	7.8047E+04	7.7910E+04	7.7773E+04	7.7361E+04	7.6950E+04
Ce-143	6.3298E+04	6.0694E+04	5.8197E+04	5.5803E+04	5.3507E+04	5.1306E+04	4.9195E+04	4.7171E+04	4.1586E+04	3.6662E+04
Ce-144	6.3369E+04	6.3356E+04	6.3343E+04	6.3330E+04	6.3318E+04	6.3305E+04	6.3292E+04	6.3279E+04	6.3240E+04	6.3202E+04
Pr-143	3.1021E+04	3.1152E+04	3.1273E+04	3.1382E+04	3.1482E+04	3.1571E+04	3.1650E+04	3.1721E+04	3.1881E+04	3.1973E+04
Nd-147	1.2632E+04	1.2566E+04	1.2500E+04	1.2434E+04	1.2369E+04	1.2304E+04	1.2240E+04	1.2176E+04	1.1985E+04	1.1797E+04
Np-239	8.4215E+05	8.2175E+05	8.0184E+05	7.8241E+05	7.6345E+05	7.4495E+05	7.2690E+05	7.0929E+05	6.5897E+05	6.1223E+05
Pu-238	3.1683E+02	3.1683E+02	3.1683E+02	3.1684E+02	3.1684E+02	3.1684E+02	3.1684E+02	3.1685E+02	3.1685E+02	3.1686E+02
Pu-239	2.1197E+01	2.1203E+01	2.1208E+01	2.1213E+01	2.1219E+01	2.1223E+01	2.1228E+01	2.1233E+01	2.1247E+01	2.1259E+01
Pu-240	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01
Pu-241	1.0904E+04	1.0904E+04	1.0904E+04	1.0904E+04	1.0904E+04	1.0904E+04	1.0904E+04	1.0904E+04	1.0903E+04	1.0903E+04
Am-241	6.7415E+00	6.7454E+00	6.7494E+00	6.7534E+00	6.7574E+00	6.7614E+00	6.7654E+00	6.7694E+00	6.7813E+00	6.7933E+00
Cm-242	1.6820E+03	1.6814E+03	1.6808E+03	1.6802E+03	1.6796E+03	1.6790E+03	1.6784E+03	1.6778E+03	1.6760E+03	1.6742E+03
Cm-244	1.8359E+02	1.8359E+02	1.8359E+02	1.8358E+02	1.8358E+02	1.8358E+02	1.8358E+02	1.8358E+02	1.8357E+02	1.8357E+02

time (hrs)	42.0000	48.0000	54.0000	60.0000	66.0000	72.0000	78.0000	84.0000	90.0000	96.0000
Co-58	1.3257E+03	1.3224E+03	1.3192E+03	1.3160E+03	1.3128E+03	1.3095E+03	1.3063E+03	1.3032E+03	1.3000E+03	1.2968E+03
Co-60	1.6130E+03	1.6129E+03	1.6128E+03	1.6126E+03	1.6125E+03	1.6123E+03	1.6122E+03	1.6120E+03	1.6119E+03	1.6117E+03
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	5.3871E+04	5.3373E+04	5.2879E+04	5.2390E+04	5.1906E+04	5.1426E+04	5.0951E+04	5.0480E+04	5.0013E+04	4.9551E+04
Sr-89	1.9274E+06	1.9208E+06	1.9142E+06	1.9077E+06	1.9011E+06	1.8946E+06	1.8881E+06	1.8817E+06	1.8752E+06	1.8688E+06
Sr-90	2.2421E+05	2.2421E+05	2.2421E+05	2.2420E+05	2.2420E+05	2.2420E+05	2.2419E+05	2.2419E+05	2.2418E+05	2.2418E+05
Sr-91	1.2519E+05	8.0810E+04	5.2160E+04	3.3668E+04	2.1732E+04	1.4027E+04	9.0540E+03	5.8441E+03	3.7722E+03	2.4348E+03
Sr-92	6.1242E+01	1.3200E+01	2.8450E+00	6.1318E-01	1.3216E-01	2.8485E-02	6.1394E-03	1.3232E-03	2.8520E-04	6.1471E-05
Y-90	8.1901E+04	9.0932E+04	9.9393E+04	1.0732E+05	1.1475E+05	1.2172E+05	1.2824E+05	1.3435E+05	1.4008E+05	1.4545E+05
Y-91	3.0369E+04	3.0405E+04	3.0396E+04	3.0359E+04	3.0303E+04	3.0235E+04	3.0160E+04	3.0080E+04	2.9997E+04	2.9912E+04
Y-92	2.2306E+03	7.0962E+02	2.2363E+02	7.0032E+01	2.1838E+01	6.7896E+00	2.1067E+00	6.5278E-01	2.0207E-01	6.2510E-02
Y-93	1.7884E+03	1.1848E+03	7.8488E+02	5.1997E+02	3.4447E+02	2.2820E+02	1.5118E+02	1.0015E+02	6.6348E+01	4.3954E+01

Zr-95	3.1080E+04	3.0995E+04	3.0912E+04	3.0828E+04	3.0745E+04	3.0661E+04	3.0579E+04	3.0496E+04	3.0413E+04	3.0331E+04
Zr-97	5.8687E+03	4.5885E+03	3.5875E+03	2.8049E+03	2.1930E+03	1.7146E+03	1.3406E+03	1.0481E+03	8.1950E+02	6.4073E+02
Nb-95	3.1811E+04	3.1805E+04	3.1800E+04	3.1794E+04	3.1787E+04	3.1781E+04	3.1773E+04	3.1766E+04	3.1758E+04	3.1750E+04
Mo-99	2.8814E+05	2.7054E+05	2.5402E+05	2.3851E+05	2.2394E+05	2.1026E+05	1.9742E+05	1.8537E+05	1.7405E+05	1.6342E+05
Tc-99m	2.9436E+05	2.7684E+05	2.6017E+05	2.4439E+05	2.2953E+05	2.1554E+05	2.0239E+05	1.9004E+05	1.7844E+05	1.6754E+05
Ru-103	3.5935E+05	3.5776E+05	3.5619E+05	3.5462E+05	3.5306E+05	3.5151E+05	3.4996E+05	3.4842E+05	3.4689E+05	3.4536E+05
Ru-105	3.6432E+02	1.4279E+02	5.5961E+01	2.1933E+01	8.5959E+00	3.3690E+00	1.3204E+00	5.1749E-01	2.0282E-01	7.9489E-02
Ru-106	1.5208E+05	1.5201E+05	1.5194E+05	1.5187E+05	1.5180E+05	1.5173E+05	1.5166E+05	1.5158E+05	1.5151E+05	1.5144E+05
Rh-105	1.2271E+05	1.0912E+05	9.7020E+04	8.6258E+04	7.6689E+04	6.8180E+04	6.0615E+04	5.3889E+04	4.7909E+04	4.2593E+04
Sb-127	3.7279E+05	3.5638E+05	3.4070E+05	3.2570E+05	3.1137E+05	2.9767E+05	2.8456E+05	2.7204E+05	2.6007E+05	2.4862E+05
Sb-129	1.8040E+03	6.8886E+02	2.6305E+02	1.0045E+02	3.8357E+01	1.4647E+01	5.5930E+00	2.1358E+00	8.1556E-01	3.1143E-01
Te-127	4.1897E+05	4.0457E+05	3.9045E+05	3.7672E+05	3.6344E+05	3.5065E+05	3.3836E+05	3.2656E+05	3.1525E+05	3.0442E+05
Te-127m	6.8122E+04	6.8118E+04	6.8110E+04	6.8097E+04	6.8080E+04	6.8059E+04	6.8034E+04	6.8005E+04	6.7973E+04	6.7938E+04
Te-129	1.9045E+05	1.8792E+05	1.8636E+05	1.8517E+05	1.8413E+05	1.8315E+05	1.8220E+05	1.8125E+05	1.8032E+05	1.7939E+05
Te-129m	2.1731E+05	2.1620E+05	2.1509E+05	2.1398E+05	2.1288E+05	2.1178E+05	2.1069E+05	2.0961E+05	2.0853E+05	2.0746E+05
Te-131m	2.5862E+05	2.2514E+05	1.9599E+05	1.7062E+05	1.4854E+05	1.2931E+05	1.1257E+05	9.7997E+04	8.5311E+04	7.4268E+04
Te-132	4.6451E+06	4.4045E+06	4.1764E+06	3.9601E+06	3.7550E+06	3.5605E+06	3.3761E+06	3.2012E+06	3.0354E+06	2.8782E+06
I-131	2.4512E+07	2.3993E+07	2.3485E+07	2.2987E+07	2.2500E+07	2.2022E+07	2.1555E+07	2.1097E+07	2.0649E+07	2.0210E+07
I-132	5.5445E+06	5.2573E+06	4.9850E+06	4.7268E+06	4.4820E+06	4.2498E+06	4.0297E+06	3.8210E+06	3.6231E+06	3.4355E+06
I-133	1.4507E+07	1.1878E+07	9.7250E+06	7.9626E+06	6.5196E+06	5.3381E+06	4.3707E+06	3.5786E+06	2.9301E+06	2.3991E+06
I-134	2.4695E-07	2.1495E-09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-135	6.7180E+05	3.5809E+05	1.9087E+05	1.0174E+05	5.4230E+04	2.8906E+04	1.5408E+04	8.2128E+03	4.3776E+03	2.3334E+03
Xe-133	6.8725E+06	7.0645E+06	7.1751E+06	7.2204E+06	7.2137E+06	7.1660E+06	7.0860E+06	6.9808E+06	6.8564E+06	6.7175E+06
Xe-135	4.0236E+06	2.7043E+06	1.7955E+06	1.1812E+06	7.7142E+05	5.0094E+05	3.2381E+05	2.0855E+05	1.3391E+05	8.5772E+04
Cs-134	6.4106E+06	6.4092E+06	6.4077E+06	6.4062E+06	6.4047E+06	6.4033E+06	6.4018E+06	6.4003E+06	6.3988E+06	6.3974E+06
Cs-136	1.6297E+06	1.6083E+06	1.5872E+06	1.5663E+06	1.5457E+06	1.5254E+06	1.5054E+06	1.4856E+06	1.4661E+06	1.4468E+06
Cs-137	4.0021E+06	4.0020E+06	4.0019E+06	4.0019E+06	4.0018E+06	4.0018E+06	4.0017E+06	4.0016E+06	4.0016E+06	4.0015E+06
Ba-139	2.4094E-03	1.1789E-04	5.7688E-06	2.8228E-07	1.3812E-08	6.7586E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	3.1409E+06	3.0984E+06	3.0566E+06	3.0153E+06	2.9745E+06	2.9344E+06	2.8947E+06	2.8556E+06	2.8170E+06	2.7790E+06
La-140	1.6800E+06	1.8239E+06	1.9495E+06	2.0586E+06	2.1530E+06	2.2341E+06	2.3033E+06	2.3618E+06	2.4107E+06	2.4510E+06
La-141	1.9859E+01	6.8925E+00	2.3921E+00	8.3023E-01	2.8814E-01	1.0001E-01	3.4708E-02	1.2046E-02	4.1808E-03	1.4510E-03
La-142	2.0129E-04	1.3559E-05	9.1340E-07	6.1530E-08	4.1449E-09	2.7921E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	7.6541E+04	7.6134E+04	7.5729E+04	7.5326E+04	7.4926E+04	7.4527E+04	7.4131E+04	7.3737E+04	7.3345E+04	7.2955E+04
Ce-143	3.2321E+04	2.8494E+04	2.5120E+04	2.2145E+04	1.9523E+04	1.7211E+04	1.5173E+04	1.3377E+04	1.1793E+04	1.0396E+04
Ce-144	6.3163E+04	6.3125E+04	6.3086E+04	6.3048E+04	6.3010E+04	6.2971E+04	6.2933E+04	6.2894E+04	6.2856E+04	6.2818E+04
Pr-143	3.2005E+04	3.1984E+04	3.1918E+04	3.1813E+04	3.1674E+04	3.1505E+04	3.1310E+04	3.1094E+04	3.0859E+04	3.0608E+04
Nd-147	1.1612E+04	1.1431E+04	1.1252E+04	1.1076E+04	1.0902E+04	1.0731E+04	1.0563E+04	1.0398E+04	1.0235E+04	1.0075E+04
Np-239	5.6879E+05	5.2844E+05	4.9096E+05	4.5613E+05	4.2377E+05	3.9371E+05	3.6578E+05	3.3983E+05	3.1572E+05	2.9332E+05
Pu-238	3.1687E+02	3.1688E+02	3.1688E+02	3.1689E+02	3.1690E+02	3.1691E+02	3.1691E+02	3.1692E+02	3.1693E+02	3.1693E+02
Pu-239	2.1271E+01	2.1281E+01	2.1292E+01	2.1301E+01	2.1310E+01	2.1318E+01	2.1325E+01	2.1332E+01	2.1338E+01	2.1344E+01
Pu-240	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2720E+01	2.2721E+01
Pu-241	1.0903E+04	1.0902E+04	1.0902E+04	1.0901E+04	1.0901E+04	1.0901E+04	1.0900E+04	1.0900E+04	1.0900E+04	1.0899E+04
Am-241	6.8052E+00	6.8172E+00	6.8292E+00	6.8411E+00	6.8531E+00	6.8650E+00	6.8770E+00	6.8890E+00	6.9009E+00	6.9129E+00
Cm-242	1.6725E+03	1.6707E+03	1.6689E+03	1.6671E+03	1.6654E+03	1.6636E+03	1.6618E+03	1.6600E+03	1.6583E+03	1.6565E+03
Cm-244	1.8356E+02	1.8356E+02	1.8355E+02	1.8355E+02	1.8354E+02	1.8354E+02	1.8353E+02	1.8353E+02	1.8352E+02	1.8352E+02

time (hrs)	144.0000	192.0000	240.0000	288.0000	336.0000	384.0000	432.0000	480.0000	528.0000	576.0000
Co-58	1.2716E+03	1.2470E+03	1.2228E+03	1.1991E+03	1.1758E+03	1.1530E+03	1.1307E+03	1.1088E+03	1.0873E+03	1.0662E+03
Co-60	1.6106E+03	1.6094E+03	1.6083E+03	1.6071E+03	1.6059E+03	1.6048E+03	1.6036E+03	1.6025E+03	1.6013E+03	1.6002E+03
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	4.6003E+04	4.2709E+04	3.9651E+04	3.6812E+04	3.4177E+04	3.1730E+04	2.9458E+04	2.7349E+04	2.5390E+04	2.3572E+04
Sr-89	1.8182E+06	1.7690E+06	1.7211E+06	1.6745E+06	1.6291E+06	1.5850E+06	1.5421E+06	1.5003E+06	1.4597E+06	1.4202E+06
Sr-90	2.2415E+05	2.2412E+05	2.2409E+05	2.2406E+05	2.2403E+05	2.2401E+05	2.2398E+05	2.2395E+05	2.2392E+05	2.2389E+05
Sr-91	7.3363E+01	2.2105E+00	6.6602E-02	2.0068E-03	6.0464E-05	1.8218E-06	5.4892E-08	1.6539E-09	4.9834E-11	0.0000E+00
Sr-92	2.8627E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	1.7785E+05	1.9711E+05	2.0855E+05	2.1534E+05	2.1936E+05	2.2174E+05	2.2315E+05	2.2397E+05	2.2445E+05	2.2472E+05
Y-91	2.9218E+04	2.8534E+04	2.7866E+04	2.7214E+04	2.6576E+04	2.5954E+04	2.5346E+04	2.4753E+04	2.4173E+04	2.3607E+04
Y-92	5.1957E-06	4.3049E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	1.6306E+00	6.0495E-02	2.2443E-03	8.3262E-05	3,0889E-06	1.1460E-07	4.2514E-09	1.5772E-10	5.8514E-12	0.0000E+00
Zr-95	2.9681E+04	2.9045E+04	2.8422E+04	2.7813E+04	2.7217E+04	2.6633E+04	2.6063E+04	2.5504E+04	2.4957E+04	2.4422E+04
Zr-97	8.9470E+01	1.2493E+01	1.7445E+00	2.4360E-01	3.4016E-02	4.7500E-03	6.6328E-04	9.2619E-05	1.2933E-05	1.8060E-06
Nb-95	3.1671E+04	3.1571E+04	3.1450E+04	3.1311E+04	3.1154E+04	3.0980E+04	3.0791E+04	3.0588E+04	3.0371E+04	3.0142E+04
Mo-99	9.8712E+04	5.9626E+04	3.6017E+04	2.1756E+04	1.3141E+04	7.9380E+03	4.7949E+03	2.8964E+03	1.7495E+03	1.0568E+03
Tc-99m	1.0120E+05	6.1131E+04	3.6926E+04	2.2305E+04	1.3473E+04	8.1384E+03	4.9160E+03	2.9695E+03	1.7937E+03	1.0835E+03
Ru-103	3.3338E+05	3.2182E+05	3.1066E+05	2.9989E+05	2.8949E+05	2.7945E+05	2.6976E+05	2.6041E+05	2.5138E+05	2.4266E+05
Ru-105	4.4251E-05	2.4635E-08	1.3714E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	1.5087E+05	1.5031E+05	1.4974E+05	1.4918E+05	1.4862E+05	1.4806E+05	1.4750E+05	1.4695E+05	1.4640E+05	1.4585E+05
Rh-105	1.6623E+04	6.4873E+03	2.5318E+03	9.8807E+02	3.8561E+02	1.5049E+02	5.8732E+01	2.2921E+01	8.9453E+00	3.4911E+00
Sb-127	1.7344E+05	1.2100E+05	8.4411E+04	5.8887E+04	4.1081E+04	2.8659E+04	1.9993E+04	1.3948E+04	9.7303E+03	6.7881E+03
Sb-129	1.4079E-04	6.3650E-08	2.8775E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	2.3298E+05	1.8285E+05	1.4761E+05	1.2278E+05	1.0520E+05	9.2696E+04	8.3726E+04	7.7228E+04	7.2457E+04	6.8893E+04
Te-127m	6.7554E+04	6.7032E+04	6.6416E+04	6.5738E+04	6.5019E+04	6.4276E+04	6.3518E+04	6.2754E+04	6.1987E+04	6.1223E+04
Te-129	1.7214E+05	1.6518E+05	1.5851E+05	1.5210E+05	1.4595E+05	1.4005E+05	1.3439E+05	1.2896E+05	1.2375E+05	1.1875E+05
Te-129m	1.9907E+05	1.9103E+05	1.8331E+05	1.7590E+05	1.6879E+05	1.6197E+05	1.5542E+05	1.4914E+05	1.4311E+05	1.3732E+05
Te-131m	2.4499E+04	8.0817E+03	2.6660E+03	8.7945E+02	2.9011E+02	9.5700E+01	3.1569E+01	1.0414E+01	3.4353E+00	1.1332E+00
Te-132	1.8808E+06	1.2291E+06	8.0315E+05	5.2483E+05	3.4296E+05	2.2412E+05	1.4645E+05	9.5702E+04	6.2538E+04	4.0867E+04
I-131	1.7014E+07	1.4322E+07	1.2054E+07	1.0145E+07	8.5383E+06	7.1861E+06	6.0480E+06	5.0901E+06	4.2839E+06	3.6055E+06
I-132	2.2450E+06	1.4670E+06	9.5865E+05	6.2645E+05	4.0936E+05	2.6751E+05	1.7481E+05	1.1423E+05	7.4646E+04	4.8779E+04
I-133	4.8457E+05	9.7875E+04	1.9769E+04	3.9930E+03	8.0653E+02	1.6291E+02	3.2904E+01	6.6461E+00	1.3424E+00	2.7114E-01
I-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-135	1.5205E+01	9.9082E-02	6.4565E-04	4.2073E-06	2.7416E-08	1.7865E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-133	5.4186E+06	4.2129E+06	3.2450E+06	2.4935E+06	1.9148E+06	1.4701E+06	1.1287E+06	8.6654E+05	6.6528E+05	5.1076E+05
Xe-135	2.3123E+03	6.0178E+01	1.5527E+00	3.9977E-02	1.0287E-03	2.6468E-05	6.8097E-07	1.7520E-08	4.5075E-10	1.1597E-11
Cs-134	6.3856E+06	6.3739E+06	6.3621E+06	6.3504E+06	6.3388E+06	6.3271E+06	6.3155E+06	6.3038E+06	6.2922E+06	6.2807E+06
Cs-136	1.3015E+06	1.1708E+06	1.0532E+06	9.4748E+05	8.5234E+05	7.6675E+05	6.8975E+05	6.2049E+05	5.5818E+05	5.0213E+05
Cs-137	4.0010E+06	4.0005E+06	4.0000E+06	3.9995E+06	3.9990E+06	3.9985E+06	3.9980E+06	3.9974E+06	3.9969E+06	3.9964E+06
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	2.4925E+06	2.2355E+06	2.0050E+06	1.7983E+06	1.6129E+06	1.4466E+06	1.2974E+06	1.1637E+06	1.0437E+06	9.3607E+05
La-140	2.5552E+06	2.4479E+06	2.2639E+06	2.0604E+06	1.8611E+06	1.6749E+06	1.5047E+06	1.3507E+06	1.2119E+06	1.0872E+06
La-141	3.0547E-07	6.4308E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	6.9908E+04	6.6989E+04	6.4192E+04	6.1511E+04	5.8943E+04	5.6482E+04	5.4123E+04	5.1863E+04	4.9697E+04	4.7622E+04
Ce-143	3.7933E+03	1.3841E+03	5.0501E+02	1.8426E+02	6.7232E+01	2.4531E+01	8.9506E+00	3.2658E+00	1.1916E+00	4.3478E-01
Ce-144	6.2512E+04	6.2208E+04	6.1906E+04	6.1604E+04	6.1305E+04	6.1006E+04	6.0710E+04	6.0414E+04	6.0121E+04	5.9828E+04
Pr-143	2.8265E+04	2.5749E+04	2.3330E+04	2.1094E+04	1.9055E+04	1.7207E+04	1.5537E+04	1.4027E+04	1.2664E+04	1.1434E+04
Nd-147	8.8799E+03	7.8266E+03	6.8983E+03	6.0801E+03	5.3589E+03	4.7233E+03	4.1630E+03	3.6693E+03	3.2340E+03	2.8505E+03
Np-239	1.6282E+05	9.0374E+04	5.0164E+04	2.7845E+04	1.5456E+04	8.5790E+03	4.7619E+03	2.6432E+03	1.4672E+03	8.1438E+02
Pu-238	3.1699E+02	3.1705E+02	3.1711E+02	3.1716E+02	3.1722E+02	3.1727E+02	3.1732E+02	3.1738E+02	3.1743E+02	3.1748E+02
Pu-239	2.1379E+01	2.1399E+01	2.1410E+01	2.1416E+01	2.1419E+01	2.1421E+01	2.1422E+01	2.1422E+01	2.1423E+01	2.1423E+01

Pu-240	2.2721E+01	2.2721E+01	2.2721E+01	2.2721E+01	2.2721E+01	2.2721E+01	2.2721E+01	2.2721E+01	2.2721E+01	2.2721E+01
Pu-241	1.0896E+04	1.0894E+04	1.0891E+04	1.0888E+04	1.0885E+04	1.0882E+04	1.0879E+04	1.0876E+04	1.0873E+04	1.0871E+04
Am-241	7.0085E+00	7.1041E+00	7.1997E+00	7.2953E+00	7.3908E+00	7.4863E+00	7.5818E+00	7.6773E+00	7.7727E+00	7.8681E+00
Cm-242	1.6425E+03	1.6285E+03	1.6147E+03	1.6010E+03	1.5875E+03	1.5740E+03	1.5607E+03	1.5474E+03	1.5343E+03	1.5213E+03
Cm-244	1.8348E+02	1.8344E+02	1.8340E+02	1.8337E+02	1.8333E+02	1.8329E+02	1.8325E+02	1.8321E+02	1.8317E+02	1.8314E+02
time (hrs)	624.0000	672.0000	720.0000	no data	no data	no data	no data	no data	no data	no data
Co-58	1.0455E+03	1.0252E+03	1.0054E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	1.5990E+03	1.5979E+03	1.5967E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	2.1885E+04	2.0318E+04	1.8863E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	1.3817E+06	1.3443E+06	1.3079E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	2.2386E+05	2.2383E+05	2.2380E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	2.2487E+05	2.2494E+05	2.2498E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	2.3054E+04	2.2515E+04	2.1987E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	2.3899E+04	2.3387E+04	2.2885E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	2.5218E-07	3.5214E-08	4.9172E-09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	2.9902E+04	2.9651E+04	2.9390E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	6.3835E+02	3.8559E+02	2.3291E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	6.5446E+02	3.9532E+02	2.3879E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	2.3424E+05	2.2612E+05	2.1828E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	1.4530E+05	1.4475E+05	1.4421E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	1.3624E+00	5.3172E-01	2.0751E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	4.7355E+03	3.3036E+03	2.3047E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	6.6176E+04	6.4051E+04	6.2343E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	6.0462E+04	5.9707E+04	5.8959E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	1.1395E+05	1.0934E+05	1.0492E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	1.3177E+05	1.2645E+05	1.2134E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	3.7383E-01	1.2332E-01	4.0680E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	2.6705E+04	1.7451E+04	1.1404E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	3.0344E+06	2.5538E+06	2.1494E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-132	3.1875E+04	2.0830E+04	1.3611E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-133	5.4766E-02	1.1062E-02	2.2343E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-133	3.9213E+05	3.0105E+05	2.3113E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	6.2691E+06	6.2576E+06	6.2461E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	4.5171E+05	4.0635E+05	3.6554E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	3.9959E+06	3.9954E+06	3.9949E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	8.3956E+05	7.5300E+05	6.7536E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

La-140	9.7517E+05	8.7467E+05	7.8451E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	4.5634E+04	4.3728E+04	4.1902E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	1.5864E-01	5.7882E-02	2.1119E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	5.9537E+04	5.9247E+04	5.8959E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	1.0322E+04	9.3193E+03	8.4136E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	2.5124E+03	2.2144E+03	1.9517E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	4.5204E+02	2.5091E+02	1.3927E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	3.1754E+02	3.1759E+02	3.1764E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	2.1423E+01	2.1423E+01	2.1423E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	2.2721E+01	2.2722E+01	2.2722E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	1.0868E+04	1.0865E+04	1.0862E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	7.9635E+00	8.0588E+00	8.1542E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	1.5084E+03	1.4956E+03	1.4829E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	1.8310E+02	1.8306E+02	1.8302E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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INTEGRATED SOURCE IN CURIE-HOURS

	0.2500	0.5000	0.7500	1.0000	1.2500	1.5000	1.7500	2.0000	2.5000	3.0000
Co-58	0.0000E+00	0.0000E+00	2.8086E+01	1.1234E+02	2.5275E+02	4.4931E+02	7.0200E+02	1.0108E+03	1.6845E+03	2.3580E+03
Co-60	0.0000E+00	0.0000E+00	3.3626E+01	1.3450E+02	3.0263E+02	5.3801E+02	8.4063E+02	1.2105E+03	2.0175E+03	2.8245E+03
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	7.1834E+02	2.8728E+03	6.7016E+03	1.2443E+04	2.0094E+04	2.9655E+04	4.1124E+04	5.4499E+04	8.3144E+04	1.1177E+05
Sr-89	0.0000E+00	0.0000E+00	4.1113E+04	1.6444E+05	3.6996E+05	6.5765E+05	1.0275E+06	1.4794E+06	2.4653E+06	3.4509E+06
Sr-90	0.0000E+00	0.0000E+00	4.6716E+03	1.8687E+04	4.2045E+04	7.4746E+04	1.1679E+05	1.6818E+05	2.8030E+05	3.9242E+05
Sr-91	0.0000E+00	0.0000E+00	5.2899E+04	2.0968E+05	4.6658E+05	8.1992E+05	1.2661E+06	1.8017E+06	2.9399E+06	4.0373E+06
Sr-92	0.0000E+00	0.0000E+00	4.8743E+04	1.8893E+05	4.0905E+05	6.9866E+05	1.0483E+06	1.4495E+06	2.2482E+06	2.9510E+06
Y-90	0.0000E+00	0.0000E+00	5.6597E+01	2.3887E+02	5.7175E+02	1.0801E+03	1.7887E+03	2.7223E+03	5.1240E+03	8.1186E+03
Y-91	0.0000E+00	0.0000E+00	5.0861E+02	2.0370E+03	4.5903E+03	8.1735E+03	1.2791E+04	1.8448E+04	3.0859E+04	4.3383E+04
Y-92	0.0000E+00	0.0000E+00	2.2149E+03	1.0923E+04	2.9875E+04	6.2115E+04	1.1006E+05	1.7559E+05	3.5560E+05	5.8935E+05
Y-93	0.0000E+00	0.0000E+00	6.3194E+02	2.5063E+03	5.5805E+03	9.8134E+03	1.5165E+04	2.1595E+04	3.5280E+04	4.8503E+04
Zr-95	0.0000E+00	0.0000E+00	6.5966E+02	2.6384E+03	5.9361E+03	1.0552E+04	1.6487E+04	2.3739E+04	3.9561E+04	5.5378E+04
Zr-97	0.0000E+00	0.0000E+00	6.6384E+02	2.6418E+03	5.9071E+03	1.0433E+04	1.6194E+04	2.3164E+04	3.8146E+04	5.2824E+04
Nb-95	0.0000E+00	0.0000E+00	6.6326E+02	2.6530E+03	5.9693E+03	1.0612E+04	1.6581E+04	2.3877E+04	3.9795E+04	5.5713E+04
Mo-99	0.0000E+00	0.0000E+00	9.2576E+03	3.6982E+04	8.3075E+04	1.4744E+05	2.2999E+05	3.3061E+05	5.4932E+05	7.6689E+05
Tc-99m	0.0000E+00	0.0000E+00	8.1755E+03	3.2702E+04	7.3579E+04	1.3080E+05	2.0435E+05	2.9424E+05	4.9025E+05	6.8609E+05
Ru-103	0.0000E+00	0.0000E+00	7.7169E+03	3.0865E+04	6.9439E+04	1.2343E+05	1.9284E+05	2.7765E+05	4.6266E+05	6.4759E+05
Ru-105	0.0000E+00	0.0000E+00	4.7530E+03	1.8648E+04	4.0979E+04	7.1079E+04	1.0832E+05	1.5211E+05	2.4244E+05	3.2599E+05
Ru-106	0.0000E+00	0.0000E+00	3.1787E+03	1.2715E+04	2.8608E+04	5.0857E+04	7.9464E+04	1.1443E+05	1.9071E+05	2.6698E+05
Rh-105	0.0000E+00	0.0000E+00	5.0566E+03	2.0223E+04	4.5488E+04	8.0839E+04	1.2625E+05	1.8170E+05	3.0249E+05	4.2294E+05
Sb-127	0.0000E+00	0.0000E+00	1.0583E+04	4.2292E+04	9.5049E+04	1.6877E+05	2.6339E+05	3.7882E+05	6.2997E+05	8.8018E+05
Sb-129	0.0000E+00	0.0000E+00	2.8145E+04	1.1037E+05	2.4237E+05	4.2012E+05	6.3980E+05	8.9785E+05	1.4293E+06	1.9197E+06
Te-127	0.0000E+00	0.0000E+00	1.0535E+04	4.2123E+04	9.4732E+04	1.6833E+05	2.6287E+05	3.7834E+05	6.2995E+05	8.8113E+05
Te-127m	0.0000E+00	0.0000E+00	1.4168E+03	5.6671E+03	1.2751E+04	2.2670E+04	3.5422E+04	5.1009E+04	8.5017E+04	1.1903E+05
Te-129	0.0000E+00	0.0000E+00	2.9585E+04	1.1704E+05	2.5970E+05	4.5473E+05	6.9924E+05	9.9032E+05	1.6005E+06	2.1769E+06

Te-129m	0.0000E+00	0.0000E+00	4.6575E+03	1.8630E+04	4.1920E+04	7.4526E+04	1.1645E+05	1.6769E+05	2.7950E+05	3.9130E+05
Te-131m	0.0000E+00	0.0000E+00	1.3974E+04	5.5735E+04	1.2496E+05	2.2134E+05	3.4456E+05	4.9429E+05	8.1826E+05	1.1385E+06
Te-132	0.0000E+00	0.0000E+00	1.3949E+05	5.5734E+05	1.2523E+06	2.2232E+06	3.4688E+06	4.9878E+06	8.2914E+06	1.1580E+07
I-131	2.9599E+05	1.1835E+06	2.8584E+06	5.5165E+06	9.1561E+06	1.3776E+07	1.9373E+07	2.5948E+07	4.0060E+07	5.4147E+07
I-132	4.0663E+05	1.5968E+06	3.7915E+06	7.2051E+06	1.1769E+07	1.7419E+07	2.4095E+07	3.1742E+07	4.7078E+07	6.0738E+07
I-133	6.0746E+05	2.4198E+06	5.8152E+06	1.1166E+07	1.8438E+07	2.7601E+07	3.8622E+07	5.1470E+07	7.8749E+07	1.0558E+08
I-134	5.5779E+05	2.0311E+06	4.3239E+06	7.3454E+06	1.0760E+07	1.4331E+07	1.7890E+07	2.1329E+07	2.6944E+07	3.0726E+07
I-135	5.5761E+05	2.2016E+06	5.2281E+06	9.9172E+06	1.6181E+07	2.3934E+07	3.3096E+07	4.3589E+07	6.5298E+07	8.5898E+07
Xe-133	8.1419E+02	4.8694E+03	2.5729E+04	8.1664E+04	1.8524E+05	3.4884E+05	5.8474E+05	9.0500E+05	1.6713E+06	2.5076E+06
Xe-135	9.0989E+03	5.3779E+04	2.7940E+05	8.7544E+05	1.9607E+06	3.6457E+06	6.0332E+06	9.2183E+06	1.6643E+07	2.4465E+07
Cs-134	8.0261E+04	3.2105E+05	7.4911E+05	1.3912E+06	2.2473E+06	3.3174E+06	4.6015E+06	6.0996E+06	9.3098E+06	1.2520E+07
Cs-136	2.2335E+04	8.9316E+04	2.0833E+05	3.8676E+05	6.2453E+05	9.2158E+05	1.2779E+06	1.6933E+06	2.5828E+06	3.4713E+06
Cs-137	5.0031E+04	2.0013E+05	4.6696E+05	8.6721E+05	1.4009E+06	2.0680E+06	2.8685E+06	3.8024E+06	5.8036E+06	7.8049E+06
Ba-139	0.0000E+00	0.0000E+00	5.1254E+04	1.9290E+05	4.0287E+05	6.6305E+05	9.5864E+05	1.2776E+06	1.8608E+06	2.3142E+06
Ba-140	0.0000E+00	0.0000E+00	7.1849E+04	2.8731E+05	6.4622E+05	1.1484E+06	1.7938E+06	2.5821E+06	4.3006E+06	6.0172E+06
La-140	0.0000E+00	0.0000E+00	9.4552E+02	4.0864E+03	1.0030E+04	1.9380E+04	3.2737E+04	5.0697E+04	9.8714E+04	1.6105E+05
La-141	0.0000E+00	0.0000E+00	5.9756E+02	2.3387E+03	5.1237E+03	8.8592E+03	1.3458E+04	1.8839E+04	2.9857E+04	3.9946E+04
La-142	0.0000E+00	0.0000E+00	4.7551E+02	1.8009E+03	3.7902E+03	6.2872E+03	9.1614E+03	1.2304E+04	1.8155E+04	2.2828E+04
Ce-141	0.0000E+00	0.0000E+00	1.6506E+03	6.6023E+03	1.4854E+04	2.6406E+04	4.1257E+04	5.9407E+04	9.8998E+04	1.3858E+05
Ce-143	0.0000E+00	0.0000E+00	1.6015E+03	6.3893E+03	1.4330E+04	2.5390E+04	3.9537E+04	5.6738E+04	9.3982E+04	1.3084E+05
Ce-144	0.0000E+00	0.0000E+00	1.3214E+03	5.2855E+03	1.1892E+04	2.1142E+04	3.3034E+04	4.7568E+04	7.9277E+04	1.1099E+05
Pr-143	0.0000E+00	0.0000E+00	6.3144E+02	2.5262E+03	5.6855E+03	1.0110E+04	1.5801E+04	2.2760E+04	3.7956E+04	5.3176E+04
Nd-147	0.0000E+00	0.0000E+00	2.6965E+02	1.0783E+03	2.4251E+03	4.3095E+03	6.7307E+03	9.6881E+03	1.6134E+04	2.2572E+04
Np-239	0.0000E+00	0.0000E+00	1.9652E+04	7.8490E+04	1.7627E+05	3.1276E+05	4.8771E+05	7.0090E+05	1.1640E+06	1.6242E+06
Pu-238	0.0000E+00	0.0000E+00	6.6004E+00	2.6402E+01	5.9405E+01	1.0561E+02	1.6501E+02	2.3762E+02	3.9603E+02	5.5444E+02
Pu-239	0.0000E+00	0.0000E+00	4.4105E-01	1.7642E+00	3.9696E+00	7.0572E+00	1.1027E+01	1.5880E+01	2.6467E+01	3.7055E+01
Pu-240	0.0000E+00	0.0000E+00	4.7334E-01	1.8934E+00	4.2600E+00	7.5734E+00	1.1834E+01	1.7040E+01	2.8400E+01	3.9760E+01
Pu-241	0.0000E+00	0.0000E+00	2.2719E+02	9.0875E+02	2.0447E+03	3.6350E+03	5.6797E+03	8.1788E+03	1.3631E+04	1.9084E+04
Am-241	0.0000E+00	0.0000E+00	1.4008E-01	5.6033E-01	1.2608E+00	2.2415E+00	3.5024E+00	5.0436E+00	8.4066E+00	1.1770E+01
Cm-242	0.0000E+00	0.0000E+00	3.5099E+01	1.4039E+02	3.1587E+02	5.6154E+02	8.7738E+02	1.2634E+03	2.1055E+03	2.9476E+03
Cm-244	0.0000E+00	0.0000E+00	3.8249E+00	1.5300E+01	3.4424E+01	6.1199E+01	9.5624E+01	1.3770E+02	2.2950E+02	3.2130E+02

	3.5000	4.0000	4.5000	5.0000	5.5000	6.0000	6.5000	7.0000	7.5000	8.0000
Co-58	3.0314E+03	3.7047E+03	4.3778E+03	5.0508E+03	5.7236E+03	6.3964E+03	7.0689E+03	7.7414E+03	8.4137E+03	9.0858E+03
Co-60	3.6315E+03	4.4385E+03	5.2455E+03	6.0525E+03	6.8594E+03	7.6664E+03	8.4733E+03	9.2803E+03	1.0087E+04	1.0894E+04
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	1.4037E+05	1.6894E+05	1.9750E+05	2.2603E+05	2.5455E+05	2.8304E+05	3.1150E+05	3.3995E+05	3.6837E+05	3.9677E+05
Sr-89	4.4362E+06	5.4212E+06	6.4059E+06	7.3904E+06	8.3746E+06	9.3585E+06	1.0342E+07	1.1325E+07	1.2308E+07	1.3291E+07
Sr-90	5.0454E+05	6.1666E+05	7.2878E+05	8.4090E+05	9.5302E+05	1.0651E+06	1.1773E+06	1.2894E+06	1.4015E+06	1.5136E+06
Sr-91	5.0953E+06	6.1155E+06	7.0991E+06	8.0475E+06	8.9619E+06	9.8436E+06	1.0694E+07	1.1513E+07	1.2303E+07	1.3065E+07
Sr-92	3.5694E+06	4.1136E+06	4.5925E+06	5.0139E+06	5.3847E+06	5.7110E+06	5.9981E+06	6.2507E+06	6.4731E+06	6.6687E+06
Y-90	1.1703E+04	1.5874E+04	2.0628E+04	2.5962E+04	3.1873E+04	3.8359E+04	4.5415E+04	5.3038E+04	6.1227E+04	6.9977E+04
Y-91	5.6016E+04	6.8754E+04	8.1592E+04	9.4527E+04	1.0756E+05	1.2067E+05	1.3388E+05	1.4717E+05	1.6053E+05	1.7398E+05
Y-92	8.6338E+05	1.1665E+06	1.4893E+06	1.8244E+06	2.1654E+06	2.5074E+06	2.8463E+06	3.1790E+06	3.5029E+06	3.8163E+06
Y-93	6.1281E+04	7.3627E+04	8.5557E+04	9.7084E+04	1.0822E+05	1.1899E+05	1.2938E+05	1.3943E+05	1.4914E+05	1.5853E+05
Zr-95	7.1192E+04	8.7003E+04	1.0281E+05	1.1861E+05	1.3441E+05	1.5021E+05	1.6600E+05	1.8179E+05	1.9758E+05	2.1336E+05
Zr-97	6.7204E+04	8.1293E+04	9.5095E+04	1.0862E+05	1.2187E+05	1.3484E+05	1.4756E+05	1.6002E+05	1.7222E+05	1.8418E+05
Nb-95	7.1630E+04	8.7548E+04	1.0347E+05	1.1938E+05	1.3530E+05	1.5122E+05	1.6713E+05	1.8305E+05	1.9897E+05	2.1488E+05

Mo-99	9.8332E+05	1.1986E+06	1.4128E+06	1.6258E+06	1.8377E+06	2.0486E+06	2.2583E+06	2.4669E+06	2.6744E+06	2.8809E+06
Tc-99m	8.8172E+05	1.0771E+06	1.2722E+06	1.4669E+06	1.6613E+06	1.8552E+06	2.0488E+06	2.2418E+06	2.4343E+06	2.6264E+06
Ru-103	8.3246E+05	1.0173E+06	1.2020E+06	1.3866E+06	1.5712E+06	1.7558E+06	1.9402E+06	2.1246E+06	2.3089E+06	2.4932E+06
Ru-105	4.0326E+05	4.7472E+05	5.4083E+05	6.0197E+05	6.5851E+05	7.1081E+05	7.5919E+05	8.0393E+05	8.4531E+05	8.8359E+05
Ru-106	3.4326E+05	4.1953E+05	4.9579E+05	5.7206E+05	6.4832E+05	7.2458E+05	8.0083E+05	8.7709E+05	9.5334E+05	1.0296E+06
Rh-105	5.4300E+05	6.6262E+05	7.8174E+05	9.0032E+05	1.0183E+06	1.1357E+06	1.2524E+06	1.3685E+06	1.4838E+06	1.5984E+06
Sb-127	1.1295E+06	1.3778E+06	1.6252E+06	1.8717E+06	2.1173E+06	2.3619E+06	2.6056E+06	2.8485E+06	3.0904E+06	3.3314E+06
Sb-129	2.3724E+06	2.7901E+06	3.1757E+06	3.5315E+06	3.8599E+06	4.1630E+06	4.4427E+06	4.7008E+06	4.9391E+06	5.1590E+06
Te-127	1.1319E+06	1.3822E+06	1.6320E+06	1.8813E+06	2.1302E+06	2.3785E+06	2.6264E+06	2.8737E+06	3.1205E+06	3.3668E+06
Te-127m	1.5304E+05	1.8705E+05	2.2106E+05	2.5508E+05	2.8909E+05	3.2311E+05	3.5713E+05	3.9115E+05	4.2517E+05	4.5920E+05
Te-129	2.7201E+06	3.2313E+06	3.7119E+06	4.1635E+06	4.5877E+06	4.9861E+06	5.3606E+06	5.7126E+06	6.0437E+06	6.3554E+06
Te-129m	5.0311E+05	6.1490E+05	7.2669E+05	8.3846E+05	9.5021E+05	1.0620E+06	1.1737E+06	1.2854E+06	1.3970E+06	1.5087E+06
Te-131m	1.4551E+06	1.7680E+06	2.0773E+06	2.3831E+06	2.6854E+06	2.9842E+06	3.2795E+06	3.5715E+06	3.8601E+06	4.1454E+06
Te-132	1.4855E+07	1.8115E+07	2.1360E+07	2.4591E+07	2.7808E+07	3.1011E+07	3.4200E+07	3.7374E+07	4.0534E+07	4.3681E+07
I-131	6.8209E+07	8.2246E+07	9.6259E+07	1.1025E+08	1.2421E+08	1.3815E+08	1.5206E+08	1.6595E+08	1.7982E+08	1.9366E+08
I-132	7.2952E+07	8.3922E+07	9.3820E+07	1.0279E+08	1.1097E+08	1.1846E+08	1.2535E+08	1.3173E+08	1.3767E+08	1.4322E+08
I-133	1.3196E+08	1.5791E+08	1.8343E+08	2.0853E+08	2.3322E+08	2.5749E+08	2.8137E+08	3.0485E+08	3.2794E+08	3.5065E+08
I-134	3.3272E+07	3.4987E+07	3.6143E+07	3.6921E+07	3.7444E+07	3.7797E+07	3.8035E+07	3.8195E+07	3.8303E+07	3.8375E+07
I-135	1.0545E+08	1.2399E+08	1.4160E+08	1.5830E+08	1.7415E+08	1.8919E+08	2.0346E+08	2.1700E+08	2.2985E+08	2.4205E+08
Xe-133	3.4127E+06	4.3850E+06	5.4233E+06	6.5263E+06	7.6927E+06	8.9211E+06	1.0210E+07	1.1559E+07	1.2967E+07	1.4431E+07
Xe-135	3.2635E+07	4.1107E+07	4.9839E+07	5.8791E+07	6.7928E+07	7.7216E+07	8.6624E+07	9.6124E+07	1.0569E+08	1.1530E+08
Cs-134	1.5730E+07	1.8940E+07	2.2150E+07	2.5360E+07	2.8570E+07	3.1780E+07	3.4989E+07	3.8199E+07	4.1408E+07	4.4618E+07
Cs-136	4.3588E+06	5.2453E+06	6.1309E+06	7.0155E+06	7.8991E+06	8.7818E+06	9.6635E+06	1.0544E+07	1.1424E+07	1.2303E+07
Cs-137	9.8061E+06	1.1807E+07	1.3809E+07	1.5810E+07	1.7811E+07	1.9812E+07	2.1814E+07	2.3815E+07	2.5816E+07	2.7817E+07
Ba-139	2.6669E+06	2.9411E+06	3.1544E+06	3.3203E+06	3.4493E+06	3.5496E+06	3.6276E+06	3.6883E+06	3.7354E+06	3.7721E+06
Ba-140	7.7318E+06	9.4445E+06	1.1155E+07	1.2864E+07	1.4571E+07	1.6276E+07	1.7979E+07	1.9680E+07	2.1379E+07	2.3076E+07
La-140	2.3756E+05	3.2812E+05	4.3258E+05	5.5081E+05	6.8268E+05	8.2804E+05	9.8677E+05	1.1587E+06	1.3438E+06	1.5419E+06
La-141	4.9183E+04	5.7640E+04	6.5383E+04	7.2473E+04	7.8964E+04	8.4908E+04	9.0349E+04	9.5332E+04	9.9893E+04	1.0407E+05
La-142	2.6560E+04	2.9541E+04	3.1922E+04	3.3823E+04	3.5341E+04	3.6554E+04	3.7523E+04	3.8296E+04	3.8914E+04	3.9408E+04
Ce-141	1.7814E+05	2.1769E+05	2.5723E+05	2.9675E+05	3.3626E+05	3.7575E+05	4.1523E+05	4.5469E+05	4.9414E+05	5.3357E+05
Ce-143	1.6731E+05	2.0340E+05	2.3911E+05	2.7445E+05	3.0942E+05	3.4402E+05	3.7826E+05	4.1215E+05	4.4568E+05	4.7886E+05
Ce-144	1.4269E+05	1.7440E+05	2.0610E+05	2.3780E+05	2.6950E+05	3.0120E+05	3.3290E+05	3.6459E+05	3.9628E+05	4.2798E+05
Pr-143	6.8419E+04	8.3684E+04	9.8971E+04	1.1428E+05	1.2961E+05	1.4496E+05	1.6033E+05	1.7572E+05	1.9113E+05	2.0656E+05
Nd-147	2.9001E+04	3.5422E+04	4.1834E+04	4.8238E+04	5.4634E+04	6.1021E+04	6.7400E+04	7.3770E+04	8.0132E+04	8.6486E+04
Np-239	2.0816E+06	2.5362E+06	2.9881E+06	3.4372E+06	3.8835E+06	4.3271E+06	4.7680E+06	5.2062E+06	5.6417E+06	6.0746E+06
Pu-238	7.1285E+02	8.7126E+02	1.0297E+03	1.1881E+03	1.3465E+03	1.5049E+03	1.6633E+03	1.8217E+03	1.9801E+03	2.1386E+03
Pu-239	4.7644E+01	5.8234E+01	6.8825E+01	7.9416E+01	9.0008E+01	1.0060E+02	1.1119E+02	1.2179E+02	1.3238E+02	1.4298E+02
Pu-240	5.1120E+01	6.2480E+01	7.3840E+01	8.5200E+01	9.6560E+01	1.0792E+02	1.1928E+02	1.3064E+02	1.4200E+02	1.5336E+02
Pu-241	2.4536E+04	2.9989E+04	3.5441E+04	4.0894E+04	4.6346E+04	5.1799E+04	5.7251E+04	6.2704E+04	6.8156E+04	7.3609E+04
Am-241	1.5134E+01	1.8499E+01	2.1864E+01	2.5229E+01	2.8595E+01	3.1962E+01	3.5329E+01	3.8696E+01	4.2064E+01	4.5433E+01
Cm-242	3.7896E+03	4.6315E+03	5.4734E+03	6.3152E+03	7.1569E+03	7.9985E+03	8.8400E+03	9.6815E+03	1.0523E+04	1.1364E+04
Cm-244	4.1309E+02	5.0489E+02	5.9668E+02	6.8848E+02	7.8027E+02	8.7207E+02	9.6386E+02	1.0557E+03	1.1475E+03	1.2392E+03

	10.0000	12.0000	14.0000	16.0000	18.0000	20.0000	22.0000	24.0000	30.0000	36.0000
Co-58	1.1773E+04	1.4458E+04	1.7141E+04	1.9822E+04	2.2500E+04	2.5177E+04	2.7851E+04	3.0523E+04	3.8525E+04	4.6509E+04
Co-60	1.4122E+04	1.7349E+04	2.0577E+04	2.3804E+04	2.7032E+04	3.0259E+04	3.3486E+04	3.6713E+04	4.6393E+04	5.6073E+04
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	5.1016E+05	6.2320E+05	7.3588E+05	8.4822E+05	9.6022E+05	1.0719E+06	1.1832E+06	1.2941E+06	1.6249E+06	1.9527E+06

Sr-89	1.7220E+07	2.1143E+07	2.5063E+07	2.8977E+07	3.2888E+07	3.6794E+07	4.0695E+07	4.4592E+07	5.6256E+07	6.7880E+07
Sr-90	1.9621E+06	2.4105E+06	2.8590E+06	3.3075E+06	3.7559E+06	4.2044E+06	4.6528E+06	5.1013E+06	6.4466E+06	7.7920E+06
Sr-91	1.5855E+07	1.8265E+07	2.0348E+07	2.2148E+07	2.3704E+07	2.5049E+07	2.6211E+07	2.7215E+07	2.9513E+07	3.0996E+07
Sr-92	7.2546E+06	7.6059E+06	7.8165E+06	7.9428E+06	8.0185E+06	8.0639E+06	8.0911E+06	8.1074E+06	8.1297E+06	8.1345E+06
Y-90	1.1052E+05	1.5980E+05	2.1766E+05	2.8393E+05	3.5844E+05	4.4102E+05	5.3149E+05	6.2968E+05	9.6864E+05	1.3714E+06
Y-91	2.2846E+05	2.8397E+05	3.4035E+05	3.9747E+05	4.5524E+05	5.1355E+05	5.7232E+05	6.3147E+05	8.1063E+05	9.9157E+05
Y-92	4.9398E+06	5.8469E+06	6.5503E+06	7.0825E+06	7.4770E+06	7.7646E+06	7.9715E+06	8.1189E+06	8.3651E+06	8.4486E+06
Y-93	1.9305E+05	2.2314E+05	2.4938E+05	2.7224E+05	2.9218E+05	3.0956E+05	3.2471E+05	3.3792E+05	3.6860E+05	3.8892E+05
Zr-95	2.7645E+05	3.3948E+05	4.0246E+05	4.6538E+05	5.2825E+05	5.9106E+05	6.5381E+05	7.1650E+05	9.0424E+05	1.0915E+06
Zr-97	2.2965E+05	2.7154E+05	3.1013E+05	3.4569E+05	3.7844E+05	4.0861E+05	4.3641E+05	4.6202E+05	5.2766E+05	5.7898E+05
Nb-95	2.7855E+05	3.4221E+05	4.0587E+05	4.6953E+05	5.3319E+05	5.9684E+05	6.6050E+05	7.2415E+05	9.1508E+05	1.1060E+06
Mo-99	3.6959E+06	4.4940E+06	5.2754E+06	6.0407E+06	6.7900E+06	7.5238E+06	8.2423E+06	8.9459E+06	1.0971E+07	1.2872E+07
Tc-99m	3.3887E+06	4.1410E+06	4.8844E+06	5.6216E+06	6.3522E+06	7.0746E+06	7.7875E+06	8.4899E+06	1.0528E+07	1.2458E+07
Ru-103	3.2295E+06	3.9648E+06	4.6990E+06	5.4321E+06	6.1641E+06	6.8950E+06	7.6249E+06	8.3537E+06	1.0534E+07	1.2704E+07
Ru-105	1.0110E+06	1.1042E+06	1.1724E+06	1.2224E+06	1.2589E+06	1.2857E+06	1.3052E+06	1.3195E+06	1.3448E+06	1.3547E+06
Ru-106	1.3345E+06	1.6395E+06	1.9443E+06	2.2491E+06	2.5539E+06	2.8586E+06	3.1633E+06	3.4679E+06	4.3815E+06	5.2947E+06
Rh-105	2.0489E+06	2.4863E+06	2.9100E+06	3.3196E+06	3.7152E+06	4.0968E+06	4.4646E+06	4.8189E+06	5.8052E+06	6.6840E+06
Sb-127	4.2864E+06	5.2272E+06	6.1540E+06	7.0670E+06	7.9664E+06	8.8524E+06	9.7252E+06	1.0585E+07	1.3089E+07	1.5482E+07
Sb-129	5.8873E+06	6.4158E+06	6.7992E+06	7.0773E+06	7.2791E+06	7.4255E+06	7.5317E+06	7.6088E+06	7.7431E+06	7.7944E+06
Te-127	4.3464E+06	5.3170E+06	6.2793E+06	7.2351E+06	8.1845E+06	9.1267E+06	1.0061E+07	1.0988E+07	1.3714E+07	1.6357E+07
Te-127m	5.9530E+05	7.3142E+05	8.6756E+05	1.0037E+06	1.1399E+06	1.2761E+06	1.4123E+06	1.5485E+06	1.9571E+06	2.3658E+06
Te-129	7.4410E+06	8.3118E+06	9.0669E+06	9.7723E+06	1.0419E+07	1.1002E+07	1.1532E+07	1.2022E+07	1.3353E+07	1.4561E+07
Te-129m	1.9549E+06	2.4007E+06	2.8458E+06	3.2903E+06	3.7342E+06	4.1773E+06	4.6197E+06	5.0614E+06	6.3821E+06	7.6960E+06
Te-131m	5.2544E+06	6.3134E+06	7.3245E+06	8.2899E+06	9.2117E+06	1.0092E+07	1.0932E+07	1.1735E+07	1.3935E+07	1.5850E+07
Te-132	5.6128E+07	6.8357E+07	8.0370E+07	9.2173E+07	1.0377E+08	1.1516E+08	1.2635E+08	1.3735E+08	1.6919E+08	1.9939E+08
I-131	2.4878E+08	3.0351E+08	3.5785E+08	4.1181E+08	4.6539E+08	5.1859E+08	5.7142E+08	6.2387E+08	7.7901E+08	9.3087E+08
I-132	1.6272E+08	1.7906E+08	1.9382E+08	2.0799E+08	2.2187E+08	2.3549E+08	2.4887E+08	2.6200E+08	3.0002E+08	3.3606E+08
I-133	4.3783E+08	5.1939E+08	5.9570E+08	6.6708E+08	7.3386E+08	7.9633E+08	8.5478E+08	9.0946E+08	1.0537E+09	1.1717E+09
I-134	3.8516E+07	3.8545E+07	3.8551E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07
I-135	2.8505E+08	3.1992E+08	3.4819E+08	3.7112E+08	3.8970E+08	4.0477E+08	4.1699E+08	4.2690E+08	4.4730E+08	4.5817E+08
Xe-133	2.0833E+07	2.8061E+07	3.6049E+07	4.4735E+07	5.4061E+07	6.3974E+07	7.4422E+07	8.5358E+07	1.2059E+08	1.5880E+08
Xe-135	1.5364E+08	1.9123E+08	2.2733E+08	2.6147E+08	2.9336E+08	3.2283E+08	3.4982E+08	3.7437E+08	4.3467E+08	4.7762E+08
Cs-134	5.7455E+07	7.0292E+07	8.3127E+07	9.5962E+07	1.0880E+08	1.2163E+08	1.3446E+08	1.4729E+08	1.8578E+08	2.2425E+08
Cs-136	1.5808E+07	1.9298E+07	2.2773E+07	2.6232E+07	2.9676E+07	3.3105E+07	3.6519E+07	3.9918E+07	5.0025E+07	5.9999E+07
Cs-137	3.5822E+07	4.3827E+07	5.1832E+07	5.9836E+07	6.7841E+07	7.5845E+07	8.3850E+07	9.1855E+07	1.1587E+08	1.3988E+08
Ba-139	3.8598E+06	3.8919E+06	3.9036E+06	3.9079E+06	3.9095E+06	3.9101E+06	3.9103E+06	3.9103E+06	3.9104E+06	3.9104E+06
Ba-140	2.9846E+07	3.6585E+07	4.3294E+07	4.9972E+07	5.6620E+07	6.3238E+07	6.9826E+07	7.6384E+07	9.5882E+07	1.1512E+08
La-140	2.4607E+06	3.5772E+06	4.8841E+06	6.3749E+06	8.0426E+06	9.8803E+06	1.1881E+07	1.4039E+07	2.1377E+07	2.9911E+07
La-141	1.1767E+05	1.2722E+05	1.3394E+05	1.3866E+05	1.4197E+05	1.4430E+05	1.4594E+05	1.4709E+05	1.4901E+05	1.4968E+05
La-142	4.0641E+04	4.1143E+04	4.1347E+04	4.1430E+04	4.1464E+04	4.1477E+04	4.1483E+04	4.1485E+04	4.1487E+04	4.1488E+04
Ce-141	6.9114E+05	8.4845E+05	1.0055E+06	1.1623E+06	1.3188E+06	1.4750E+06	1.6310E+06	1.7866E+06	2.2520E+06	2.7150E+06
Ce-143	6.0817E+05	7.3216E+05	8.5105E+05	9.6505E+05	1.0744E+06	1.1792E+06	1.2797E+06	1.3760E+06	1.6423E+06	1.8771E+06
Ce-144	5.5473E+05	6.8145E+05	8.0815E+05	9.3482E+05	1.0615E+06	1.1881E+06	1.3147E+06	1.4413E+06	1.8208E+06	2.2001E+06
Pr-143	2.6846E+05	3.3063E+05	3.9306E+05	4.5571E+05	5.1857E+05	5.8163E+05	6.4485E+05	7.0822E+05	8.9903E+05	1.0906E+06
Nd-147	1.1182E+05	1.3701E+05	1.6208E+05	1.8701E+05	2.1182E+05	2.3649E+05	2.6103E+05	2.8545E+05	3.5793E+05	4.2928E+05
Np-239	7.7798E+06	9.4437E+06	1.1067E+07	1.2652E+07	1.4197E+07	1.5706E+07	1.7178E+07	1.8614E+07	2.2719E+07	2.6532E+07
Pu-238	2.7722E+03	3.4059E+03	4.0395E+03	4.6732E+03	5.3069E+03	5.9406E+03	6.5742E+03	7.2079E+03	9.1090E+03	1.1010E+04
Pu-239	1.8537E+02	2.2777E+02	2.7018E+02	3.1260E+02	3.5503E+02	3.9747E+02	4.3992E+02	4.8239E+02	6.0983E+02	7.3734E+02
Pu-240	1.9880E+02	2.4424E+02	2.8968E+02	3.3512E+02	3.8056E+02	4.2600E+02	4.7144E+02	5.1688E+02	6.5320E+02	7.8952E+02
Pu-241	9.5418E+04	1.1723E+05	1.3903E+05	1.6084E+05	1.8265E+05	2.0446E+05	2.2627E+05	2.4807E+05	3.1349E+05	3.7891E+05
Am-241	5.8912E+01	7.2399E+01	8.5893E+01	9.9396E+01	1.1291E+02	1.2643E+02	1.3995E+02	1.5349E+02	1.9414E+02	2.3486E+02

Cm-242	1.4729E+04	1.8092E+04	2.1454E+04	2.4815E+04	2.8175E+04	3.1534E+04	3.4891E+04	3.8247E+04	4.8309E+04	5.8359E+04
Cm-244	1.6064E+03	1.9736E+03	2.3408E+03	2.7080E+03	3.0751E+03	3.4423E+03	3.8094E+03	4.1766E+03	5.2780E+03	6.3795E+03

	42.0000	48.0000	54.0000	60.0000	66.0000	72.0000	78.0000	84.0000	90.0000	96.0000
Co-58	5.4473E+04	6.2417E+04	7.0342E+04	7.8247E+04	8.6134E+04	9.4001E+04	1.0185E+05	1.0968E+05	1.1749E+05	1.2528E+05
Co-60	6.5751E+04	7.5429E+04	8.5106E+04	9.4782E+04	1.0446E+05	1.1413E+05	1.2381E+05	1.3348E+05	1.4315E+05	1.5282E+05
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	2.2774E+06	2.5992E+06	2.9179E+06	3.2337E+06	3.5466E+06	3.8566E+06	4.1637E+06	4.4680E+06	4.7695E+06	5.0682E+06
Sr-89	7.9465E+07	9.1009E+07	1.0251E+08	1.1398E+08	1.2541E+08	1.3679E+08	1.4814E+08	1.5945E+08	1.7072E+08	1.8195E+08
Sr-90	9.1373E+06	1.0483E+07	1.1828E+07	1.3173E+07	1.4518E+07	1.5863E+07	1.7209E+07	1.8554E+07	1.9899E+07	2.1244E+07
Sr-91	3.1954E+07	3.2572E+07	3.2971E+07	3.3228E+07	3.3394E+07	3.3502E+07	3.3571E+07	3.3616E+07	3.3644E+07	3.3663E+07
Sr-92	8.1356E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06
Y-90	1.8339E+06	2.3524E+06	2.9234E+06	3.5435E+06	4.2097E+06	4.9191E+06	5.6690E+06	6.4568E+06	7.2801E+06	8.1366E+06
Y-91	1.1735E+06	1.3558E+06	1.5382E+06	1.7205E+06	1.9024E+06	2.0841E+06	2.2652E+06	2.4460E+06	2.6262E+06	2.8059E+06
Y-92	8.4760E+06	8.4849E+06	8.4877E+06	8.4885E+06	8.4888E+06	8.4889E+06	8.4889E+06	8.4889E+06	8.4889E+06	8.4889E+06
Y-93	4.0238E+05	4.1130E+05	4.1721E+05	4.2113E+05	4.2372E+05	4.2544E+05	4.2658E+05	4.2733E+05	4.2783E+05	4.2816E+05
Zr-95	1.2782E+06	1.4644E+06	1.6502E+06	1.8354E+06	2.0201E+06	2.2043E+06	2.3880E+06	2.5713E+06	2.7540E+06	2.9362E+06
Zr-97	6.1910E+05	6.5047E+05	6.7500E+05	6.9418E+05	7.0917E+05	7.2089E+05	7.3006E+05	7.3723E+05	7.4283E+05	7.4721E+05
Nb-95	1.2969E+06	1.4877E+06	1.6785E+06	1.8693E+06	2.0601E+06	2.2508E+06	2.4414E+06	2.6320E+06	2.8226E+06	3.0131E+06
Mo-99	1.4657E+07	1.6333E+07	1.7907E+07	1.9384E+07	2.0772E+07	2.2074E+07	2.3297E+07	2.4446E+07	2.5524E+07	2.6536E+07
Tc-99m	1.4279E+07	1.5993E+07	1.7604E+07	1.9117E+07	2.0539E+07	2.1874E+07	2.3128E+07	2.4305E+07	2.5411E+07	2.6449E+07
Ru-103	1.4865E+07	1.7016E+07	1.9158E+07	2.1291E+07	2.3414E+07	2.5527E+07	2.7632E+07	2.9727E+07	3.1813E+07	3.3890E+07
Ru-105	1.3586E+06	1.3601E+06	1.3607E+06	1.3610E+06	1.3610E+06	1.3611E+06	1.3611E+06	1.3611E+06	1.3611E+06	1.3611E+06
Ru-106	6.2074E+06	7.1196E+06	8.0315E+06	8.9429E+06	9.8539E+06	1.0765E+07	1.1675E+07	1.2584E+07	1.3494E+07	1.4403E+07
Rh-105	7.4660E+06	8.1615E+06	8.7799E+06	9.3297E+06	9.8186E+06	1.0253E+07	1.0640E+07	1.0983E+07	1.1288E+07	1.1560E+07
Sb-127	1.7771E+07	1.9958E+07	2.2049E+07	2.4049E+07	2.5960E+07	2.7787E+07	2.9534E+07	3.1203E+07	3.2800E+07	3.4326E+07
Sb-129	7.8140E+06	7.8214E+06	7.8243E+06	7.8254E+06	7.8258E+06	7.8260E+06	7.8260E+06	7.8260E+06	7.8261E+06	7.8261E+06
Te-127	1.8915E+07	2.1385E+07	2.3770E+07	2.6072E+07	2.8292E+07	3.0435E+07	3.2502E+07	3.4496E+07	3.6422E+07	3.8281E+07
Te-127m	2.7746E+06	3.1833E+06	3.5920E+06	4.0006E+06	4.4091E+06	4.8175E+06	5.2258E+06	5.6339E+06	6.0419E+06	6.4496E+06
Te-129	1.5719E+07	1.6854E+07	1.7977E+07	1.9092E+07	2.0200E+07	2.1302E+07	2.2398E+07	2.3488E+07	2.4573E+07	2.5652E+07
Te-129m	9.0032E+06	1.0304E+07	1.1598E+07	1.2885E+07	1.4165E+07	1.5439E+07	1.6707E+07	1.7968E+07	1.9222E+07	2.0470E+07
Te-131m	1.7517E+07	1.8968E+07	2.0231E+07	2.1331E+07	2.2289E+07	2.3122E+07	2.3848E+07	2.4480E+07	2.5030E+07	2.5508E+07
Te-132	2.2802E+08	2.5517E+08	2.8091E+08	3.0532E+08	3.2846E+08	3.5041E+08	3.7122E+08	3.9095E+08	4.0966E+08	4.2740E+08
I-131	1.0795E+09	1.2250E+09	1.3675E+09	1.5069E+09	1.6434E+09	1.7769E+09	1.9077E+09	2.0356E+09	2.1609E+09	2.2834E+09
I-132	3.7024E+08	4.0264E+08	4.3337E+08	4.6250E+08	4.9013E+08	5.1633E+08	5.4116E+08	5.6472E+08	5.8705E+08	6.0822E+08
I-133	1.2684E+09	1.3476E+09	1.4124E+09	1.4654E+09	1.5089E+09	1.5444E+09	1.5736E+09	1.5974E+09	1.6169E+09	1.6329E+09
I-134	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07
I-135	4.6397E+08	4.6706E+08	4.6871E+08	4.6958E+08	4.7005E+08	4.7030E+08	4.7043E+08	4.7050E+08	4.7054E+08	4.7056E+08
Xe-133	1.9916E+08	2.4097E+08	2.8369E+08	3.2687E+08	3.7018E+08	4.1332E+08	4.5607E+08	4.9827E+08	5.3978E+08	5.8051E+08
Xe-135	5.0736E+08	5.2755E+08	5.4105E+08	5.4998E+08	5.5584E+08	5.5965E+08	5.6213E+08	5.6372E+08	5.6475E+08	5.6541E+08
Cs-134	2.6272E+08	3.0118E+08	3.3963E+08	3.7807E+08	4.1651E+08	4.5493E+08	4.9335E+08	5.3175E+08	5.7015E+08	6.0854E+08
Cs-136	6.9843E+07	7.9557E+07	8.9143E+07	9.8604E+07	1.0794E+08	1.1715E+08	1.2625E+08	1.3522E+08	1.4407E+08	1.5281E+08
Cs-137	1.6389E+08	1.8791E+08	2.1192E+08	2.3593E+08	2.5994E+08	2.8395E+08	3.0796E+08	3.3197E+08	3.5598E+08	3.7999E+08
Ba-139	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06
Ba-140	1.3409E+08	1.5281E+08	1.7127E+08	1.8949E+08	2.0746E+08	2.2519E+08	2.4267E+08	2.5992E+08	2.7694E+08	2.9373E+08
La-140	3.9499E+07	5.0010E+07	6.1331E+07	7.3355E+07	8.5990E+07	9.9151E+07	1.1276E+08	1.2676E+08	1.4108E+08	1.5566E+08
La-141	1.4991E+05	1.4999E+05	1.5002E+05	1.5003E+05	1.5003E+05	1.5003E+05	1.5003E+05	1.5003E+05	1.5003E+05	1.5003E+05
La-142	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04

Ce-141	3.1755E+06	3.6335E+06	4.0891E+06	4.5422E+06	4.9930E+06	5.4413E+06	5.8873E+06	6.3309E+06	6.7722E+06	7.2111E+06
Ce-143	2.0840E+06	2.2665E+06	2.4273E+06	2.5691E+06	2.6941E+06	2.8043E+06	2.9014E+06	2.9871E+06	3.0626E+06	3.1292E+06
Ce-144	2.5792E+06	2.9581E+06	3.3367E+06	3.7151E+06	4.0933E+06	4.4713E+06	4.8490E+06	5.2264E+06	5.6037E+06	5.9807E+06
Pr-143	1.2825E+06	1.4745E+06	1.6662E+06	1.8574E+06	2.0478E+06	2.2374E+06	2.4258E+06	2.6130E+06	2.7989E+06	2.9833E+06
Nd-147	4.9951E+05	5.6864E+05	6.3668E+05	7.0367E+05	7.6960E+05	8.3450E+05	8.9838E+05	9.6127E+05	1.0232E+06	1.0841E+06
Np-239	3.0075E+07	3.3367E+07	3.6425E+07	3.9266E+07	4.1906E+07	4.4359E+07	4.6637E+07	4.8754E+07	5.0721E+07	5.2548E+07
Pu-238	1.2911E+04	1.4813E+04	1.6714E+04	1.8615E+04	2.0517E+04	2.2418E+04	2.4319E+04	2.6221E+04	2.8122E+04	3.0024E+04
Pu-239	8.6493E+02	9.9259E+02	1.1203E+03	1.2481E+03	1.3759E+03	1.5038E+03	1.6317E+03	1.7597E+03	1.8877E+03	2.0158E+03
Pu-240	9.2584E+02	1.0622E+03	1.1985E+03	1.3348E+03	1.4711E+03	1.6074E+03	1.7438E+03	1.8801E+03	2.0164E+03	2.1527E+03
Pu-241	4.4433E+05	5.0975E+05	5.7516E+05	6.4057E+05	7.0597E+05	7.7138E+05	8.3678E+05	9.0218E+05	9.6758E+05	1.0330E+06
Am-241	2.7566E+02	3.1653E+02	3.5747E+02	3.9848E+02	4.3956E+02	4.8071E+02	5.2194E+02	5.6324E+02	6.0461E+02	6.4605E+02
Cm-242	6.8400E+04	7.8429E+04	8.8448E+04	9.8456E+04	1.0845E+05	1.1844E+05	1.2842E+05	1.3838E+05	1.4834E+05	1.5828E+05
Cm-244	7.4809E+03	8.5822E+03	9.6835E+03	1.0785E+04	1.1886E+04	1.2987E+04	1.4089E+04	1.5190E+04	1.6291E+04	1.7392E+04

	144.0000	192.0000	240.0000	288.0000	336.0000	384.0000	432.0000	480.0000	528.0000	576.0000
Co-58	1.8692E+05	2.4736E+05	3.0664E+05	3.6477E+05	4.2176E+05	4.7765E+05	5.3246E+05	5.8621E+05	6.3892E+05	6.9060E+05
Co-60	2.3016E+05	3.0744E+05	3.8466E+05	4.6183E+05	5.3894E+05	6.1600E+05	6.9300E+05	7.6995E+05	8.4684E+05	9.2367E+05
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	7.3615E+06	9.4906E+06	1.1467E+07	1.3302E+07	1.5006E+07	1.6588E+07	1.8056E+07	1.9420E+07	2.0685E+07	2.1861E+07
Sr-89	2.7044E+08	3.5653E+08	4.4030E+08	5.2179E+08	6.0108E+08	6.7822E+08	7.5327E+08	8.2628E+08	8.9732E+08	9.6644E+08
Sr-90	3.2004E+07	4.2762E+07	5.3519E+07	6.4275E+07	7.5029E+07	8.5782E+07	9.6534E+07	1.0728E+08	1.1803E+08	1.2878E+08
Sr-91	3.3723E+07	3.3725E+07	3.3725E+07	3.3725E+07	3.3725E+07	3.3725E+07	3.3725E+07	3.3725E+07	3.3725E+07	3.3725E+07
Sr-92	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06	8.1358E+06
Y-90	1.5896E+07	2.4895E+07	3.4631E+07	4.4804E+07	5.5237E+07	6.5823E+07	7.6501E+07	8.7232E+07	9.7994E+07	1.0877E+08
Y-91	4.2250E+06	5.6111E+06	6.9647E+06	8.2866E+06	9.5776E+06	1.0838E+07	1.2069E+07	1.3272E+07	1.4446E+07	1.5593E+07
Y-92	8.4889E+06	8.4889E+06	8.4889E+06	8.4889E+06	8.4889E+06	8.4889E+06	8.4889E+06	8.4889E+06	8.4889E+06	8.4889E+06
Y-93	4.2925E+05	4.2929E+05	4.2930E+05	4.2930E+05	4.2930E+05	4.2930E+05	4.2930E+05	4.2930E+05	4.2930E+05	4.2930E+05
Zr-95	4.3765E+06	5.7859E+06	7.1651E+06	8.5148E+06	9.8355E+06	1.1128E+07	1.2393E+07	1.3630E+07	1.4841E+07	1.6026E+07
Zr-97	7.6473E+05	7.6718E+05	7.6752E+05	7.6757E+05	7.6758E+05	7.6758E+05	7.6758E+05	7.6758E+05	7.6758E+05	7.6758E+05
Nb-95	4.5352E+06	6.0530E+06	7.5655E+06	9.0718E+06	1.0571E+07	1.2062E+07	1.3545E+07	1.5018E+07	1.6481E+07	1.7933E+07
Mo-99	3.2827E+07	3.6627E+07	3.8923E+07	4.0309E+07	4.1147E+07	4.1653E+07	4.1958E+07	4.2143E+07	4.2255E+07	4.2322E+07
Tc-99m	3.2899E+07	3.6795E+07	3.9148E+07	4.0569E+07	4.1428E+07	4.1947E+07	4.2260E+07	4.2449E+07	4.2564E+07	4.2633E+07
Ru-103	5.0179E+07	6.5904E+07	8.1084E+07	9.5737E+07	1.0988E+08	1.2354E+08	1.3672E+08	1.4944E+08	1.6172E+08	1.7358E+08
Ru-105	1.3611E+06	1.3611E+06	1.3611E+06	1.3611E+06	1.3611E+06	1.3611E+06	1.3611E+06	1.3611E+06	1.3611E+06	1.3611E+06
Ru-106	2.1658E+07	2.8886E+07	3.6087E+07	4.3262E+07	5.0409E+07	5.7529E+07	6.4623E+07	7.1689E+07	7.8730E+07	8.5744E+07
Rh-105	1.2981E+07	1.3536E+07	1.3752E+07	1.3837E+07	1.3870E+07	1.3883E+07	1.3888E+07	1.3890E+07	1.3890E+07	1.3891E+07
Sb-127	4.4455E+07	5.1522E+07	5.6452E+07	5.9891E+07	6.2290E+07	6.3964E+07	6.5131E+07	6.5946E+07	6.6514E+07	6.6911E+07
Sb-129	7.8261E+06	7.8261E+06	7.8261E+06	7.8261E+06	7.8261E+06	7.8261E+06	7.8261E+06	7.8261E+06	7.8261E+06	7.8261E+06
Te-127	5.1178E+07	6.1158E+07	6.9089E+07	7.5579E+07	8.1050E+07	8.5800E+07	9.0034E+07	9.3897E+07	9.7489E+07	1.0088E+08
Te-127m	9.7014E+06	1.2931E+07	1.6134E+07	1.9306E+07	2.2444E+07	2.5547E+07	2.8614E+07	3.1645E+07	3.4639E+07	3.7596E+07
Te-129	3.4089E+07	4.2184E+07	4.9953E+07	5.7407E+07	6.4561E+07	7.1425E+07	7.8011E+07	8.4332E+07	9.0397E+07	9.6217E+07
Te-129m	3.0227E+07	3.9589E+07	4.8573E+07	5.7194E+07	6.5467E+07	7.3405E+07	8.1023E+07	8.8332E+07	9.5346E+07	1.0208E+08
Te-131m	2.7879E+07	2.8661E+07	2.8919E+07	2.9004E+07	2.9032E+07	2.9041E+07	2.9044E+07	2.9045E+07	2.9045E+07	2.9045E+07
Te-132	5.4162E+08	6.1626E+08	6.6503E+08	6.9690E+08	7.1773E+08	7.3134E+08	7.4023E+08	7.4604E+08	7.4984E+08	7.5232E+08
I-131	3.1768E+09	3.9289E+09	4.5619E+09	5.0947E+09	5.5431E+09	5.9205E+09	6.2381E+09	6.5054E+09	6.7304E+09	6.9197E+09
I-132	7.4456E+08	8.3364E+08	8.9186E+08	9.2990E+08	9.5476E+08	9.7101E+08	9.8162E+08	9.8856E+08	9.9309E+08	9.9605E+08
I-133	1.7021E+09	1.7161E+09	1.7189E+09	1.7195E+09	1.7196E+09	1.7197E+09	1.7197E+09	1.7197E+09	1.7197E+09	1.7197E+09
I-134	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07	3.8552E+07

I-135	4.7062E+08	4.7062E+08	4.7062E+08	4.7062E+08	4.7062E+08	4.7062E+08	4.7062E+08	4.7062E+08	4.7062E+08	4.7062E+08
Xe-133	8.7177E+08	1.1029E+09	1.2819E+09	1.4196E+09	1.5254E+09	1.6067E+09	1.6690E+09	1.7169E+09	1.7537E+09	1.7819E+09
Xe-135	5.6752E+08	5.6758E+08	5.6758E+08	5.6758E+08	5.6758E+08	5.6758E+08	5.6758E+08	5.6758E+08	5.6758E+08	5.6758E+08
Cs-134	9.1533E+08	1.2216E+09	1.5272E+09	1.8323E+09	2.1369E+09	2.4408E+09	2.7443E+09	3.0471E+09	3.3494E+09	3.6512E+09
Cs-136	2.1877E+08	2.7811E+08	3.3148E+08	3.7950E+08	4.2269E+08	4.6155E+08	4.9651E+08	5.2795E+08	5.5624E+08	5.8169E+08
Cs-137	5.7205E+08	7.6409E+08	9.5610E+08	1.1481E+09	1.3401E+09	1.5320E+09	1.7239E+09	1.9158E+09	2.1077E+09	2.2995E+09
Ba-139	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06	3.9104E+06
Ba-140	4.2025E+08	5.3372E+08	6.3549E+08	7.2677E+08	8.0864E+08	8.8207E+08	9.4792E+08	1.0070E+09	1.0600E+09	1.1075E+09
La-140	2.7581E+08	3.9588E+08	5.0897E+08	6.1275E+08	7.0687E+08	7.9173E+08	8.6804E+08	9.3657E+08	9.9807E+08	1.0533E+09
La-141	1.5003E+05	1.5003E+05	1.5003E+05	1.5003E+05	1.5003E+05	1.5003E+05	1.5003E+05	1.5003E+05	1.5003E+05	1.5003E+05
La-142	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04	4.1488E+04
Ce-141	1.0640E+07	1.3925E+07	1.7074E+07	2.0091E+07	2.2981E+07	2.5752E+07	2.8406E+07	3.0950E+07	3.3387E+07	3.5723E+07
Ce-143	3.4697E+06	3.5940E+06	3.6393E+06	3.6559E+06	3.6619E+06	3.6641E+06	3.6649E+06	3.6652E+06	3.6653E+06	3.6653E+06
Ce-144	8.9886E+06	1.1982E+07	1.4961E+07	1.7925E+07	2.0875E+07	2.3810E+07	2.6731E+07	2.9638E+07	3.2531E+07	3.5410E+07
Pr-143	4.3963E+06	5.6926E+06	6.8705E+06	7.9367E+06	8.9002E+06	9.7705E+06	1.0556E+07	1.1266E+07	1.1907E+07	1.2485E+07
Nd-147	1.5390E+06	1.9400E+06	2.2934E+06	2.6048E+06	2.8794E+06	3.1214E+06	3.3346E+06	3.5226E+06	3.6883E+06	3.8343E+06
Np-239	6.3495E+07	6.9572E+07	7.2945E+07	7.4817E+07	7.5856E+07	7.6433E+07	7.6753E+07	7.6931E+07	7.7029E+07	7.7084E+07
Pu-238	4.5238E+04	6.0455E+04	7.5675E+04	9.0897E+04	1.0612E+05	1.2135E+05	1.3658E+05	1.5181E+05	1.6705E+05	1.8229E+05
Pu-239	3.0411E+03	4.0678E+03	5.0952E+03	6.1230E+03	7.1511E+03	8.1792E+03	9.2075E+03	1.0236E+04	1.1264E+04	1.2292E+04
Pu-240	3.2433E+03	4.3339E+03	5.4245E+03	6.5152E+03	7.6058E+03	8.6964E+03	9.7870E+03	1.0878E+04	1.1968E+04	1.3059E+04
Pu-241	1.5561E+06	2.0790E+06	2.6019E+06	3.1246E+06	3.6471E+06	4.1695E+06	4.6918E+06	5.2139E+06	5.7359E+06	6.2577E+06
Am-241	9.8016E+02	1.3189E+03	1.6622E+03	2.0100E+03	2.3625E+03	2.7196E+03	3.0812E+03	3.4474E+03	3.8182E+03	4.1936E+03
Cm-242	2.3746E+05	3.1596E+05	3.9380E+05	4.7097E+05	5.4750E+05	6.2337E+05	6.9861E+05	7.7320E+05	8.4716E+05	9.2050E+05
Cm-244	2.6200E+04	3.5006E+04	4.3810E+04	5.2613E+04	6.1414E+04	7.0212E+04	7.9009E+04	8.7804E+04	9.6598E+04	1.0539E+05
	624.0000	672.0000	720.0000	no data	no data	no data	no data	no data	no data	no data
Co-58	7.4128E+05	7.9098E+05	8.3971E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	1.0005E+06	1.0772E+06	1.1539E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	2.2952E+07	2.3964E+07	2.4905E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	1.0337E+09	1.0991E+09	1.1628E+09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	1.3953E+08	1.5027E+08	1.6101E+08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	3.3725E+07	3.3725E+07	3.3725E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	8.1358E+06	8.1358E+06	8.1358E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	1.1956E+08	1.3036E+08	1.4116E+08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	1.6713E+07	1.7806E+07	1.8874E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	8.4889E+06	8.4889E+06	8.4889E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	4.2930E+05	4.2930E+05	4.2930E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	1.7186E+07	1.8321E+07	1.9431E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	7.6758E+05	7.6758E+05	7.6758E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	1.9374E+07	2.0803E+07	2.2220E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	4.2363E+07	4.2387E+07	4.2402E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	4.2674E+07	4.2700E+07	4.2715E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	1.8503E+08	1.9608E+08	2.0674E+08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	1.3611E+06	1.3611E+06	1.3611E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	9.2731E+07	9.9693E+07	1.0663E+08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	1.3891E+07	1.3891E+07	1.3891E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	6.7187E+07	6.7380E+07	6.7515E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Sb-129	7.8261E+06	7.8261E+06	7.8261E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	1.0412E+08	1.0725E+08	1.1028E+08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	4.0516E+07	4.3400E+07	4.6248E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	1.0180E+08	1.0716E+08	1.1230E+08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	1.0853E+08	1.1473E+08	1.2068E+08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	2.9045E+07	2.9045E+07	2.9046E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	7.5395E+08	7.5501E+08	7.5570E+08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	7.0791E+09	7.2132E+09	7.3261E+09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-132	9.9799E+08	9.9926E+08	1.0001E+09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-133	1.7197E+09	1.7197E+09	1.7197E+09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-134	3.8552E+07	3.8552E+07	3.8552E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-135	4.7062E+08	4.7062E+08	4.7062E+08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-133	1.8036E+09	1.8202E+09	1.8330E+09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	5.6758E+08	5.6758E+08	5.6758E+08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	3.9524E+09	4.2530E+09	4.5531E+09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	6.0458E+08	6.2518E+08	6.4370E+08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	2.4913E+09	2.6831E+09	2.8749E+09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	3.9104E+06	3.9104E+06	3.9104E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	1.1501E+09	1.1883E+09	1.2226E+09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	1.1027E+09	1.1471E+09	1.1870E+09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	1.5003E+05	1.5003E+05	1.5003E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	4.1488E+04	4.1488E+04	4.1488E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	3.7961E+07	4.0106E+07	4.2161E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	3.6654E+06	3.6654E+06	3.6654E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	3.8275E+07	4.1126E+07	4.3962E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	1.3007E+07	1.3478E+07	1.3904E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	3.9630E+06	4.0765E+06	4.1765E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	7.7115E+07	7.7131E+07	7.7141E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	1.9753E+05	2.1277E+05	2.2802E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	1.3321E+04	1.4349E+04	1.5377E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	1.4149E+04	1.5240E+04	1.6331E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	6.7795E+06	7.3011E+06	7.8225E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	4.5735E+03	4.9581E+03	5.3472E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	9.9321E+05	1.0653E+06	1.1368E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	1.1418E+05	1.2297E+05	1.3175E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

	A	B	C	D	E	F	G	H	I	J	K
1	INTEGRATED SOURCE	CURIE-HOURS									
2		0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.5	3
3	Co-58	0.00E+00	0.00E+00	2.81E+01	1.12E+02	2.53E+02	4.49E+02	7.02E+02	1.01E+03	1.68E+03	2.36E+03
4	Co-60	0.00E+00	0.00E+00	3.36E+01	1.35E+02	3.03E+02	5.38E+02	8.41E+02	1.21E+03	2.02E+03	2.82E+03
5	Kr-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
6	Kr-85m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7	Kr-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	Kr-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	Rb-86	7.18E+02	2.87E+03	6.70E+03	1.24E+04	2.01E+04	2.97E+04	4.11E+04	5.45E+04	8.31E+04	1.12E+05
10	Sr-89	0.00E+00	0.00E+00	4.11E+04	1.64E+05	3.70E+05	6.58E+05	1.03E+06	1.48E+06	2.47E+06	3.45E+06
11	Sr-90	0.00E+00	0.00E+00	4.67E+03	1.87E+04	4.20E+04	7.47E+04	1.17E+05	1.68E+05	2.80E+05	3.92E+05
12	Sr-91	0.00E+00	0.00E+00	5.29E+04	2.10E+05	4.67E+05	8.20E+05	1.27E+06	1.80E+06	2.94E+06	4.04E+06
13	Sr-92	0.00E+00	0.00E+00	4.87E+04	1.89E+05	4.09E+05	6.99E+05	1.05E+06	1.45E+06	2.25E+06	2.95E+06
14	Y-90	0.00E+00	0.00E+00	5.66E+01	2.39E+02	5.72E+02	1.08E+03	1.79E+03	2.72E+03	5.12E+03	8.12E+03
15	Y-91	0.00E+00	0.00E+00	5.09E+02	2.04E+03	4.59E+03	8.17E+03	1.28E+04	1.84E+04	3.09E+04	4.34E+04
16	Y-92	0.00E+00	0.00E+00	2.21E+03	1.09E+04	2.99E+04	6.21E+04	1.10E+05	1.76E+05	3.56E+05	5.89E+05
17	Y-93	0.00E+00	0.00E+00	6.32E+02	2.51E+03	5.58E+03	9.81E+03	1.52E+04	2.16E+04	3.53E+04	4.85E+04
18	Zr-95	0.00E+00	0.00E+00	6.60E+02	2.64E+03	5.94E+03	1.06E+04	1.65E+04	2.37E+04	3.96E+04	5.54E+04
19	Zr-97	0.00E+00	0.00E+00	6.64E+02	2.64E+03	5.91E+03	1.04E+04	1.62E+04	2.32E+04	3.81E+04	5.28E+04
20	Nb-95	0.00E+00	0.00E+00	6.63E+02	2.65E+03	5.97E+03	1.06E+04	1.66E+04	2.39E+04	3.98E+04	5.57E+04
21	Mo-99	0.00E+00	0.00E+00	9.26E+03	3.70E+04	8.31E+04	1.47E+05	2.30E+05	3.31E+05	5.49E+05	7.67E+05
22	Tc-99m	0.00E+00	0.00E+00	8.18E+03	3.27E+04	7.36E+04	1.31E+05	2.04E+05	2.94E+05	4.90E+05	6.86E+05
23	Ru-103	0.00E+00	0.00E+00	7.72E+03	3.09E+04	6.94E+04	1.23E+05	1.93E+05	2.78E+05	4.63E+05	6.48E+05
24	Ru-105	0.00E+00	0.00E+00	4.75E+03	1.86E+04	4.10E+04	7.11E+04	1.08E+05	1.52E+05	2.42E+05	3.26E+05
25	Ru-106	0.00E+00	0.00E+00	3.18E+03	1.27E+04	2.86E+04	5.09E+04	7.95E+04	1.14E+05	1.91E+05	2.67E+05
26	Rh-105	0.00E+00	0.00E+00	5.06E+03	2.02E+04	4.55E+04	8.08E+04	1.26E+05	1.82E+05	3.02E+05	4.23E+05
27	Sb-127	0.00E+00	0.00E+00	1.06E+04	4.23E+04	9.50E+04	1.69E+05	2.63E+05	3.79E+05	6.30E+05	8.80E+05
28	Sb-129	0.00E+00	0.00E+00	2.81E+04	1.10E+05	2.42E+05	4.20E+05	6.40E+05	8.98E+05	1.43E+06	1.92E+06
29	Te-127	0.00E+00	0.00E+00	1.05E+04	4.21E+04	9.47E+04	1.68E+05	2.63E+05	3.78E+05	6.30E+05	8.81E+05
30	Te-127m	0.00E+00	0.00E+00	1.42E+03	5.67E+03	1.28E+04	2.27E+04	3.54E+04	5.10E+04	8.50E+04	1.19E+05
31	Te-129	0.00E+00	0.00E+00	2.96E+04	1.17E+05	2.60E+05	4.55E+05	6.99E+05	9.90E+05	1.60E+06	2.18E+06
32	Te-129m	0.00E+00	0.00E+00	4.66E+03	1.86E+04	4.19E+04	7.45E+04	1.16E+05	1.68E+05	2.80E+05	3.91E+05
33	Te-131m	0.00E+00	0.00E+00	1.40E+04	5.57E+04	1.25E+05	2.21E+05	3.45E+05	4.94E+05	8.18E+05	1.14E+06
34	Te-132	0.00E+00	0.00E+00	1.39E+05	5.57E+05	1.25E+06	2.22E+06	3.47E+06	4.99E+06	8.29E+06	1.16E+07
35	I-131	2.96E+05	1.18E+06	2.86E+06	5.52E+06	9.16E+06	1.38E+07	1.94E+07	2.59E+07	4.01E+07	5.41E+07
36	I-132	4.07E+05	1.60E+06	3.79E+06	7.21E+06	1.18E+07	1.74E+07	2.41E+07	3.17E+07	4.71E+07	6.07E+07
37	I-133	6.07E+05	2.42E+06	5.82E+06	1.12E+07	1.84E+07	2.76E+07	3.86E+07	5.15E+07	7.87E+07	1.06E+08
38	I-134	5.58E+05	2.03E+06	4.32E+06	7.35E+06	1.08E+07	1.43E+07	1.79E+07	2.13E+07	2.69E+07	3.07E+07
39	I-135	5.58E+05	2.20E+06	5.23E+06	9.92E+06	1.62E+07	2.39E+07	3.31E+07	4.36E+07	6.53E+07	8.59E+07
40	Xe-133	8.14E+02	4.87E+03	2.57E+04	8.17E+04	1.85E+05	3.49E+05	5.85E+05	9.05E+05	1.67E+06	2.51E+06
41	Xe-135	9.10E+03	5.38E+04	2.79E+05	8.75E+05	1.96E+06	3.65E+06	6.03E+06	9.22E+06	1.66E+07	2.45E+07
42	Cs-134	8.03E+04	3.21E+05	7.49E+05	1.39E+06	2.25E+06	3.32E+06	4.60E+06	6.10E+06	9.31E+06	1.25E+07
43	Cs-136	2.23E+04	8.93E+04	2.08E+05	3.87E+05	6.25E+05	9.22E+05	1.28E+06	1.69E+06	2.58E+06	3.47E+06
44	Cs-137	5.00E+04	2.00E+05	4.67E+05	8.67E+05	1.40E+06	2.07E+06	2.87E+06	3.80E+06	5.80E+06	7.80E+06
45	Ba-139	0.00E+00	0.00E+00	5.13E+04	1.93E+05	4.03E+05	6.63E+05	9.59E+05	1.28E+06	1.86E+06	2.31E+06
46	Ba-140	0.00E+00	0.00E+00	7.18E+04	2.87E+05	6.46E+05	1.15E+06	1.79E+06	2.58E+06	4.30E+06	6.02E+06
47	La-140	0.00E+00	0.00E+00	9.46E+02	4.09E+03	1.00E+04	1.94E+04	3.27E+04	5.07E+04	9.87E+04	1.61E+05
48	La-141	0.00E+00	0.00E+00	5.98E+02	2.34E+03	5.12E+03	8.86E+03	1.35E+04	1.88E+04	2.99E+04	3.99E+04
49	La-142	0.00E+00	0.00E+00	4.76E+02	1.80E+03	3.79E+03	6.29E+03	9.16E+03	1.23E+04	1.82E+04	2.28E+04
50	Ce-141	0.00E+00	0.00E+00	1.65E+03	6.60E+03	1.49E+04	2.64E+04	4.13E+04	5.94E+04	9.90E+04	1.39E+05
51	Ce-143	0.00E+00	0.00E+00	1.60E+03	6.39E+03	1.43E+04	2.54E+04	3.95E+04	5.67E+04	9.40E+04	1.31E+05
52	Ce-144	0.00E+00	0.00E+00	1.32E+03	5.29E+03	1.19E+04	2.11E+04	3.30E+04	4.76E+04	7.93E+04	1.11E+05
53	Pr-143	0.00E+00	0.00E+00	6.31E+02	2.53E+03	5.69E+03	1.01E+04	1.58E+04	2.28E+04	3.80E+04	5.32E+04
54	Nd-147	0.00E+00	0.00E+00	2.70E+02	1.08E+03	2.43E+03	4.31E+03	6.73E+03	9.69E+03	1.61E+04	2.26E+04
55	Np-239	0.00E+00	0.00E+00	1.97E+04	7.85E+04	1.76E+05	3.13E+05	4.88E+05	7.01E+05	1.16E+06	1.62E+06
56	Pu-238	0.00E+00	0.00E+00	6.60E+00	2.64E+01	5.94E+01	1.06E+02	1.65E+02	2.38E+02	3.96E+02	5.54E+02

	A	B	C	D	E	F	G	H	I	J	K
57	Pu-239	0.00E+00	0.00E+00	4.41E-01	1.76E+00	3.97E+00	7.06E+00	1.10E+01	1.59E+01	2.65E+01	3.71E+01
58	Pu-240	0.00E+00	0.00E+00	4.73E-01	1.89E+00	4.26E+00	7.57E+00	1.18E+01	1.70E+01	2.84E+01	3.98E+01
59	Pu-241	0.00E+00	0.00E+00	2.27E+02	9.09E+02	2.04E+03	3.64E+03	5.68E+03	8.18E+03	1.36E+04	1.91E+04
60	Am-241	0.00E+00	0.00E+00	1.40E-01	5.60E-01	1.26E+00	2.24E+00	3.50E+00	5.04E+00	8.41E+00	1.18E+01
61	Cm-242	0.00E+00	0.00E+00	3.51E+01	1.40E+02	3.16E+02	5.62E+02	8.77E+02	1.26E+03	2.11E+03	2.95E+03
62	Cm-244	0.00E+00	0.00E+00	3.82E+00	1.53E+01	3.44E+01	6.12E+01	9.56E+01	1.38E+02	2.30E+02	3.21E+02
63											
64		3.5	4	4.5	5	5.5	6	6.5	7	7.5	8
65	Co-58	3.03E+03	3.70E+03	4.38E+03	5.05E+03	5.72E+03	6.40E+03	7.07E+03	7.74E+03	8.41E+03	9.09E+03
66	Co-60	3.63E+03	4.44E+03	5.25E+03	6.05E+03	6.86E+03	7.67E+03	8.47E+03	9.28E+03	1.01E+04	1.09E+04
67	Kr-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
68	Kr-85m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
69	Kr-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
70	Kr-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
71	Rb-86	1.40E+05	1.69E+05	1.98E+05	2.26E+05	2.55E+05	2.83E+05	3.12E+05	3.40E+05	3.68E+05	3.97E+05
72	Sr-89	4.44E+06	5.42E+06	6.41E+06	7.39E+06	8.37E+06	9.36E+06	1.03E+07	1.13E+07	1.23E+07	1.33E+07
73	Sr-90	5.05E+05	6.17E+05	7.29E+05	8.41E+05	9.53E+05	1.07E+06	1.18E+06	1.29E+06	1.40E+06	1.51E+06
74	Sr-91	5.10E+06	6.12E+06	7.10E+06	8.05E+06	8.96E+06	9.84E+06	1.07E+07	1.15E+07	1.23E+07	1.31E+07
75	Sr-92	3.57E+06	4.11E+06	4.59E+06	5.01E+06	5.38E+06	5.71E+06	6.00E+06	6.25E+06	6.47E+06	6.67E+06
76	Y-90	1.17E+04	1.59E+04	2.06E+04	2.60E+04	3.19E+04	3.84E+04	4.54E+04	5.30E+04	6.12E+04	7.00E+04
77	Y-91	5.60E+04	6.88E+04	8.16E+04	9.45E+04	1.08E+05	1.21E+05	1.34E+05	1.47E+05	1.61E+05	1.74E+05
78	Y-92	8.63E+05	1.17E+06	1.49E+06	1.82E+06	2.17E+06	2.51E+06	2.85E+06	3.18E+06	3.50E+06	3.82E+06
79	Y-93	6.13E+04	7.36E+04	8.56E+04	9.71E+04	1.08E+05	1.19E+05	1.29E+05	1.39E+05	1.49E+05	1.59E+05
80	Zr-95	7.12E+04	8.70E+04	1.03E+05	1.19E+05	1.34E+05	1.50E+05	1.66E+05	1.82E+05	1.98E+05	2.13E+05
81	Zr-97	6.72E+04	8.13E+04	9.51E+04	1.09E+05	1.22E+05	1.35E+05	1.48E+05	1.60E+05	1.72E+05	1.84E+05
82	Nb-95	7.16E+04	8.75E+04	1.03E+05	1.19E+05	1.35E+05	1.51E+05	1.67E+05	1.83E+05	1.99E+05	2.15E+05
83	Mo-99	9.83E+05	1.20E+06	1.41E+06	1.63E+06	1.84E+06	2.05E+06	2.26E+06	2.47E+06	2.67E+06	2.88E+06
84	Tc-99m	8.82E+05	1.08E+06	1.27E+06	1.47E+06	1.66E+06	1.86E+06	2.05E+06	2.24E+06	2.43E+06	2.63E+06
85	Ru-103	8.32E+05	1.02E+06	1.20E+06	1.39E+06	1.57E+06	1.76E+06	1.94E+06	2.12E+06	2.31E+06	2.49E+06
86	Ru-105	4.03E+05	4.75E+05	5.41E+05	6.02E+05	6.59E+05	7.11E+05	7.59E+05	8.04E+05	8.45E+05	8.84E+05
87	Ru-106	3.43E+05	4.20E+05	4.96E+05	5.72E+05	6.48E+05	7.25E+05	8.01E+05	8.77E+05	9.53E+05	1.03E+06
88	Rh-105	5.43E+05	6.63E+05	7.82E+05	9.00E+05	1.02E+06	1.14E+06	1.25E+06	1.37E+06	1.48E+06	1.60E+06
89	Sb-127	1.13E+06	1.38E+06	1.63E+06	1.87E+06	2.12E+06	2.36E+06	2.61E+06	2.85E+06	3.09E+06	3.33E+06
90	Sb-129	2.37E+06	2.79E+06	3.18E+06	3.53E+06	3.86E+06	4.16E+06	4.44E+06	4.70E+06	4.94E+06	5.16E+06
91	Te-127	1.13E+06	1.38E+06	1.63E+06	1.88E+06	2.13E+06	2.38E+06	2.63E+06	2.87E+06	3.12E+06	3.37E+06
92	Te-127m	1.53E+05	1.87E+05	2.21E+05	2.55E+05	2.89E+05	3.23E+05	3.57E+05	3.91E+05	4.25E+05	4.59E+05
93	Te-129	2.72E+06	3.23E+06	3.71E+06	4.16E+06	4.59E+06	4.99E+06	5.36E+06	5.71E+06	6.04E+06	6.36E+06
94	Te-129m	5.03E+05	6.15E+05	7.27E+05	8.38E+05	9.50E+05	1.06E+06	1.17E+06	1.29E+06	1.40E+06	1.51E+06
95	Te-131m	1.46E+06	1.77E+06	2.08E+06	2.38E+06	2.69E+06	2.98E+06	3.28E+06	3.57E+06	3.86E+06	4.15E+06
96	Te-132	1.49E+07	1.81E+07	2.14E+07	2.46E+07	2.78E+07	3.10E+07	3.42E+07	3.74E+07	4.05E+07	4.37E+07
97	I-131	6.82E+07	8.22E+07	9.63E+07	1.10E+08	1.24E+08	1.38E+08	1.52E+08	1.66E+08	1.80E+08	1.94E+08
98	I-132	7.30E+07	8.39E+07	9.38E+07	1.03E+08	1.11E+08	1.18E+08	1.25E+08	1.32E+08	1.38E+08	1.43E+08
99	I-133	1.32E+08	1.58E+08	1.83E+08	2.09E+08	2.33E+08	2.57E+08	2.81E+08	3.05E+08	3.28E+08	3.51E+08
100	I-134	3.33E+07	3.50E+07	3.61E+07	3.69E+07	3.74E+07	3.78E+07	3.80E+07	3.82E+07	3.83E+07	3.84E+07
101	I-135	1.05E+08	1.24E+08	1.42E+08	1.58E+08	1.74E+08	1.89E+08	2.03E+08	2.17E+08	2.30E+08	2.42E+08
102	Xe-133	3.41E+06	4.39E+06	5.42E+06	6.53E+06	7.69E+06	8.92E+06	1.02E+07	1.16E+07	1.30E+07	1.44E+07
103	Xe-135	3.26E+07	4.11E+07	4.98E+07	5.88E+07	6.79E+07	7.72E+07	8.66E+07	9.61E+07	1.06E+08	1.15E+08
104	Cs-134	1.57E+07	1.89E+07	2.22E+07	2.54E+07	2.86E+07	3.18E+07	3.50E+07	3.82E+07	4.14E+07	4.46E+07
105	Cs-136	4.36E+06	5.25E+06	6.13E+06	7.02E+06	7.90E+06	8.78E+06	9.66E+06	1.05E+07	1.14E+07	1.23E+07
106	Cs-137	9.81E+06	1.18E+07	1.38E+07	1.58E+07	1.78E+07	1.98E+07	2.18E+07	2.38E+07	2.58E+07	2.78E+07
107	Ba-139	2.67E+06	2.94E+06	3.15E+06	3.32E+06	3.45E+06	3.55E+06	3.63E+06	3.69E+06	3.74E+06	3.77E+06
108	Ba-140	7.73E+06	9.44E+06	1.12E+07	1.29E+07	1.46E+07	1.63E+07	1.80E+07	1.97E+07	2.14E+07	2.31E+07
109	La-140	2.38E+05	3.28E+05	4.33E+05	5.51E+05	6.83E+05	8.28E+05	9.87E+05	1.16E+06	1.34E+06	1.54E+06
110	La-141	4.92E+04	5.76E+04	6.54E+04	7.25E+04	7.90E+04	8.49E+04	9.03E+04	9.53E+04	9.99E+04	1.04E+05
111	La-142	2.66E+04	2.95E+04	3.19E+04	3.38E+04	3.53E+04	3.66E+04	3.75E+04	3.83E+04	3.89E+04	3.94E+04
112	Ce-141	1.78E+05	2.18E+05	2.57E+05	2.97E+05	3.36E+05	3.76E+05	4.15E+05	4.55E+05	4.94E+05	5.34E+05

	A	B	C	D	E	F	G	H	I	J	K
113	Ce-143	1.67E+05	2.03E+05	2.39E+05	2.74E+05	3.09E+05	3.44E+05	3.78E+05	4.12E+05	4.46E+05	4.79E+05
114	Ce-144	1.43E+05	1.74E+05	2.06E+05	2.38E+05	2.70E+05	3.01E+05	3.33E+05	3.65E+05	3.96E+05	4.28E+05
115	Pr-143	6.84E+04	8.37E+04	9.90E+04	1.14E+05	1.30E+05	1.45E+05	1.60E+05	1.76E+05	1.91E+05	2.07E+05
116	Nd-147	2.90E+04	3.54E+04	4.18E+04	4.82E+04	5.46E+04	6.10E+04	6.74E+04	7.38E+04	8.01E+04	8.65E+04
117	Np-239	2.08E+06	2.54E+06	2.99E+06	3.44E+06	3.88E+06	4.33E+06	4.77E+06	5.21E+06	5.64E+06	6.07E+06
118	Pu-238	7.13E+02	8.71E+02	1.03E+03	1.19E+03	1.35E+03	1.50E+03	1.66E+03	1.82E+03	1.98E+03	2.14E+03
119	Pu-239	4.76E+01	5.82E+01	6.88E+01	7.94E+01	9.00E+01	1.01E+02	1.11E+02	1.22E+02	1.32E+02	1.43E+02
120	Pu-240	5.11E+01	6.25E+01	7.38E+01	8.52E+01	9.66E+01	1.08E+02	1.19E+02	1.31E+02	1.42E+02	1.53E+02
121	Pu-241	2.45E+04	3.00E+04	3.54E+04	4.09E+04	4.63E+04	5.18E+04	5.73E+04	6.27E+04	6.82E+04	7.36E+04
122	Am-241	1.51E+01	1.85E+01	2.19E+01	2.52E+01	2.86E+01	3.20E+01	3.53E+01	3.87E+01	4.21E+01	4.54E+01
123	Cm-242	3.79E+03	4.63E+03	5.47E+03	6.32E+03	7.16E+03	8.00E+03	8.84E+03	9.68E+03	1.05E+04	1.14E+04
124	Cm-244	4.13E+02	5.05E+02	5.97E+02	6.88E+02	7.80E+02	8.72E+02	9.64E+02	1.06E+03	1.15E+03	1.24E+03
125											
126		10	12	14	16	18	20	22	24	30	36
127	Co-58	1.18E+04	1.45E+04	1.71E+04	1.98E+04	2.25E+04	2.52E+04	2.79E+04	3.05E+04	3.85E+04	4.65E+04
128	Co-60	1.41E+04	1.73E+04	2.06E+04	2.38E+04	2.70E+04	3.03E+04	3.35E+04	3.67E+04	4.64E+04	5.61E+04
129	Kr-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
130	Kr-85m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
131	Kr-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
132	Kr-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
133	Rb-86	5.10E+05	6.23E+05	7.36E+05	8.48E+05	9.60E+05	1.07E+06	1.18E+06	1.29E+06	1.62E+06	1.95E+06
134	Sr-89	1.72E+07	2.11E+07	2.51E+07	2.90E+07	3.29E+07	3.68E+07	4.07E+07	4.46E+07	5.63E+07	6.79E+07
135	Sr-90	1.96E+06	2.41E+06	2.86E+06	3.31E+06	3.76E+06	4.20E+06	4.65E+06	5.10E+06	6.45E+06	7.79E+06
136	Sr-91	1.59E+07	1.83E+07	2.03E+07	2.21E+07	2.37E+07	2.50E+07	2.62E+07	2.72E+07	2.95E+07	3.10E+07
137	Sr-92	7.25E+06	7.61E+06	7.82E+06	7.94E+06	8.02E+06	8.06E+06	8.09E+06	8.11E+06	8.13E+06	8.13E+06
138	Y-90	1.11E+05	1.60E+05	2.18E+05	2.84E+05	3.58E+05	4.41E+05	5.31E+05	6.30E+05	9.69E+05	1.37E+06
139	Y-91	2.28E+05	2.84E+05	3.40E+05	3.97E+05	4.55E+05	5.14E+05	5.72E+05	6.31E+05	8.11E+05	9.92E+05
140	Y-92	4.94E+06	5.85E+06	6.55E+06	7.08E+06	7.48E+06	7.76E+06	7.97E+06	8.12E+06	8.37E+06	8.45E+06
141	Y-93	1.93E+05	2.23E+05	2.49E+05	2.72E+05	2.92E+05	3.10E+05	3.25E+05	3.38E+05	3.69E+05	3.89E+05
142	Zr-95	2.76E+05	3.39E+05	4.02E+05	4.65E+05	5.28E+05	5.91E+05	6.54E+05	7.17E+05	9.04E+05	1.09E+06
143	Zr-97	2.30E+05	2.72E+05	3.10E+05	3.46E+05	3.78E+05	4.09E+05	4.36E+05	4.62E+05	5.28E+05	5.79E+05
144	Nb-95	2.79E+05	3.42E+05	4.06E+05	4.70E+05	5.33E+05	5.97E+05	6.61E+05	7.24E+05	9.15E+05	1.11E+06
145	Mo-99	3.70E+06	4.49E+06	5.28E+06	6.04E+06	6.79E+06	7.52E+06	8.24E+06	8.95E+06	1.10E+07	1.29E+07
146	Tc-99m	3.39E+06	4.14E+06	4.88E+06	5.62E+06	6.35E+06	7.07E+06	7.79E+06	8.49E+06	1.05E+07	1.25E+07
147	Ru-103	3.23E+06	3.96E+06	4.70E+06	5.43E+06	6.16E+06	6.90E+06	7.62E+06	8.35E+06	1.05E+07	1.27E+07
148	Ru-105	1.01E+06	1.10E+06	1.17E+06	1.22E+06	1.26E+06	1.29E+06	1.31E+06	1.32E+06	1.34E+06	1.35E+06
149	Ru-106	1.33E+06	1.64E+06	1.94E+06	2.25E+06	2.55E+06	2.86E+06	3.16E+06	3.47E+06	4.38E+06	5.29E+06
150	Rh-105	2.05E+06	2.49E+06	2.91E+06	3.32E+06	3.72E+06	4.10E+06	4.46E+06	4.82E+06	5.81E+06	6.68E+06
151	Sb-127	4.29E+06	5.23E+06	6.15E+06	7.07E+06	7.97E+06	8.85E+06	9.73E+06	1.06E+07	1.31E+07	1.55E+07
152	Sb-129	5.89E+06	6.42E+06	6.80E+06	7.08E+06	7.28E+06	7.43E+06	7.53E+06	7.61E+06	7.74E+06	7.79E+06
153	Te-127	4.35E+06	5.32E+06	6.28E+06	7.24E+06	8.18E+06	9.13E+06	1.01E+07	1.10E+07	1.37E+07	1.64E+07
154	Te-127m	5.95E+05	7.31E+05	8.68E+05	1.00E+06	1.14E+06	1.28E+06	1.41E+06	1.55E+06	1.96E+06	2.37E+06
155	Te-129	7.44E+06	8.31E+06	9.07E+06	9.77E+06	1.04E+07	1.10E+07	1.15E+07	1.20E+07	1.34E+07	1.46E+07
156	Te-129m	1.95E+06	2.40E+06	2.85E+06	3.29E+06	3.73E+06	4.18E+06	4.62E+06	5.06E+06	6.38E+06	7.70E+06
157	Te-131m	5.25E+06	6.31E+06	7.32E+06	8.29E+06	9.21E+06	1.01E+07	1.09E+07	1.17E+07	1.39E+07	1.59E+07
158	Te-132	5.61E+07	6.84E+07	8.04E+07	9.22E+07	1.04E+08	1.15E+08	1.26E+08	1.37E+08	1.69E+08	1.99E+08
159	I-131	2.49E+08	3.04E+08	3.58E+08	4.12E+08	4.65E+08	5.19E+08	5.71E+08	6.24E+08	7.79E+08	9.31E+08
160	I-132	1.63E+08	1.79E+08	1.94E+08	2.08E+08	2.22E+08	2.35E+08	2.49E+08	2.62E+08	3.00E+08	3.36E+08
161	I-133	4.38E+08	5.19E+08	5.96E+08	6.67E+08	7.34E+08	7.96E+08	8.55E+08	9.09E+08	1.05E+09	1.17E+09
162	I-134	3.85E+07	3.85E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07
163	I-135	2.85E+08	3.20E+08	3.48E+08	3.71E+08	3.90E+08	4.05E+08	4.17E+08	4.27E+08	4.47E+08	4.58E+08
164	Xe-133	2.08E+07	2.81E+07	3.60E+07	4.47E+07	5.41E+07	6.40E+07	7.44E+07	8.54E+07	1.21E+08	1.59E+08
165	Xe-135	1.54E+08	1.91E+08	2.27E+08	2.61E+08	2.93E+08	3.23E+08	3.50E+08	3.74E+08	4.35E+08	4.78E+08
166	Cs-134	5.75E+07	7.03E+07	8.31E+07	9.60E+07	1.09E+08	1.22E+08	1.34E+08	1.47E+08	1.86E+08	2.24E+08
167	Cs-136	1.58E+07	1.93E+07	2.28E+07	2.62E+07	2.97E+07	3.31E+07	3.65E+07	3.99E+07	5.00E+07	6.00E+07
168	Cs-137	3.58E+07	4.38E+07	5.18E+07	5.98E+07	6.78E+07	7.58E+07	8.39E+07	9.19E+07	1.16E+08	1.40E+08

	A	B	C	D	E	F	G	H	I	J	K
169	Ba-139	3.86E+06	3.89E+06	3.90E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06
170	Ba-140	2.98E+07	3.66E+07	4.33E+07	5.00E+07	5.66E+07	6.32E+07	6.98E+07	7.64E+07	9.59E+07	1.15E+08
171	La-140	2.46E+06	3.58E+06	4.88E+06	6.37E+06	8.04E+06	9.88E+06	1.19E+07	1.40E+07	2.14E+07	2.99E+07
172	La-141	1.18E+05	1.27E+05	1.34E+05	1.39E+05	1.42E+05	1.44E+05	1.46E+05	1.47E+05	1.49E+05	1.50E+05
173	La-142	4.06E+04	4.11E+04	4.13E+04	4.14E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04
174	Ce-141	6.91E+05	8.48E+05	1.01E+06	1.16E+06	1.32E+06	1.48E+06	1.63E+06	1.79E+06	2.25E+06	2.72E+06
175	Ce-143	6.08E+05	7.32E+05	8.51E+05	9.65E+05	1.07E+06	1.18E+06	1.28E+06	1.38E+06	1.64E+06	1.88E+06
176	Ce-144	5.55E+05	6.81E+05	8.08E+05	9.35E+05	1.06E+06	1.19E+06	1.31E+06	1.44E+06	1.82E+06	2.20E+06
177	Pr-143	2.68E+05	3.31E+05	3.93E+05	4.56E+05	5.19E+05	5.82E+05	6.45E+05	7.08E+05	8.99E+05	1.09E+06
178	Nd-147	1.12E+05	1.37E+05	1.62E+05	1.87E+05	2.12E+05	2.36E+05	2.61E+05	2.85E+05	3.58E+05	4.29E+05
179	Np-239	7.78E+06	9.44E+06	1.11E+07	1.27E+07	1.42E+07	1.57E+07	1.72E+07	1.86E+07	2.27E+07	2.65E+07
180	Pu-238	2.77E+03	3.41E+03	4.04E+03	4.67E+03	5.31E+03	5.94E+03	6.57E+03	7.21E+03	9.11E+03	1.10E+04
181	Pu-239	1.85E+02	2.28E+02	2.70E+02	3.13E+02	3.55E+02	3.97E+02	4.40E+02	4.82E+02	6.10E+02	7.37E+02
182	Pu-240	1.99E+02	2.44E+02	2.90E+02	3.35E+02	3.81E+02	4.26E+02	4.71E+02	5.17E+02	6.53E+02	7.90E+02
183	Pu-241	9.54E+04	1.17E+05	1.39E+05	1.61E+05	1.83E+05	2.04E+05	2.26E+05	2.48E+05	3.13E+05	3.79E+05
184	Am-241	5.89E+01	7.24E+01	8.59E+01	9.94E+01	1.13E+02	1.26E+02	1.40E+02	1.53E+02	1.94E+02	2.35E+02
185	Cm-242	1.47E+04	1.81E+04	2.15E+04	2.48E+04	2.82E+04	3.15E+04	3.49E+04	3.82E+04	4.83E+04	5.84E+04
186	Cm-244	1.61E+03	1.97E+03	2.34E+03	2.71E+03	3.08E+03	3.44E+03	3.81E+03	4.18E+03	5.28E+03	6.38E+03
187											
188		42	48	54	60	66	72	78	84	90	96
189	Co-58	5.45E+04	6.24E+04	7.03E+04	7.82E+04	8.61E+04	9.40E+04	1.02E+05	1.10E+05	1.17E+05	1.25E+05
190	Co-60	6.58E+04	7.54E+04	8.51E+04	9.48E+04	1.04E+05	1.14E+05	1.24E+05	1.33E+05	1.43E+05	1.53E+05
191	Kr-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
192	Kr-85m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
193	Kr-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
194	Kr-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
195	Rb-86	2.28E+06	2.60E+06	2.92E+06	3.23E+06	3.55E+06	3.86E+06	4.16E+06	4.47E+06	4.77E+06	5.07E+06
196	Sr-89	7.95E+07	9.10E+07	1.03E+08	1.14E+08	1.25E+08	1.37E+08	1.48E+08	1.59E+08	1.71E+08	1.82E+08
197	Sr-90	9.14E+06	1.05E+07	1.18E+07	1.32E+07	1.45E+07	1.59E+07	1.72E+07	1.86E+07	1.99E+07	2.12E+07
198	Sr-91	3.20E+07	3.26E+07	3.30E+07	3.32E+07	3.34E+07	3.35E+07	3.36E+07	3.36E+07	3.36E+07	3.37E+07
199	Sr-92	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06
200	Y-90	1.83E+06	2.35E+06	2.92E+06	3.54E+06	4.21E+06	4.92E+06	5.67E+06	6.46E+06	7.28E+06	8.14E+06
201	Y-91	1.17E+06	1.36E+06	1.54E+06	1.72E+06	1.90E+06	2.08E+06	2.27E+06	2.45E+06	2.63E+06	2.81E+06
202	Y-92	8.48E+06	8.48E+06	8.49E+06	8.49E+06	8.49E+06	8.49E+06	8.49E+06	8.49E+06	8.49E+06	8.49E+06
203	Y-93	4.02E+05	4.11E+05	4.17E+05	4.21E+05	4.24E+05	4.25E+05	4.27E+05	4.27E+05	4.28E+05	4.28E+05
204	Zr-95	1.28E+06	1.46E+06	1.65E+06	1.84E+06	2.02E+06	2.20E+06	2.39E+06	2.57E+06	2.75E+06	2.94E+06
205	Zr-97	6.19E+05	6.50E+05	6.75E+05	6.94E+05	7.09E+05	7.21E+05	7.30E+05	7.37E+05	7.43E+05	7.47E+05
206	Nb-95	1.30E+06	1.49E+06	1.68E+06	1.87E+06	2.06E+06	2.25E+06	2.44E+06	2.63E+06	2.82E+06	3.01E+06
207	Mo-99	1.47E+07	1.63E+07	1.79E+07	1.94E+07	2.08E+07	2.21E+07	2.33E+07	2.44E+07	2.55E+07	2.65E+07
208	Tc-99m	1.43E+07	1.60E+07	1.76E+07	1.91E+07	2.05E+07	2.19E+07	2.31E+07	2.43E+07	2.54E+07	2.64E+07
209	Ru-103	1.49E+07	1.70E+07	1.92E+07	2.13E+07	2.34E+07	2.55E+07	2.76E+07	2.97E+07	3.18E+07	3.39E+07
210	Ru-105	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06
211	Ru-106	6.21E+06	7.12E+06	8.03E+06	8.94E+06	9.85E+06	1.08E+07	1.17E+07	1.26E+07	1.35E+07	1.44E+07
212	Rh-105	7.47E+06	8.16E+06	8.78E+06	9.33E+06	9.82E+06	1.03E+07	1.06E+07	1.10E+07	1.13E+07	1.16E+07
213	Sb-127	1.78E+07	2.00E+07	2.20E+07	2.40E+07	2.60E+07	2.78E+07	2.95E+07	3.12E+07	3.28E+07	3.43E+07
214	Sb-129	7.81E+06	7.82E+06	7.82E+06	7.83E+06	7.83E+06	7.83E+06	7.83E+06	7.83E+06	7.83E+06	7.83E+06
215	Te-127	1.89E+07	2.14E+07	2.38E+07	2.61E+07	2.83E+07	3.04E+07	3.25E+07	3.45E+07	3.64E+07	3.83E+07
216	Te-127m	2.77E+06	3.18E+06	3.59E+06	4.00E+06	4.41E+06	4.82E+06	5.23E+06	5.63E+06	6.04E+06	6.45E+06
217	Te-129	1.57E+07	1.69E+07	1.80E+07	1.91E+07	2.02E+07	2.13E+07	2.24E+07	2.35E+07	2.46E+07	2.57E+07
218	Te-129m	9.00E+06	1.03E+07	1.16E+07	1.29E+07	1.42E+07	1.54E+07	1.67E+07	1.80E+07	1.92E+07	2.05E+07
219	Te-131m	1.75E+07	1.90E+07	2.02E+07	2.13E+07	2.23E+07	2.31E+07	2.38E+07	2.45E+07	2.50E+07	2.55E+07
220	Te-132	2.28E+08	2.55E+08	2.81E+08	3.05E+08	3.28E+08	3.50E+08	3.71E+08	3.91E+08	4.10E+08	4.27E+08
221	I-131	1.08E+09	1.23E+09	1.37E+09	1.51E+09	1.64E+09	1.78E+09	1.91E+09	2.04E+09	2.16E+09	2.28E+09
222	I-132	3.70E+08	4.03E+08	4.33E+08	4.63E+08	4.90E+08	5.16E+08	5.41E+08	5.65E+08	5.87E+08	6.08E+08
223	I-133	1.27E+09	1.35E+09	1.41E+09	1.47E+09	1.51E+09	1.54E+09	1.57E+09	1.60E+09	1.62E+09	1.63E+09
224	I-134	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07

	A	B	C	D	E	F	G	H	I	J	K
225	I-135	4.64E+08	4.67E+08	4.69E+08	4.70E+08	4.70E+08	4.70E+08	4.70E+08	4.71E+08	4.71E+08	4.71E+08
226	Xe-133	1.99E+08	2.41E+08	2.84E+08	3.27E+08	3.70E+08	4.13E+08	4.56E+08	4.98E+08	5.40E+08	5.81E+08
227	Xe-135	5.07E+08	5.28E+08	5.41E+08	5.50E+08	5.56E+08	5.60E+08	5.62E+08	5.64E+08	5.65E+08	5.65E+08
228	Cs-134	2.63E+08	3.01E+08	3.40E+08	3.78E+08	4.17E+08	4.55E+08	4.93E+08	5.32E+08	5.70E+08	6.09E+08
229	Cs-136	6.98E+07	7.96E+07	8.91E+07	9.86E+07	1.08E+08	1.17E+08	1.26E+08	1.35E+08	1.44E+08	1.53E+08
230	Cs-137	1.64E+08	1.88E+08	2.12E+08	2.36E+08	2.60E+08	2.84E+08	3.08E+08	3.32E+08	3.56E+08	3.80E+08
231	Ba-139	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06
232	Ba-140	1.34E+08	1.53E+08	1.71E+08	1.89E+08	2.07E+08	2.25E+08	2.43E+08	2.60E+08	2.77E+08	2.94E+08
233	La-140	3.95E+07	5.00E+07	6.13E+07	7.34E+07	8.60E+07	9.92E+07	1.13E+08	1.27E+08	1.41E+08	1.56E+08
234	La-141	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
235	La-142	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04
236	Ce-141	3.18E+06	3.63E+06	4.09E+06	4.54E+06	4.99E+06	5.44E+06	5.89E+06	6.33E+06	6.77E+06	7.21E+06
237	Ce-143	2.08E+06	2.27E+06	2.43E+06	2.57E+06	2.69E+06	2.80E+06	2.90E+06	2.99E+06	3.06E+06	3.13E+06
238	Ce-144	2.58E+06	2.96E+06	3.34E+06	3.72E+06	4.09E+06	4.47E+06	4.85E+06	5.23E+06	5.60E+06	5.98E+06
239	Pr-143	1.28E+06	1.47E+06	1.67E+06	1.86E+06	2.05E+06	2.24E+06	2.43E+06	2.61E+06	2.80E+06	2.98E+06
240	Nd-147	5.00E+05	5.69E+05	6.37E+05	7.04E+05	7.70E+05	8.35E+05	8.98E+05	9.61E+05	1.02E+06	1.08E+06
241	Np-239	3.01E+07	3.34E+07	3.64E+07	3.93E+07	4.19E+07	4.44E+07	4.66E+07	4.88E+07	5.07E+07	5.25E+07
242	Pu-238	1.29E+04	1.48E+04	1.67E+04	1.86E+04	2.05E+04	2.24E+04	2.43E+04	2.62E+04	2.81E+04	3.00E+04
243	Pu-239	8.65E+02	9.93E+02	1.12E+03	1.25E+03	1.38E+03	1.50E+03	1.63E+03	1.76E+03	1.89E+03	2.02E+03
244	Pu-240	9.26E+02	1.06E+03	1.20E+03	1.33E+03	1.47E+03	1.61E+03	1.74E+03	1.88E+03	2.02E+03	2.15E+03
245	Pu-241	4.44E+05	5.10E+05	5.75E+05	6.41E+05	7.06E+05	7.71E+05	8.37E+05	9.02E+05	9.68E+05	1.03E+06
246	Am-241	2.76E+02	3.17E+02	3.57E+02	3.98E+02	4.40E+02	4.81E+02	5.22E+02	5.63E+02	6.05E+02	6.46E+02
247	Cm-242	6.84E+04	7.84E+04	8.84E+04	9.85E+04	1.08E+05	1.18E+05	1.28E+05	1.38E+05	1.48E+05	1.58E+05
248	Cm-244	7.48E+03	8.58E+03	9.68E+03	1.08E+04	1.19E+04	1.30E+04	1.41E+04	1.52E+04	1.63E+04	1.74E+04
249											
250		144	192	240	288	336	384	432	480	528	576
251	Co-58	1.87E+05	2.47E+05	3.07E+05	3.65E+05	4.22E+05	4.78E+05	5.32E+05	5.86E+05	6.39E+05	6.91E+05
252	Co-60	2.30E+05	3.07E+05	3.85E+05	4.62E+05	5.39E+05	6.16E+05	6.93E+05	7.70E+05	8.47E+05	9.24E+05
253	Kr-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
254	Kr-85m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
255	Kr-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
256	Kr-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
257	Rb-86	7.36E+06	9.49E+06	1.15E+07	1.33E+07	1.50E+07	1.66E+07	1.81E+07	1.94E+07	2.07E+07	2.19E+07
258	Sr-89	2.70E+08	3.57E+08	4.40E+08	5.22E+08	6.01E+08	6.78E+08	7.53E+08	8.26E+08	8.97E+08	9.66E+08
259	Sr-90	3.20E+07	4.28E+07	5.35E+07	6.43E+07	7.50E+07	8.58E+07	9.65E+07	1.07E+08	1.18E+08	1.29E+08
260	Sr-91	3.37E+07	3.37E+07	3.37E+07	3.37E+07	3.37E+07	3.37E+07	3.37E+07	3.37E+07	3.37E+07	3.37E+07
261	Sr-92	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06	8.14E+06
262	Y-90	1.59E+07	2.49E+07	3.46E+07	4.48E+07	5.52E+07	6.58E+07	7.65E+07	8.72E+07	9.80E+07	1.09E+08
263	Y-91	4.23E+06	5.61E+06	6.96E+06	8.29E+06	9.58E+06	1.08E+07	1.21E+07	1.33E+07	1.44E+07	1.56E+07
264	Y-92	8.49E+06	8.49E+06	8.49E+06	8.49E+06	8.49E+06	8.49E+06	8.49E+06	8.49E+06	8.49E+06	8.49E+06
265	Y-93	4.29E+05	4.29E+05	4.29E+05	4.29E+05	4.29E+05	4.29E+05	4.29E+05	4.29E+05	4.29E+05	4.29E+05
266	Zr-95	4.38E+06	5.79E+06	7.17E+06	8.51E+06	9.84E+06	1.11E+07	1.24E+07	1.36E+07	1.48E+07	1.60E+07
267	Zr-97	7.65E+05	7.67E+05	7.68E+05	7.68E+05	7.68E+05	7.68E+05	7.68E+05	7.68E+05	7.68E+05	7.68E+05
268	Nb-95	4.54E+06	6.05E+06	7.57E+06	9.07E+06	1.06E+07	1.21E+07	1.35E+07	1.50E+07	1.65E+07	1.79E+07
269	Mo-99	3.28E+07	3.66E+07	3.89E+07	4.03E+07	4.11E+07	4.17E+07	4.20E+07	4.21E+07	4.23E+07	4.23E+07
270	Tc-99m	3.29E+07	3.68E+07	3.91E+07	4.06E+07	4.14E+07	4.19E+07	4.23E+07	4.24E+07	4.26E+07	4.26E+07
271	Ru-103	5.02E+07	6.59E+07	8.11E+07	9.57E+07	1.10E+08	1.24E+08	1.37E+08	1.49E+08	1.62E+08	1.74E+08
272	Ru-105	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06	1.36E+06
273	Ru-106	2.17E+07	2.89E+07	3.61E+07	4.33E+07	5.04E+07	5.75E+07	6.46E+07	7.17E+07	7.87E+07	8.57E+07
274	Rh-105	1.30E+07	1.35E+07	1.38E+07	1.38E+07	1.39E+07	1.39E+07	1.39E+07	1.39E+07	1.39E+07	1.39E+07
275	Sb-127	4.45E+07	5.15E+07	5.65E+07	5.99E+07	6.23E+07	6.40E+07	6.51E+07	6.59E+07	6.65E+07	6.69E+07
276	Sb-129	7.83E+06	7.83E+06	7.83E+06	7.83E+06	7.83E+06	7.83E+06	7.83E+06	7.83E+06	7.83E+06	7.83E+06
277	Te-127	5.12E+07	6.12E+07	6.91E+07	7.56E+07	8.11E+07	8.58E+07	9.00E+07	9.39E+07	9.75E+07	1.01E+08
278	Te-127m	9.70E+06	1.29E+07	1.61E+07	1.93E+07	2.24E+07	2.55E+07	2.86E+07	3.16E+07	3.46E+07	3.76E+07
279	Te-129	3.41E+07	4.22E+07	5.00E+07	5.74E+07	6.46E+07	7.14E+07	7.80E+07	8.43E+07	9.04E+07	9.62E+07
280	Te-129m	3.02E+07	3.96E+07	4.86E+07	5.72E+07	6.55E+07	7.34E+07	8.10E+07	8.83E+07	9.53E+07	1.02E+08

	A	B	C	D	E	F	G	H	I	J	K
281	Te-131m	2.79E+07	2.87E+07	2.89E+07	2.90E+07	2.90E+07	2.90E+07	2.90E+07	2.90E+07	2.90E+07	2.90E+07
282	Te-132	5.42E+08	6.16E+08	6.65E+08	6.97E+08	7.18E+08	7.31E+08	7.40E+08	7.46E+08	7.50E+08	7.52E+08
283	I-131	3.18E+09	3.93E+09	4.56E+09	5.09E+09	5.54E+09	5.92E+09	6.24E+09	6.51E+09	6.73E+09	6.92E+09
284	I-132	7.45E+08	8.34E+08	8.92E+08	9.30E+08	9.55E+08	9.71E+08	9.82E+08	9.89E+08	9.93E+08	9.96E+08
285	I-133	1.70E+09	1.72E+09	1.72E+09	1.72E+09	1.72E+09	1.72E+09	1.72E+09	1.72E+09	1.72E+09	1.72E+09
286	I-134	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07	3.86E+07
287	I-135	4.71E+08	4.71E+08	4.71E+08	4.71E+08	4.71E+08	4.71E+08	4.71E+08	4.71E+08	4.71E+08	4.71E+08
288	Xe-133	8.72E+08	1.10E+09	1.28E+09	1.42E+09	1.53E+09	1.61E+09	1.67E+09	1.72E+09	1.75E+09	1.78E+09
289	Xe-135	5.68E+08	5.68E+08	5.68E+08	5.68E+08	5.68E+08	5.68E+08	5.68E+08	5.68E+08	5.68E+08	5.68E+08
290	Cs-134	9.15E+08	1.22E+09	1.53E+09	1.83E+09	2.14E+09	2.44E+09	2.74E+09	3.05E+09	3.35E+09	3.65E+09
291	Cs-136	2.19E+08	2.78E+08	3.31E+08	3.80E+08	4.23E+08	4.62E+08	4.97E+08	5.28E+08	5.56E+08	5.82E+08
292	Cs-137	5.72E+08	7.64E+08	9.56E+08	1.15E+09	1.34E+09	1.53E+09	1.72E+09	1.92E+09	2.11E+09	2.30E+09
293	Ba-139	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06	3.91E+06
294	Ba-140	4.20E+08	5.34E+08	6.35E+08	7.27E+08	8.09E+08	8.82E+08	9.48E+08	1.01E+09	1.06E+09	1.11E+09
295	La-140	2.76E+08	3.96E+08	5.09E+08	6.13E+08	7.07E+08	7.92E+08	8.68E+08	9.37E+08	9.98E+08	1.05E+09
296	La-141	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
297	La-142	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04	4.15E+04
298	Ce-141	1.06E+07	1.39E+07	1.71E+07	2.01E+07	2.30E+07	2.58E+07	2.84E+07	3.10E+07	3.34E+07	3.57E+07
299	Ce-143	3.47E+06	3.59E+06	3.64E+06	3.66E+06	3.66E+06	3.66E+06	3.66E+06	3.67E+06	3.67E+06	3.67E+06
300	Ce-144	8.99E+06	1.20E+07	1.50E+07	1.79E+07	2.09E+07	2.38E+07	2.67E+07	2.96E+07	3.25E+07	3.54E+07
301	Pr-143	4.40E+06	5.69E+06	6.87E+06	7.94E+06	8.90E+06	9.77E+06	1.06E+07	1.13E+07	1.19E+07	1.25E+07
302	Nd-147	1.54E+06	1.94E+06	2.29E+06	2.60E+06	2.88E+06	3.12E+06	3.33E+06	3.52E+06	3.69E+06	3.83E+06
303	Np-239	6.35E+07	6.96E+07	7.29E+07	7.48E+07	7.59E+07	7.64E+07	7.68E+07	7.69E+07	7.70E+07	7.71E+07
304	Pu-238	4.52E+04	6.05E+04	7.57E+04	9.09E+04	1.06E+05	1.21E+05	1.37E+05	1.52E+05	1.67E+05	1.82E+05
305	Pu-239	3.04E+03	4.07E+03	5.10E+03	6.12E+03	7.15E+03	8.18E+03	9.21E+03	1.02E+04	1.13E+04	1.23E+04
306	Pu-240	3.24E+03	4.33E+03	5.42E+03	6.52E+03	7.61E+03	8.70E+03	9.79E+03	1.09E+04	1.20E+04	1.31E+04
307	Pu-241	1.56E+06	2.08E+06	2.60E+06	3.12E+06	3.65E+06	4.17E+06	4.69E+06	5.21E+06	5.74E+06	6.26E+06
308	Am-241	9.80E+02	1.32E+03	1.66E+03	2.01E+03	2.36E+03	2.72E+03	3.08E+03	3.45E+03	3.82E+03	4.19E+03
309	Cm-242	2.37E+05	3.16E+05	3.94E+05	4.71E+05	5.48E+05	6.23E+05	6.99E+05	7.73E+05	8.47E+05	9.21E+05
310	Cm-244	2.62E+04	3.50E+04	4.38E+04	5.26E+04	6.14E+04	7.02E+04	7.90E+04	8.78E+04	9.66E+04	1.05E+05
311											
312		624	672	720	no data	no data	no data	no data	no data	no data	no data
313	Co-58	7.41E+05	7.91E+05	8.40E+05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
314	Co-60	1.00E+06	1.08E+06	1.15E+06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
315	Kr-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
316	Kr-85m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
317	Kr-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
318	Kr-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
319	Rb-86	2.30E+07	2.40E+07	2.49E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
320	Sr-89	1.03E+09	1.10E+09	1.16E+09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
321	Sr-90	1.40E+08	1.50E+08	1.61E+08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
322	Sr-91	3.37E+07	3.37E+07	3.37E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
323	Sr-92	8.14E+06	8.14E+06	8.14E+06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
324	Y-90	1.20E+08	1.30E+08	1.41E+08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
325	Y-91	1.67E+07	1.78E+07	1.89E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
326	Y-92	8.49E+06	8.49E+06	8.49E+06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
327	Y-93	4.29E+05	4.29E+05	4.29E+05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
328	Zr-95	1.72E+07	1.83E+07	1.94E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
329	Zr-97	7.68E+05	7.68E+05	7.68E+05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
330	Nb-95	1.94E+07	2.08E+07	2.22E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
331	Mo-99	4.24E+07	4.24E+07	4.24E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
332	Tc-99m	4.27E+07	4.27E+07	4.27E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
333	Ru-103	1.85E+08	1.96E+08	2.07E+08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
334	Ru-105	1.36E+06	1.36E+06	1.36E+06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
335	Ru-106	9.27E+07	9.97E+07	1.07E+08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
336	Rh-105	1.39E+07	1.39E+07	1.39E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

	A	B	C	D	E	F	G	H	I	J	K
337	Sb-127	6.72E+07	6.74E+07	6.75E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
338	Sb-129	7.83E+06	7.83E+06	7.83E+06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
339	Te-127	1.04E+08	1.07E+08	1.10E+08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
340	Te-127m	4.05E+07	4.34E+07	4.62E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
341	Te-129	1.02E+08	1.07E+08	1.12E+08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
342	Te-129m	1.09E+08	1.15E+08	1.21E+08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
343	Te-131m	2.90E+07	2.90E+07	2.90E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
344	Te-132	7.54E+08	7.55E+08	7.56E+08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
345	I-131	7.08E+09	7.21E+09	7.33E+09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
346	I-132	9.98E+08	9.99E+08	1.00E+09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
347	I-133	1.72E+09	1.72E+09	1.72E+09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
348	I-134	3.86E+07	3.86E+07	3.86E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
349	I-135	4.71E+08	4.71E+08	4.71E+08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
350	Xe-133	1.80E+09	1.82E+09	1.83E+09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
351	Xe-135	5.68E+08	5.68E+08	5.68E+08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
352	Cs-134	3.95E+09	4.25E+09	4.55E+09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
353	Cs-136	6.05E+08	6.25E+08	6.44E+08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
354	Cs-137	2.49E+09	2.68E+09	2.87E+09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
355	Ba-139	3.91E+06	3.91E+06	3.91E+06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
356	Ba-140	1.15E+09	1.19E+09	1.22E+09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
357	La-140	1.10E+09	1.15E+09	1.19E+09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
358	La-141	1.50E+05	1.50E+05	1.50E+05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
359	La-142	4.15E+04	4.15E+04	4.15E+04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
360	Ce-141	3.80E+07	4.01E+07	4.22E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
361	Ce-143	3.67E+06	3.67E+06	3.67E+06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
362	Ce-144	3.83E+07	4.11E+07	4.40E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
363	Pr-143	1.30E+07	1.35E+07	1.39E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
364	Nd-147	3.96E+06	4.08E+06	4.18E+06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
365	Np-239	7.71E+07	7.71E+07	7.71E+07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
366	Pu-238	1.98E+05	2.13E+05	2.28E+05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
367	Pu-239	1.33E+04	1.43E+04	1.54E+04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
368	Pu-240	1.41E+04	1.52E+04	1.63E+04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
369	Pu-241	6.78E+06	7.30E+06	7.82E+06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
370	Am-241	4.57E+03	4.96E+03	5.35E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
371	Cm-242	9.93E+05	1.07E+06	1.14E+06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
372	Cm-244	1.14E+05	1.23E+05	1.32E+05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

	A	B	C	D	E	F	G	H	I	J	K	L
1								128318	Diluting Water Volume (cubic feet)			
2								RADTRAD OUTPUT, DIGESTED, in uCi-Hours / cc				
3	RADTRAD OUTPUT, DIGESTED, in Curie-Hours							(with standard control room occupancy assumptions)				
4		2	8	24	96	720		2	8	24	96	720
5	Co-58	1.01E+03	9.09E+03	3.05E+04	1.25E+05	8.40E+05	Co-58	2.78E-01	2.50E+00	8.40E+00	2.40E+01	1.03E+02
6	Co-60	1.21E+03	1.09E+04	3.67E+04	1.53E+05	1.15E+06	Co-60	3.33E-01	3.00E+00	1.01E+01	2.93E+01	1.39E+02
7	Kr-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Kr-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8	Kr-85m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Kr-85m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
9	Kr-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Kr-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
10	Kr-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	Kr-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
11	Rb-86	5.45E+04	3.97E+05	1.29E+06	5.07E+06	2.49E+07	Rb-86	1.50E+01	1.09E+02	3.56E+02	9.79E+02	3.16E+03
12	Sr-89	1.48E+06	1.33E+07	4.46E+07	1.82E+08	1.16E+09	Sr-89	4.07E+02	3.66E+03	1.23E+04	3.50E+04	1.43E+05
13	Sr-90	1.68E+05	1.51E+06	5.10E+06	2.12E+07	1.61E+08	Sr-90	4.63E+01	4.17E+02	1.40E+03	4.07E+03	1.95E+04
14	Sr-91	1.80E+06	1.31E+07	2.72E+07	3.37E+07	3.37E+07	Sr-91	4.96E+02	3.60E+03	7.49E+03	8.55E+03	8.56E+03
15	Sr-92	1.45E+06	6.67E+06	8.11E+06	8.14E+06	8.14E+06	Sr-92	3.99E+02	1.84E+03	2.23E+03	2.24E+03	2.24E+03
16	Y-90	2.72E+03	7.00E+04	6.30E+05	8.14E+06	1.41E+08	Y-90	7.49E-01	1.93E+01	1.73E+02	1.41E+03	1.61E+04
17	Y-91	1.84E+04	1.74E+05	6.31E+05	2.81E+06	1.89E+07	Y-91	5.08E+00	4.79E+01	1.74E+02	5.33E+02	2.30E+03
18	Y-92	1.76E+05	3.82E+06	8.12E+06	8.49E+06	8.49E+06	Y-92	4.83E+01	1.05E+03	2.23E+03	2.30E+03	2.30E+03
19	Y-93	2.16E+04	1.59E+05	3.38E+05	4.28E+05	4.29E+05	Y-93	5.94E+00	4.36E+01	9.30E+01	1.08E+02	1.08E+02
20	Zr-95	2.37E+04	2.13E+05	7.17E+05	2.94E+06	1.94E+07	Zr-95	6.53E+00	5.87E+01	1.97E+02	5.64E+02	2.38E+03
21	Zr-97	2.32E+04	1.84E+05	4.62E+05	7.47E+05	7.68E+05	Zr-97	6.38E+00	5.07E+01	1.27E+02	1.74E+02	1.76E+02
22	Nb-95	2.39E+04	2.15E+05	7.24E+05	3.01E+06	2.22E+07	Nb-95	6.57E+00	5.91E+01	1.99E+02	5.77E+02	2.69E+03
23	Mo-99	3.31E+05	2.88E+06	8.95E+06	2.65E+07	4.24E+07	Mo-99	9.10E+01	7.93E+02	2.46E+03	5.37E+03	7.11E+03
24	Tc-99m	2.94E+05	2.63E+06	8.49E+06	2.64E+07	4.27E+07	Tc-99m	8.10E+01	7.23E+02	2.34E+03	5.30E+03	7.09E+03
25	Ru-103	2.78E+05	2.49E+06	8.35E+06	3.39E+07	2.07E+08	Ru-103	7.64E+01	6.86E+02	2.30E+03	6.52E+03	2.55E+04
26	Ru-105	1.52E+05	8.84E+05	1.32E+06	1.36E+06	1.36E+06	Ru-105	4.19E+01	2.43E+02	3.63E+02	3.70E+02	3.70E+02
27	Ru-106	1.14E+05	1.03E+06	3.47E+06	1.44E+07	1.07E+08	Ru-106	3.15E+01	2.83E+02	9.54E+02	2.76E+03	1.29E+04
28	Rh-105	1.82E+05	1.60E+06	4.82E+06	1.16E+07	1.39E+07	Rh-105	5.00E+01	4.40E+02	1.33E+03	2.44E+03	2.70E+03
29	Sb-127	3.79E+05	3.33E+06	1.06E+07	3.43E+07	6.75E+07	Sb-127	1.04E+02	9.17E+02	2.91E+03	6.83E+03	1.05E+04
30	Sb-129	8.98E+05	5.16E+06	7.61E+06	7.83E+06	7.83E+06	Sb-129	2.47E+02	1.42E+03	2.09E+03	2.13E+03	2.13E+03
31	Te-127	3.78E+05	3.37E+06	1.10E+07	3.83E+07	1.10E+08	Te-127	1.04E+02	9.27E+02	3.02E+03	7.53E+03	1.55E+04
32	Te-127m	5.10E+04	4.59E+05	1.55E+06	6.45E+06	4.62E+07	Te-127m	1.40E+01	1.26E+02	4.26E+02	1.24E+03	5.62E+03
33	Te-129	9.90E+05	6.36E+06	1.20E+07	2.57E+07	1.12E+08	Te-129	2.73E+02	1.75E+03	3.31E+03	5.56E+03	1.51E+04
34	Te-129m	1.68E+05	1.51E+06	5.06E+06	2.05E+07	1.21E+08	Te-129m	4.62E+01	4.15E+02	1.39E+03	3.94E+03	1.50E+04
35	Te-131m	4.94E+05	4.15E+06	1.17E+07	2.55E+07	2.90E+07	Te-131m	1.36E+02	1.14E+03	3.23E+03	5.50E+03	5.89E+03
36	Te-132	4.99E+06	4.37E+07	1.37E+08	4.27E+08	7.56E+08	Te-132	1.37E+03	1.20E+04	3.78E+04	8.57E+04	1.22E+05
37	I-131	2.59E+07	1.94E+08	6.24E+08	2.28E+09	7.33E+09	I-131	7.14E+03	5.33E+04	1.72E+05	4.46E+05	1.00E+06
38	I-132	3.17E+07	1.43E+08	2.62E+08	6.08E+08	1.00E+09	I-132	8.74E+03	3.94E+04	7.21E+04	1.29E+05	1.72E+05
39	I-133	5.15E+07	3.51E+08	9.09E+08	1.63E+09	1.72E+09	I-133	1.42E+04	9.65E+04	2.50E+05	3.70E+05	3.79E+05
40	I-134	2.13E+07	3.84E+07	3.86E+07	3.86E+07	3.86E+07	I-134	5.87E+03	1.06E+04	1.06E+04	1.06E+04	1.06E+04
41	I-135	4.36E+07	2.42E+08	4.27E+08	4.71E+08	4.71E+08	I-135	1.20E+04	6.66E+04	1.17E+05	1.25E+05	1.25E+05
42	Xe-133	9.05E+05	1.44E+07	8.54E+07	5.81E+08	1.83E+09	Xe-133	2.49E+02	3.97E+03	2.35E+04	1.05E+05	2.43E+05
43	Xe-135	9.22E+06	1.15E+08	3.74E+08	5.65E+08	5.68E+08	Xe-135	2.54E+03	3.17E+04	1.03E+05	1.35E+05	1.35E+05
44	Cs-134	6.10E+06	4.46E+07	1.47E+08	6.09E+08	4.55E+09	Cs-134	1.68E+03	1.23E+04	4.05E+04	1.17E+05	5.51E+05
45	Cs-136	1.69E+06	1.23E+07	3.99E+07	1.53E+08	6.44E+08	Cs-136	4.66E+02	3.39E+03	1.10E+04	2.96E+04	8.37E+04
46	Cs-137	3.80E+06	2.78E+07	9.19E+07	3.80E+08	2.87E+09	Cs-137	1.05E+03	7.66E+03	2.53E+04	7.29E+04	3.48E+05
47	Ba-139	1.28E+06	3.77E+06	3.91E+06	3.91E+06	3.91E+06	Ba-139	3.52E+02	1.04E+03	1.08E+03	1.08E+03	1.08E+03
48	Ba-140	2.58E+06	2.31E+07	7.64E+07	2.94E+08	1.22E+09	Ba-140	7.11E+02	6.35E+03	2.10E+04	5.69E+04	1.59E+05
49	La-140	5.07E+04	1.54E+06	1.40E+07	1.56E+08	1.19E+09	La-140	1.40E+01	4.24E+02	3.86E+03	2.72E+04	1.41E+05
50	La-141	1.88E+04	1.04E+05	1.47E+05	1.50E+05	1.50E+05	La-141	5.18E+00	2.86E+01	4.05E+01	4.10E+01	4.10E+01
51	La-142	1.23E+04	3.94E+04	4.15E+04	4.15E+04	4.15E+04	La-142	3.39E+00	1.08E+01	1.14E+01	1.14E+01	1.14E+01
52	Ce-141	5.94E+04	5.34E+05	1.79E+06	7.21E+06	4.22E+07	Ce-141	1.63E+01	1.47E+02	4.92E+02	1.39E+03	5.23E+03
53	Ce-143	5.67E+04	4.79E+05	1.38E+06	3.13E+06	3.67E+06	Ce-143	1.56E+01	1.32E+02	3.79E+02	6.68E+02	7.27E+02
54	Ce-144	4.76E+04	4.28E+05	1.44E+06	5.98E+06	4.40E+07	Ce-144	1.31E+01	1.18E+02	3.97E+02	1.15E+03	5.33E+03
55	Pr-143	2.28E+04	2.07E+05	7.08E+05	2.98E+06	1.39E+07	Pr-143	6.26E+00	5.68E+01	1.95E+02	5.71E+02	1.77E+03
56	Nd-147	9.69E+03	8.65E+04	2.85E+05	1.08E+06	4.18E+06	Nd-147	2.67E+00	2.38E+01	7.86E+01	2.10E+02	5.51E+02
57	Np-239	7.01E+05	6.07E+06	1.86E+07	5.25E+07	7.71E+07	Np-239	1.93E+02	1.67E+03	5.12E+03	1.07E+04	1.34E+04
58	Pu-238	2.38E+02	2.14E+03	7.21E+03	3.00E+04	2.28E+05	Pu-238	6.54E-02	5.89E-01	1.98E+00	5.75E+00	2.75E+01
59	Pu-239	1.59E+01	1.43E+02	4.82E+02	2.02E+03	1.54E+04	Pu-239	4.37E-03	3.93E-02	1.33E-01	3.86E-01	1.86E+00
60	Pu-240	1.70E+01	1.53E+02	5.17E+02	2.15E+03	1.63E+04	Pu-240	4.69E-03	4.22E-02	1.42E-01	4.12E-01	1.97E+00
61	Pu-241	8.18E+03	7.36E+04	2.48E+05	1.03E+06	7.82E+06	Pu-241	2.25E+00	2.03E+01	6.83E+01	1.98E+02	9.45E+02
62	Am-241	5.04E+00	4.54E+01	1.53E+02	6.46E+02	5.35E+03	Am-241	1.39E-03	1.25E-02	4.22E-02	1.24E-01	6.41E-01
63	Cm-242	1.26E+03	1.14E+04	3.82E+04	1.58E+05	1.14E+06	Cm-242	3.48E-01	3.13E+00	1.05E+01	3.03E+01	1.38E+02
64	Cm-244	1.38E+02	1.24E+03	4.18E+03	1.74E+04	1.32E+05	Cm-244	3.79E-02	3.41E-01	1.15E+00	3.33E+00	1.59E+01

	A	B	C	D	E	F	G	H
1								128318
2								RADTRAD OUTPUT, DIGESTED, In u
3	RADTRAD O							(with standard control room occupar
4		2	8	24	96	720		2
5	Co-58	1010.8	9085.8	30523	125280	839710	Co-58	=1000000*B5/($H$1*30.48^3)
6	Co-60	1210.5	10894	36713	152820	1153900	Co-60	=1000000*B6/($H$1*30.48^3)
7	Kr-85	0	0	0	0	0	Kr-85	=1000000*B7/($H$1*30.48^3)
8	Kr-85m	0	0	0	0	0	Kr-85m	=1000000*B8/($H$1*30.48^3)
9	Kr-87	0	0	0	0	0	Kr-87	=1000000*B9/($H$1*30.48^3)
10	Kr-88	0	0	0	0	0	Kr-88	=1000000*B10/($H$1*30.48^3)
11	Rb-86	54499	396770	1294100	5068200	24905000	Rb-86	=1000000*B11/($H$1*30.48^3)
12	Sr-89	1479400	13291000	44592000	181950000	1162800000	Sr-89	=1000000*B12/($H$1*30.48^3)
13	Sr-90	168180	1513600	5101300	21244000	161010000	Sr-90	=1000000*B13/($H$1*30.48^3)
14	Sr-91	1801700	13065000	27215000	33663000	33725000	Sr-91	=1000000*B14/($H$1*30.48^3)
15	Sr-92	1449500	6668700	8107400	8135800	8135800	Sr-92	=1000000*B15/($H$1*30.48^3)
16	Y-90	2722.3	69977	629680	8136600	141160000	Y-90	=1000000*B16/($H$1*30.48^3)
17	Y-91	18448	173980	631470	2805900	18874000	Y-91	=1000000*B17/($H$1*30.48^3)
18	Y-92	175590	3816300	8118900	8488900	8488900	Y-92	=1000000*B18/($H$1*30.48^3)
19	Y-93	21595	158530	337920	428160	429300	Y-93	=1000000*B19/($H$1*30.48^3)
20	Zr-95	23739	213360	716500	2936200	19431000	Zr-95	=1000000*B20/($H$1*30.48^3)
21	Zr-97	23164	184180	462020	747210	767580	Zr-97	=1000000*B21/($H$1*30.48^3)
22	Nb-95	23877	214880	724150	3013100	22220000	Nb-95	=1000000*B22/($H$1*30.48^3)
23	Mo-99	330610	2880900	8945900	26536000	42402000	Mo-99	=1000000*B23/($H$1*30.48^3)
24	Tc-99m	294240	2626400	8489900	26449000	42715000	Tc-99m	=1000000*B24/($H$1*30.48^3)
25	Ru-103	277650	2493200	8353700	33890000	206740000	Ru-103	=1000000*B25/($H$1*30.48^3)
26	Ru-105	152110	883590	1319500	1361100	1361100	Ru-105	=1000000*B26/($H$1*30.48^3)
27	Ru-106	114430	1029600	3467900	14403000	106630000	Ru-106	=1000000*B27/($H$1*30.48^3)
28	Rh-105	181700	1598400	4818900	11560000	13891000	Rh-105	=1000000*B28/($H$1*30.48^3)
29	Sb-127	378820	3331400	10585000	34326000	67515000	Sb-127	=1000000*B29/($H$1*30.48^3)
30	Sb-129	897850	5159000	7608800	7826100	7826100	Sb-129	=1000000*B30/($H$1*30.48^3)
31	Te-127	378340	3366800	10988000	38281000	110280000	Te-127	=1000000*B31/($H$1*30.48^3)
32	Te-127m	51009	459200	1548500	6449600	46248000	Te-127m	=1000000*B32/($H$1*30.48^3)
33	Te-129	990320	6355400	12022000	25652000	112300000	Te-129	=1000000*B33/($H$1*30.48^3)
34	Te-129m	167690	1508700	5061400	20470000	120680000	Te-129m	=1000000*B34/($H$1*30.48^3)
35	Te-131m	494290	4145400	11735000	25508000	29046000	Te-131m	=1000000*B35/($H$1*30.48^3)
36	Te-132	4987800	43681000	137350000	427400000	755700000	Te-132	=1000000*B36/($H$1*30.48^3)
37	I-131	25948000	193660000	623870000	2283400000	7326100000	I-131	=1000000*B37/($H$1*30.48^3)
38	I-132	31742000	143220000	262000000	608220000	1000100000	I-132	=1000000*B38/($H$1*30.48^3)
39	I-133	51470000	350650000	909460000	1632900000	1719700000	I-133	=1000000*B39/($H$1*30.48^3)
40	I-134	21329000	38375000	38552000	38552000	38552000	I-134	=1000000*B40/($H$1*30.48^3)
41	I-135	43589000	242050000	426900000	470560000	470620000	I-135	=1000000*B41/($H$1*30.48^3)
42	Xe-133	905000	14431000	85358000	580510000	1833000000	Xe-133	=1000000*B42/($H$1*30.48^3)
43	Xe-135	9218300	115300000	374370000	565410000	567580000	Xe-135	=1000000*B43/($H$1*30.48^3)
44	Cs-134	6099600	44618000	147290000	608540000	4553100000	Cs-134	=1000000*B44/($H$1*30.48^3)
45	Cs-136	1693300	12303000	39918000	152810000	643700000	Cs-136	=1000000*B45/($H$1*30.48^3)
46	Cs-137	3802400	27817000	91855000	379990000	2874900000	Cs-137	=1000000*B46/($H$1*30.48^3)
47	Ba-139	1277600	3772100	3910300	3910400	3910400	Ba-139	=1000000*B47/($H$1*30.48^3)
48	Ba-140	2582100	23076000	76384000	293730000	1222600000	Ba-140	=1000000*B48/($H$1*30.48^3)
49	La-140	50697	1541900	14039000	155660000	1187000000	La-140	=1000000*B49/($H$1*30.48^3)
50	La-141	18839	104070	147090	150030	150030	La-141	=1000000*B50/($H$1*30.48^3)
51	La-142	12304	39408	41485	41488	41488	La-142	=1000000*B51/($H$1*30.48^3)
52	Ce-141	59407	533570	1786600	7211100	42161000	Ce-141	=1000000*B52/($H$1*30.48^3)
53	Ce-143	56738	478860	1376000	3129200	3665400	Ce-143	=1000000*B53/($H$1*30.48^3)
54	Ce-144	47568	427980	1441300	5980700	43962000	Ce-144	=1000000*B54/($H$1*30.48^3)
55	Pr-143	22760	206560	708220	2983300	13904000	Pr-143	=1000000*B55/($H$1*30.48^3)
56	Nd-147	9688.1	86486	285450	1084100	4176500	Nd-147	=1000000*B56/($H$1*30.48^3)
57	Np-239	700900	6074600	18614000	52548000	77141000	Np-239	=1000000*B57/($H$1*30.48^3)
58	Pu-238	237.62	2138.6	7207.9	30024	228020	Pu-238	=1000000*B58/($H$1*30.48^3)
59	Pu-239	15.88	142.98	482.39	2015.8	15377	Pu-239	=1000000*B59/($H$1*30.48^3)
60	Pu-240	17.04	153.36	516.88	2152.7	16331	Pu-240	=1000000*B60/($H$1*30.48^3)
61	Pu-241	8178.8	73609	248070	1033000	7822500	Pu-241	=1000000*B61/($H$1*30.48^3)
62	Am-241	5.0436	45.433	153.49	646.05	5347.2	Am-241	=1000000*B62/($H$1*30.48^3)
63	Cm-242	1263.4	11364	38247	158280	1136800	Cm-242	=1000000*B63/($H$1*30.48^3)
64	Cm-244	137.7	1239.2	4176.6	17392	131750	Cm-244	=1000000*B64/($H$1*30.48^3)

	I	J	K
1	Diluting Water Volume (cubic feet)		
2			
3			
4	8	24	96
5	=1000000*C5/($H$1*30.48^3)	=1000000*D5/($H$1*30.48^3)	=1000000*(D5+0.6*(E5-D5))/($H$1*30.48^3)
6	=1000000*C6/($H$1*30.48^3)	=1000000*D6/($H$1*30.48^3)	=1000000*(D6+0.6*(E6-D6))/($H$1*30.48^3)
7	=1000000*C7/($H$1*30.48^3)	=1000000*D7/($H$1*30.48^3)	=1000000*(D7+0.6*(E7-D7))/($H$1*30.48^3)
8	=1000000*C8/($H$1*30.48^3)	=1000000*D8/($H$1*30.48^3)	=1000000*(D8+0.6*(E8-D8))/($H$1*30.48^3)
9	=1000000*C9/($H$1*30.48^3)	=1000000*D9/($H$1*30.48^3)	=1000000*(D9+0.6*(E9-D9))/($H$1*30.48^3)
10	=1000000*C10/($H$1*30.48^3)	=1000000*D10/($H$1*30.48^3)	=1000000*(D10+0.6*(E10-D10))/($H$1*30.48^3)
11	=1000000*C11/($H$1*30.48^3)	=1000000*D11/($H$1*30.48^3)	=1000000*(D11+0.6*(E11-D11))/($H$1*30.48^3)
12	=1000000*C12/($H$1*30.48^3)	=1000000*D12/($H$1*30.48^3)	=1000000*(D12+0.6*(E12-D12))/($H$1*30.48^3)
13	=1000000*C13/($H$1*30.48^3)	=1000000*D13/($H$1*30.48^3)	=1000000*(D13+0.6*(E13-D13))/($H$1*30.48^3)
14	=1000000*C14/($H$1*30.48^3)	=1000000*D14/($H$1*30.48^3)	=1000000*(D14+0.6*(E14-D14))/($H$1*30.48^3)
15	=1000000*C15/($H$1*30.48^3)	=1000000*D15/($H$1*30.48^3)	=1000000*(D15+0.6*(E15-D15))/($H$1*30.48^3)
16	=1000000*C16/($H$1*30.48^3)	=1000000*D16/($H$1*30.48^3)	=1000000*(D16+0.6*(E16-D16))/($H$1*30.48^3)
17	=1000000*C17/($H$1*30.48^3)	=1000000*D17/($H$1*30.48^3)	=1000000*(D17+0.6*(E17-D17))/($H$1*30.48^3)
18	=1000000*C18/($H$1*30.48^3)	=1000000*D18/($H$1*30.48^3)	=1000000*(D18+0.6*(E18-D18))/($H$1*30.48^3)
19	=1000000*C19/($H$1*30.48^3)	=1000000*D19/($H$1*30.48^3)	=1000000*(D19+0.6*(E19-D19))/($H$1*30.48^3)
20	=1000000*C20/($H$1*30.48^3)	=1000000*D20/($H$1*30.48^3)	=1000000*(D20+0.6*(E20-D20))/($H$1*30.48^3)
21	=1000000*C21/($H$1*30.48^3)	=1000000*D21/($H$1*30.48^3)	=1000000*(D21+0.6*(E21-D21))/($H$1*30.48^3)
22	=1000000*C22/($H$1*30.48^3)	=1000000*D22/($H$1*30.48^3)	=1000000*(D22+0.6*(E22-D22))/($H$1*30.48^3)
23	=1000000*C23/($H$1*30.48^3)	=1000000*D23/($H$1*30.48^3)	=1000000*(D23+0.6*(E23-D23))/($H$1*30.48^3)
24	=1000000*C24/($H$1*30.48^3)	=1000000*D24/($H$1*30.48^3)	=1000000*(D24+0.6*(E24-D24))/($H$1*30.48^3)
25	=1000000*C25/($H$1*30.48^3)	=1000000*D25/($H$1*30.48^3)	=1000000*(D25+0.6*(E25-D25))/($H$1*30.48^3)
26	=1000000*C26/($H$1*30.48^3)	=1000000*D26/($H$1*30.48^3)	=1000000*(D26+0.6*(E26-D26))/($H$1*30.48^3)
27	=1000000*C27/($H$1*30.48^3)	=1000000*D27/($H$1*30.48^3)	=1000000*(D27+0.6*(E27-D27))/($H$1*30.48^3)
28	=1000000*C28/($H$1*30.48^3)	=1000000*D28/($H$1*30.48^3)	=1000000*(D28+0.6*(E28-D28))/($H$1*30.48^3)
29	=1000000*C29/($H$1*30.48^3)	=1000000*D29/($H$1*30.48^3)	=1000000*(D29+0.6*(E29-D29))/($H$1*30.48^3)
30	=1000000*C30/($H$1*30.48^3)	=1000000*D30/($H$1*30.48^3)	=1000000*(D30+0.6*(E30-D30))/($H$1*30.48^3)
31	=1000000*C31/($H$1*30.48^3)	=1000000*D31/($H$1*30.48^3)	=1000000*(D31+0.6*(E31-D31))/($H$1*30.48^3)
32	=1000000*C32/($H$1*30.48^3)	=1000000*D32/($H$1*30.48^3)	=1000000*(D32+0.6*(E32-D32))/($H$1*30.48^3)
33	=1000000*C33/($H$1*30.48^3)	=1000000*D33/($H$1*30.48^3)	=1000000*(D33+0.6*(E33-D33))/($H$1*30.48^3)
34	=1000000*C34/($H$1*30.48^3)	=1000000*D34/($H$1*30.48^3)	=1000000*(D34+0.6*(E34-D34))/($H$1*30.48^3)
35	=1000000*C35/($H$1*30.48^3)	=1000000*D35/($H$1*30.48^3)	=1000000*(D35+0.6*(E35-D35))/($H$1*30.48^3)
36	=1000000*C36/($H$1*30.48^3)	=1000000*D36/($H$1*30.48^3)	=1000000*(D36+0.6*(E36-D36))/($H$1*30.48^3)
37	=1000000*C37/($H$1*30.48^3)	=1000000*D37/($H$1*30.48^3)	=1000000*(D37+0.6*(E37-D37))/($H$1*30.48^3)
38	=1000000*C38/($H$1*30.48^3)	=1000000*D38/($H$1*30.48^3)	=1000000*(D38+0.6*(E38-D38))/($H$1*30.48^3)
39	=1000000*C39/($H$1*30.48^3)	=1000000*D39/($H$1*30.48^3)	=1000000*(D39+0.6*(E39-D39))/($H$1*30.48^3)
40	=1000000*C40/($H$1*30.48^3)	=1000000*D40/($H$1*30.48^3)	=1000000*(D40+0.6*(E40-D40))/($H$1*30.48^3)
41	=1000000*C41/($H$1*30.48^3)	=1000000*D41/($H$1*30.48^3)	=1000000*(D41+0.6*(E41-D41))/($H$1*30.48^3)
42	=1000000*C42/($H$1*30.48^3)	=1000000*D42/($H$1*30.48^3)	=1000000*(D42+0.6*(E42-D42))/($H$1*30.48^3)
43	=1000000*C43/($H$1*30.48^3)	=1000000*D43/($H$1*30.48^3)	=1000000*(D43+0.6*(E43-D43))/($H$1*30.48^3)
44	=1000000*C44/($H$1*30.48^3)	=1000000*D44/($H$1*30.48^3)	=1000000*(D44+0.6*(E44-D44))/($H$1*30.48^3)
45	=1000000*C45/($H$1*30.48^3)	=1000000*D45/($H$1*30.48^3)	=1000000*(D45+0.6*(E45-D45))/($H$1*30.48^3)
46	=1000000*C46/($H$1*30.48^3)	=1000000*D46/($H$1*30.48^3)	=1000000*(D46+0.6*(E46-D46))/($H$1*30.48^3)
47	=1000000*C47/($H$1*30.48^3)	=1000000*D47/($H$1*30.48^3)	=1000000*(D47+0.6*(E47-D47))/($H$1*30.48^3)
48	=1000000*C48/($H$1*30.48^3)	=1000000*D48/($H$1*30.48^3)	=1000000*(D48+0.6*(E48-D48))/($H$1*30.48^3)
49	=1000000*C49/($H$1*30.48^3)	=1000000*D49/($H$1*30.48^3)	=1000000*(D49+0.6*(E49-D49))/($H$1*30.48^3)
50	=1000000*C50/($H$1*30.48^3)	=1000000*D50/($H$1*30.48^3)	=1000000*(D50+0.6*(E50-D50))/($H$1*30.48^3)
51	=1000000*C51/($H$1*30.48^3)	=1000000*D51/($H$1*30.48^3)	=1000000*(D51+0.6*(E51-D51))/($H$1*30.48^3)
52	=1000000*C52/($H$1*30.48^3)	=1000000*D52/($H$1*30.48^3)	=1000000*(D52+0.6*(E52-D52))/($H$1*30.48^3)
53	=1000000*C53/($H$1*30.48^3)	=1000000*D53/($H$1*30.48^3)	=1000000*(D53+0.6*(E53-D53))/($H$1*30.48^3)
54	=1000000*C54/($H$1*30.48^3)	=1000000*D54/($H$1*30.48^3)	=1000000*(D54+0.6*(E54-D54))/($H$1*30.48^3)
55	=1000000*C55/($H$1*30.48^3)	=1000000*D55/($H$1*30.48^3)	=1000000*(D55+0.6*(E55-D55))/($H$1*30.48^3)
56	=1000000*C56/($H$1*30.48^3)	=1000000*D56/($H$1*30.48^3)	=1000000*(D56+0.6*(E56-D56))/($H$1*30.48^3)
57	=1000000*C57/($H$1*30.48^3)	=1000000*D57/($H$1*30.48^3)	=1000000*(D57+0.6*(E57-D57))/($H$1*30.48^3)
58	=1000000*C58/($H$1*30.48^3)	=1000000*D58/($H$1*30.48^3)	=1000000*(D58+0.6*(E58-D58))/($H$1*30.48^3)
59	=1000000*C59/($H$1*30.48^3)	=1000000*D59/($H$1*30.48^3)	=1000000*(D59+0.6*(E59-D59))/($H$1*30.48^3)
60	=1000000*C60/($H$1*30.48^3)	=1000000*D60/($H$1*30.48^3)	=1000000*(D60+0.6*(E60-D60))/($H$1*30.48^3)
61	=1000000*C61/($H$1*30.48^3)	=1000000*D61/($H$1*30.48^3)	=1000000*(D61+0.6*(E61-D61))/($H$1*30.48^3)
62	=1000000*C62/($H$1*30.48^3)	=1000000*D62/($H$1*30.48^3)	=1000000*(D62+0.6*(E62-D62))/($H$1*30.48^3)
63	=1000000*C63/($H$1*30.48^3)	=1000000*D63/($H$1*30.48^3)	=1000000*(D63+0.6*(E63-D63))/($H$1*30.48^3)
64	=1000000*C64/($H$1*30.48^3)	=1000000*D64/($H$1*30.48^3)	=1000000*(D64+0.6*(E64-D64))/($H$1*30.48^3)

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5	=1000000*(D5+0.6*(E5-D5)+0.4*(F5-E5))/($H$1*30.48^3)
6	=1000000*(D6+0.6*(E6-D6)+0.4*(F6-E6))/($H$1*30.48^3)
7	=1000000*(D7+0.6*(E7-D7)+0.4*(F7-E7))/($H$1*30.48^3)
8	=1000000*(D8+0.6*(E8-D8)+0.4*(F8-E8))/($H$1*30.48^3)
9	=1000000*(D9+0.6*(E9-D9)+0.4*(F9-E9))/($H$1*30.48^3)
10	=1000000*(D10+0.6*(E10-D10)+0.4*(F10-E10))/($H$1*30.48^3)
11	=1000000*(D11+0.6*(E11-D11)+0.4*(F11-E11))/($H$1*30.48^3)
12	=1000000*(D12+0.6*(E12-D12)+0.4*(F12-E12))/($H$1*30.48^3)
13	=1000000*(D13+0.6*(E13-D13)+0.4*(F13-E13))/($H$1*30.48^3)
14	=1000000*(D14+0.6*(E14-D14)+0.4*(F14-E14))/($H$1*30.48^3)
15	=1000000*(D15+0.6*(E15-D15)+0.4*(F15-E15))/($H$1*30.48^3)
16	=1000000*(D16+0.6*(E16-D16)+0.4*(F16-E16))/($H$1*30.48^3)
17	=1000000*(D17+0.6*(E17-D17)+0.4*(F17-E17))/($H$1*30.48^3)
18	=1000000*(D18+0.6*(E18-D18)+0.4*(F18-E18))/($H$1*30.48^3)
19	=1000000*(D19+0.6*(E19-D19)+0.4*(F19-E19))/($H$1*30.48^3)
20	=1000000*(D20+0.6*(E20-D20)+0.4*(F20-E20))/($H$1*30.48^3)
21	=1000000*(D21+0.6*(E21-D21)+0.4*(F21-E21))/($H$1*30.48^3)
22	=1000000*(D22+0.6*(E22-D22)+0.4*(F22-E22))/($H$1*30.48^3)
23	=1000000*(D23+0.6*(E23-D23)+0.4*(F23-E23))/($H$1*30.48^3)
24	=1000000*(D24+0.6*(E24-D24)+0.4*(F24-E24))/($H$1*30.48^3)
25	=1000000*(D25+0.6*(E25-D25)+0.4*(F25-E25))/($H$1*30.48^3)
26	=1000000*(D26+0.6*(E26-D26)+0.4*(F26-E26))/($H$1*30.48^3)
27	=1000000*(D27+0.6*(E27-D27)+0.4*(F27-E27))/($H$1*30.48^3)
28	=1000000*(D28+0.6*(E28-D28)+0.4*(F28-E28))/($H$1*30.48^3)
29	=1000000*(D29+0.6*(E29-D29)+0.4*(F29-E29))/($H$1*30.48^3)
30	=1000000*(D30+0.6*(E30-D30)+0.4*(F30-E30))/($H$1*30.48^3)
31	=1000000*(D31+0.6*(E31-D31)+0.4*(F31-E31))/($H$1*30.48^3)
32	=1000000*(D32+0.6*(E32-D32)+0.4*(F32-E32))/($H$1*30.48^3)
33	=1000000*(D33+0.6*(E33-D33)+0.4*(F33-E33))/($H$1*30.48^3)
34	=1000000*(D34+0.6*(E34-D34)+0.4*(F34-E34))/($H$1*30.48^3)
35	=1000000*(D35+0.6*(E35-D35)+0.4*(F35-E35))/($H$1*30.48^3)
36	=1000000*(D36+0.6*(E36-D36)+0.4*(F36-E36))/($H$1*30.48^3)
37	=1000000*(D37+0.6*(E37-D37)+0.4*(F37-E37))/($H$1*30.48^3)
38	=1000000*(D38+0.6*(E38-D38)+0.4*(F38-E38))/($H$1*30.48^3)
39	=1000000*(D39+0.6*(E39-D39)+0.4*(F39-E39))/($H$1*30.48^3)
40	=1000000*(D40+0.6*(E40-D40)+0.4*(F40-E40))/($H$1*30.48^3)
41	=1000000*(D41+0.6*(E41-D41)+0.4*(F41-E41))/($H$1*30.48^3)
42	=1000000*(D42+0.6*(E42-D42)+0.4*(F42-E42))/($H$1*30.48^3)
43	=1000000*(D43+0.6*(E43-D43)+0.4*(F43-E43))/($H$1*30.48^3)
44	=1000000*(D44+0.6*(E44-D44)+0.4*(F44-E44))/($H$1*30.48^3)
45	=1000000*(D45+0.6*(E45-D45)+0.4*(F45-E45))/($H$1*30.48^3)
46	=1000000*(D46+0.6*(E46-D46)+0.4*(F46-E46))/($H$1*30.48^3)
47	=1000000*(D47+0.6*(E47-D47)+0.4*(F47-E47))/($H$1*30.48^3)
48	=1000000*(D48+0.6*(E48-D48)+0.4*(F48-E48))/($H$1*30.48^3)
49	=1000000*(D49+0.6*(E49-D49)+0.4*(F49-E49))/($H$1*30.48^3)
50	=1000000*(D50+0.6*(E50-D50)+0.4*(F50-E50))/($H$1*30.48^3)
51	=1000000*(D51+0.6*(E51-D51)+0.4*(F51-E51))/($H$1*30.48^3)
52	=1000000*(D52+0.6*(E52-D52)+0.4*(F52-E52))/($H$1*30.48^3)
53	=1000000*(D53+0.6*(E53-D53)+0.4*(F53-E53))/($H$1*30.48^3)
54	=1000000*(D54+0.6*(E54-D54)+0.4*(F54-E54))/($H$1*30.48^3)
55	=1000000*(D55+0.6*(E55-D55)+0.4*(F55-E55))/($H$1*30.48^3)
56	=1000000*(D56+0.6*(E56-D56)+0.4*(F56-E56))/($H$1*30.48^3)
57	=1000000*(D57+0.6*(E57-D57)+0.4*(F57-E57))/($H$1*30.48^3)
58	=1000000*(D58+0.6*(E58-D58)+0.4*(F58-E58))/($H$1*30.48^3)
59	=1000000*(D59+0.6*(E59-D59)+0.4*(F59-E59))/($H$1*30.48^3)
60	=1000000*(D60+0.6*(E60-D60)+0.4*(F60-E60))/($H$1*30.48^3)
61	=1000000*(D61+0.6*(E61-D61)+0.4*(F61-E61))/($H$1*30.48^3)
62	=1000000*(D62+0.6*(E62-D62)+0.4*(F62-E62))/($H$1*30.48^3)
63	=1000000*(D63+0.6*(E63-D63)+0.4*(F63-E63))/($H$1*30.48^3)
64	=1000000*(D64+0.6*(E64-D64)+0.4*(F64-E64))/($H$1*30.48^3)

Source Term Development for ECCS Piping Gamma Shine

The source terms developed for revision 0 of this calculation reflected the 60 isotopes that are used for RADTRAD analyses of doses to offsite receptors and for control room operators. While this set of isotopes are considered sufficient for inhalation and cloud immersion doses, the use for shielded ECCS sources was questioned by NRC. The following spreadsheet starts with the entire 800 plus fission products addressed by ORIGEN-2 and produces a more conservative set of isotopes for consideration.

The "Integrated Source" is summation of the average core activity over each period times the period duration, with standard factors for control room occupancy included for the shielding evaluation.

The "Integrated Source with Release, Timing Credit" is a similar summation but includes release fractions and timing to yield an ECCS fluid source in Ci-hrs. These sources are divided by the ECCS fluid volume to yield time integrated concentrations for use in MicroShield pipe dose analyses.

This analysis is slightly different from that performed in Revision 0. In the previous Revision, the activity in ECCS liquid as a function of time was determined by RADTRAD. In this revision it is determined by a spreadsheet based on release fractions. Special attention was paid to isotopes that have a parent with a higher release fraction then the daughter. This caused original RADTRAD based activity to be used for certain isotopes. In most cases both approaches yielded source terms in reasonable agreement.

Group	Gap Release Fraction	EIR Release Fraction	Integrated Source (Ci-hrs)	Isotope	Shutdown 0	Integration with Release, Timing Credit 0-0.5hr (Ci-hrs)	0.5-2hr (Ci-hrs)	2-720hr (Ci-hrs)	Total (Ci-hrs)	Effect of Rel. Delay Credit	128318 Concentration (uCi/cc)	ECCS Water Volume (cu.ft.) Value, if controlled by parent per Original RADTRAD Results
4	0	0.02	6.434E+05	BA135M	1.960E+04	0.000E+00	2.825E+02	1.210E+04	1.239E+04	0.9625	3.409E+00	-
4	0	0.02	4.775E+09	BA137M	1.510E+07	0.000E+00	2.263E+05	9.489E+07	9.512E+07	0.9961	2.618E+04	3.272E+05
4	0	0.02	4.125E+08	BA139	1.719E+08	0.000E+00	1.298E+06	3.411E+06	4.708E+06	0.5707	1.296E+03	
4	0	0.02	2.858E+10	BA140	1.661E+08	0.000E+00	2.483E+06	5.649E+08	5.674E+08	0.9927	1.561E+05	
4	0	0.02	7.516E+07	BA141	1.555E+08	0.000E+00	9.781E+04	3.437E+04	1.322E+05	0.0879	3.638E+01	
4	0	0.02	4.136E+07	BA142	1.475E+08	0.000E+00	1.577E+04	1.244E+03	1.701E+04	0.0206	4.681E+00	
2	0.05	0.25	2.251E+07	BR 82	5.843E+05	7.259E+03	1.490E+05	6.410E+06	6.566E+06	0.9722	1.807E+03	
2	0.05	0.25	4.563E+07	BR 83	1.155E+07	1.349E+05	2.093E+06	8.136E+06	1.036E+07	0.7572	2.852E+03	
2	0.05	0.25	1.822E+07	BR 84	2.002E+07	1.759E+05	9.916E+05	5.970E+05	1.764E+06	0.3227	4.856E+02	
2	0.05	0.25	2.193E+06	BR 85	2.404E+07	1.223E+04	2.528E+02	2.136E-06	1.248E+04	0.0190	3.435E+00	
7	0	0.0005	3.825E+10	CE141	1.575E+08	0.000E+00	5.906E+04	1.897E+07	1.903E+07	0.9949	5.236E+03	
7	0	0.0005	5.334E+09	CE143	1.449E+08	0.000E+00	5.284E+04	2.524E+06	2.577E+06	0.9663	7.093E+02	
7	0	0.0005	3.874E+10	CE144	1.264E+08	0.000E+00	4.740E+04	1.924E+07	1.929E+07	0.9959	5.309E+03	
3	0.05	0.2	2.880E+06	CS132	2.495E+04	3.113E+02	5.576E+03	7.076E+05	7.135E+05	0.9909	1.964E+02	
3	0.05	0.2	8.004E+09	CS134	2.559E+07	3.198E+05	5.756E+06	1.988E+09	1.994E+09	0.9966	5.489E+05	
3	0.05	0.2	2.378E+07	CS134M	5.325E+06	6.112E+04	8.387E+05	3.822E+06	4.722E+06	0.7944	1.300E+03	
3	0.05	0.2	2.864E+04	CS135	9.032E+01	1.129E+00	2.032E+01	7.115E+03	7.136E+03	0.9967	1.964E+00	
3	0.05	0.2	1.240E+09	CS136	7.123E+06	8.897E+04	1.597E+06	3.064E+08	3.081E+08	0.9940	8.478E+04	
3	0.05	0.2	5.047E+09	CS137	1.595E+07	1.994E+05	3.589E+06	1.254E+09	1.258E+09	0.9967	3.461E+05	
3	0.05	0.2	2.065E+08	CS138	1.760E+08	1.814E+06	1.109E+07	6.912E+06	1.982E+07	0.3840	5.454E+03	
3	0.05	0.2	4.299E+07	CS139	1.667E+08	5.535E+05	4.289E+05	6.325E+03	9.886E+05	0.0920	2.721E+02	
6	0	0.0002	5.036E+08	EU154	1.595E+06	0.000E+00	2.391E+02	1.001E+05	1.003E+05	0.9960	2.761E+01	
6	0	0.0002	3.574E+08	EU155	1.134E+06	0.000E+00	1.701E+02	7.103E+04	7.120E+04	0.9960	1.959E+01	
6	0	0.0002	3.299E+09	EU156	1.764E+07	0.000E+00	2.639E+03	6.527E+05	6.553E+05	0.9933	1.804E+02	
2	0.05	0.25	8.799E+05	I128	1.353E+06	9.572E+03	4.023E+04	1.610E+04	6.590E+04	0.2497	1.814E+01	
2	0.05	0.25	5.827E+07	I130	3.457E+06	4.247E+04	8.356E+05	1.551E+07	1.639E+07	0.9376	4.511E+03	
2	0.05	0.25	1.283E+10	I131	9.444E+07	1.180E+06	2.474E+07	3.793E+09	3.819E+09	0.9920	1.051E+06	
2	0.05	0.25	9.746E+09	I132	1.364E+08	1.703E+06	3.552E+07	2.842E+09	2.879E+09	0.9849	7.925E+05	
2	0.05	0.25	5.029E+09	I133	1.925E+08	2.396E+06	4.881E+07	1.396E+09	1.447E+09	0.9589	3.982E+05	
2	0.05	0.25	4.657E+08	I134	2.118E+08	2.412E+06	3.015E+07	4.957E+07	8.214E+07	0.5879	2.261E+04	
2	0.05	0.25	1.757E+09	I135	1.806E+08	2.175E+06	4.039E+07	4.291E+08	4.717E+08	0.8951	1.298E+05	
2	0.05	0.25	4.937E+06	I136	8.602E+07	6.524E+03	3.741E-01	2.335E-19	6.524E+03	0.0044	1.796E+00	
6	0	0.0002	3.208E+10	LA140	1.722E+08	0.000E+00	2.581E+04	6.347E+06	6.372E+06	0.9933	1.754E+03	1.4100E-05
6	0	0.0002	1.007E+09	LA141	1.563E+08	0.000E+00	1.894E+04	1.455E+05	1.644E+05	0.8161	4.525E+01	
6	0	0.0002	4.047E+08	LA142	1.510E+08	0.000E+00	1.235E+04	3.671E+04	4.906E+04	0.6062	1.350E+01	
5	0	0.0025	1.106E+10	MO 99	1.785E+08	0.000E+00	3.289E+05	2.677E+07	2.710E+07	0.9800	7.459E+03	
5	0	0.0025	6.201E+07	MO101	1.612E+08	0.000E+00	6.604E+03	1.390E+03	7.994E+03	0.0516	2.200E+00	
6	0	0.0002	4.896E+10	NB 95	1.586E+08	0.000E+00	2.379E+04	9.729E+06	9.753E+06	0.9960	2.684E+03	
6	0	0.0002	3.196E+08	NB 95M	1.148E+06	0.000E+00	1.721E+02	6.346E+04	6.363E+04	0.9955	1.751E+01	
6	0	0.0002	3.613E+09	NB 97	1.592E+08	0.000E+00	2.311E+04	6.601E+05	6.832E+05	0.9454	1.880E+02	
6	0	0.0002	3.241E+09	NB 97M	1.496E+08	0.000E+00	2.095E+04	5.907E+05	6.116E+05	0.9437	1.683E+02	
6	0	0.0002	1.010E+10	ND147	6.321E+07	0.000E+00	9.448E+03	1.995E+06	2.004E+06	0.9922	5.516E+02	
6	0	0.0002	1.009E+08	ND149	3.669E+07	0.000E+00	2.938E+03	9.820E+03	1.276E+04	0.6319	3.511E+00	
5	0	0.0025	5.959E+08	PD109	3.287E+07	0.000E+00	5.691E+04	1.333E+06	1.390E+06	0.9328	3.824E+02	
6	0	0.0002	5.288E+09	PM147	1.650E+07	0.000E+00	2.475E+03	1.051E+06	1.053E+06	0.9961	2.899E+02	
6	0	0.0002	2.702E+09	PM148	2.626E+07	0.000E+00	3.904E+03	5.299E+05	5.338E+05	0.9879	1.469E+02	
6	0	0.0002	1.043E+09	PM148M	4.091E+06	0.000E+00	6.129E+02	2.070E+05	2.076E+05	0.9951	5.714E+01	
6	0	0.0002	2.903E+09	PM149	5.406E+07	0.000E+00	8.021E+03	5.591E+05	5.671E+05	0.9768	1.561E+02	
6	0	0.0002	6.252E+08	PM151	1.907E+07	0.000E+00	2.766E+03	1.176E+05	1.203E+05	0.9622	3.311E+01	
6	0	0.0002	1.862E+08	PR142	7.763E+06	0.000E+00	1.099E+03	3.423E+04	3.533E+04	0.9489	9.723E+00	
6	0	0.0002	2.736E+10	PR143	1.416E+08	0.000E+00	2.124E+04	5.416E+06	5.437E+06	0.9935	1.496E+03	
6	0	0.0002	3.874E+10	PR144	1.271E+08	0.000E+00	1.897E+04	7.698E+06	7.717E+06	0.9959	2.124E+03	
6	0	0.0002	4.649E+08	PR144M	1.519E+06	0.000E+00	2.276E+02	9.237E+04	9.260E+04	0.9959	2.548E+01	
3	0.05	0.2	4.649E+07	RB 86	2.291E+05	2.862E+03	5.143E+04	1.151E+07	1.156E+07	0.9948	3.182E+03	
3	0.05	0.2	3.181E+08	RB 88	6.678E+07	8.032E+05	1.139E+07	5.116E+07	6.335E+07	0.7966	1.744E+04	

Group	Gap Release Fraction	EIR Release Fraction	Integrated Source (Ci-hrs)	Isotope	Shutdown 0 (Ci-hrs)	Integration with Release, Timing Credit 0-0.5hr (Ci-hrs)	0.5-2hr (Ci-hrs)	2-720hr (Ci-hrs)	Total (Ci-hrs)	Effect of Rel. Delay Credit	128318 Concentration (uCi/cc)	ECCS Water Volume (cu.ft.) Value, if controlled by parent per Original RADTRAD Results
3	0.05	0.2	4.041E+07	RB 89	8.557E+07	5.299E+05	1.002E+06	1.137E+05	1.646E+06	0.1629	4.529E+02	
5	0.05	0.2	4.085E+06	RB 90	8.739E+07	3.919E+04	5.894E+02	2.185E+05	2.571E+04	0.0202	5.829E+00	
5	0.05	0.2	2.993E+06	RB 90M	1.941E+07	2.019E+04	2.180E+03	2.067E+02	2.237E+04	0.0333	6.157E+00	
5	0	0.0025	3.360E+10	RH103M	1.331E+08	0.000E+00	2.493E+05	8.334E+07	8.359E+07	0.9951	2.301E+04	
5	0	0.0025	4.210E+09	RH105	9.673E+07	0.000E+00	1.811E+05	1.004E+07	1.022E+07	0.9713	2.814E+03	
5	0	0.0025	1.987E+08	RH105M	2.861E+07	0.000E+00	4.296E+04	3.699E+05	4.129E+05	0.8310	1.136E+02	
5	0	0.0025	1.878E+10	RH106	6.461E+07	0.000E+00	1.140E+05	4.664E+07	4.675E+07	0.9959	1.287E+04	
5	0	0.0025	3.727E+10	RU103	1.477E+08	0.000E+00	2.766E+05	9.245E+07	9.273E+07	0.9950	2.552E+04	
5	0	0.0025	7.077E+08	RU105	1.022E+08	0.000E+00	1.530E+05	1.317E+06	1.470E+06	0.8310	4.046E+02	
5	0	0.0025	1.878E+10	RU106	6.081E+07	0.000E+00	1.140E+05	4.664E+07	4.675E+07	0.9960	1.287E+04	
4	0	0.05	1.460E+07	SB122	2.388E+05	0.000E+00	8.799E+03	7.063E+05	7.151E+05	0.9797	1.968E+02	
4	0	0.05	4.041E+07	SB124	1.485E+05	0.000E+00	5.563E+03	2.006E+06	2.011E+06	0.9954	5.535E+02	
4	0	0.05	5.656E+08	SB125	1.796E+06	0.000E+00	6.735E+04	2.810E+07	2.817E+07	0.9960	7.752E+03	
4	0	0.05	1.807E+07	SB126	1.067E+05	0.000E+00	3.986E+03	8.930E+05	8.970E+05	0.9926	2.469E+02	
4	0	0.05	3.930E+04	SB126M	2.459E+04	0.000E+00	2.066E+01	1.882E+03	1.962E+03	0.0618	5.400E+01	
4	0	0.05	8.241E+08	SB127	1.018E+07	0.000E+00	3.796E+05	4.019E+07	4.057E+07	0.9846	1.117E+04	
4	0	0.05	2.013E+08	SB129	3.036E+07	0.000E+00	8.863E+05	7.432E+06	8.318E+06	0.8264	2.289E+03	
6	0	0.0002	2.363E+07	SM151	7.400E+04	0.000E+00	1.110E+01	4.697E+03	4.708E+03	0.9961	1.296E+00	
6	0	0.0002	2.173E+09	SM153	4.558E+07	0.000E+00	6.674E+03	4.167E+05	4.233E+05	0.9740	1.165E+02	
4	0	0.02	2.343E+10	SR 89	8.846E+07	0.000E+00	1.326E+06	4.650E+08	4.663E+08	0.9953	1.283E+05	
4	0	0.02	3.534E+09	SR 90	1.117E+07	0.000E+00	1.676E+05	7.024E+07	7.041E+07	0.9960	1.938E+04	
4	0	0.02	1.492E+09	SR 91	1.110E+08	0.000E+00	1.477E+06	2.570E+07	2.718E+07	0.9109	7.481E+03	
4	0	0.02	5.038E+08	SR 92	1.205E+08	0.000E+00	1.189E+06	6.293E+06	7.482E+06	0.7425	2.059E+03	
4	0	0.02	2.729E+07	SR 93	5.370E+08	0.000E+00	2.015E+03	1.208E+01	2.015E+03	0.0051	5.587E-01	
5	0	0.0025	6.367E+05	TC 99	2.004E+03	0.000E+00	3.758E+00	1.582E+03	1.586E+03	0.9961	4.363E-01	
5	0	0.0025	1.052E+10	TC 99M	1.563E+08	0.000E+00	2.925E+05	2.552E+07	2.581E+07	0.9814	7.103E+03	
5	0	0.0025	1.213E+08	TC101	1.612E+08	0.000E+00	2.629E+04	8.719E+03	3.501E+04	0.1154	9.635E+00	
4	0	0.05	6.902E+05	TE123M	2.355E+03	0.000E+00	8.829E+01	3.427E+04	3.436E+04	0.9957	9.456E+00	
4	0	0.05	1.253E+08	TE125M	3.927E+05	0.000E+00	1.473E+04	6.224E+06	6.239E+06	0.9961	1.717E+03	
4	0	0.05	1.171E+09	TE127	1.010E+07	0.000E+00	3.788E+05	5.755E+07	5.793E+07	0.9892	1.594E+04	
4	0	0.05	4.051E+08	TE127M	1.355E+06	0.000E+00	5.081E+04	2.012E+07	2.017E+07	0.9958	5.552E+03	
4	0	0.05	9.312E+08	TE129	2.988E+07	0.000E+00	1.022E+06	4.371E+07	4.473E+07	0.9607	1.231E+04	
4	0	0.05	1.090E+09	TE129M	4.453E+06	0.000E+00	1.669E+05	5.404E+07	5.421E+07	0.9949	1.492E+04	
4	0	0.05	2.018E+08	TE131	8.383E+07	0.000E+00	8.440E+05	5.548E+06	6.392E+06	0.6333	1.759E+03	
4	0	0.05	4.642E+08	TE131M	1.360E+07	0.000E+00	4.930E+05	2.187E+07	2.237E+07	0.9638	6.156E+03	
4	0	0.05	9.464E+09	TE132	1.343E+08	0.000E+00	4.965E+06	4.599E+08	4.649E+08	0.9823	1.279E+05	
4	0	0.05	5.325E+07	TE133	1.135E+08	0.000E+00	1.889E+05	2.340E+05	4.229E+05	0.1588	1.164E+02	
4	0	0.05	1.008E+08	TE133M	6.990E+07	0.000E+00	8.025E+05	1.352E+06	2.155E+06	0.4274	5.930E+02	
4	0	0.05	1.740E+08	TE134	1.599E+08	0.000E+00	1.286E+06	1.559E+06	2.845E+06	0.3270	7.830E+02	
6	0	0.0002	3.555E+09	Y 90	1.150E+07	0.000E+00	1.724E+03	7.064E+05	7.081E+05	0.9960	1.949E+02	1.938E+04
6	0	0.0002	3.118E+10	Y 91	1.143E+08	0.000E+00	1.715E+04	6.190E+06	6.208E+06	0.9954	1.708E+03	7.481E+03
6	0	0.0002	9.401E+08	Y 91M	6.440E+07	0.000E+00	9.135E+03	1.630E+05	1.721E+05	0.9153	4.736E+01	4.264E+03
6	0	0.0002	1.138E+09	Y 92	1.210E+08	0.000E+00	1.710E+04	1.805E+05	1.976E+05	0.8685	5.438E+01	2.059E+03
6	0	0.0002	2.011E+09	Y 93	1.404E+08	0.000E+00	1.903E+04	3.491E+05	3.681E+05	0.9154	1.013E+02	
6	0	0.0002	4.331E+10	ZR 95	1.578E+08	0.000E+00	2.365E+04	8.600E+06	8.623E+06	0.9954	2.373E+03	
6	0	0.0002	3.421E+09	ZR 97	1.578E+08	0.000E+00	2.212E+04	6.236E+05	6.457E+05	0.9437	1.777E+02	

Turquoise = Isotopes in base nuclide information file

Tan = Isotopes that could be neglected for thick shields because of gamma energies and yields (future)

Lime = Isotopes that could be neglected for thick shields because of limited integrated source value (future)

Column AD addresses a limited set of cases where a parents release fraction exceeds that o f the daughter. This can cause the daughter ingrowth in the ECCS

MicroShield v5.05 (5.05-00210)
Raytheon Engineers & Constructors

Page : 1
DOS File: LGSCS-AA.MS5
Run Date: June 8, 2006
Run Time: 4:00:08 PM
Duration: 00:00:11

File Ref: _____
Date: _____
By: _____
Checked: _____

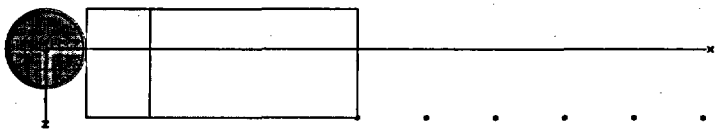
Case Title: LGS CS Pipe
Description: Case A, with 110 isotopes, Along East Cabinet Wall
Geometry: 7 - Cylinder Volume - Side Shields

Source Dimensions

Height	426.72 cm	14 ft 0.0 in
Radius	16.828 cm	6.6 in

Dose Points

	X	Y	Z
# 1	137.16 cm	182.88 cm	30.48 cm
	4 ft 6.0 in	6 ft	1 ft
# 2	167.64 cm	182.88 cm	30.48 cm
	5 ft 6.0 in	6 ft	1 ft
# 3	198.12 cm	182.88 cm	30.48 cm
	6 ft 6.0 in	6 ft	1 ft
# 4	228.6 cm	182.88 cm	30.48 cm
	7 ft 6.0 in	6 ft	1 ft
# 5	259.08 cm	182.88 cm	30.48 cm
	8 ft 6.0 in	6 ft	1 ft
# 6	289.56 cm	182.88 cm	30.48 cm
	9 ft 6.0 in	6 ft	1 ft



Shields

Shield Name	Dimension	Material	Density
Source	13.406 ft³	Water	1
Transition		Air	0.00122
Shield 2	.917 ft	Air	0.00122
Shield 3	3.0 ft	Concrete	2.35
Air Gap		Air	0.00122
Wall Clad	.031 ft	Iron	7.86

Source Input
Grouping Method : Linear Energy
Number of Groups : 25
Lower Energy Cutoff : 0.015
Photons < 0.015 : Excluded
Library : Grove

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Am-241	2.4333e-001	9.0031e+009	6.4100e-001	2.3717e+004
Ba-137m	1.2421e+005	4.5957e+015	3.2720e+005	1.2106e+010
Ba-139	4.9197e+002	1.8203e+013	1.2960e+003	4.7952e+007
Ba-140	5.9256e+004	2.1925e+015	1.5610e+005	5.7757e+009
Ba-141	1.3810e+001	5.1097e+011	3.6380e+001	1.3461e+006
Ba-142	1.7769e+000	6.5746e+010	4.6810e+000	1.7320e+005
Br-82	6.8595e+002	2.5380e+013	1.8070e+003	6.6859e+007
Br-83	1.0826e+003	4.0057e+013	2.8520e+003	1.0552e+008
Br-84	1.8434e+002	6.8204e+012	4.8560e+002	1.7967e+007
Br-85	1.3039e+000	4.8246e+010	3.4350e+000	1.2709e+005
Ce-141	1.9876e+003	7.3542e+013	5.2360e+003	1.9373e+008
Ce-143	2.6925e+002	9.9624e+012	7.0930e+002	2.6244e+007
Ce-144	2.0153e+003	7.4567e+013	5.3090e+003	1.9643e+008
Cm-242	5.2386e+001	1.9383e+012	1.3800e+002	5.1060e+006
Cm-244	6.0357e+000	2.2332e+011	1.5900e+001	5.8830e+005
Co-58	3.9099e+001	1.4467e+012	1.0300e+002	3.8110e+006
Co-60	5.2765e+001	1.9523e+012	1.3900e+002	5.1430e+006
Cs-132	7.4554e+001	2.7585e+012	1.9640e+002	7.2668e+006
Cs-134	2.0837e+005	7.7095e+015	5.4890e+005	2.0309e+010
Cs-134m	4.9349e+002	1.8259e+013	1.3000e+003	4.8100e+007
Cs-135	7.4554e-001	2.7585e+010	1.9640e+000	7.2668e+004
Cs-136	3.2183e+004	1.1908e+015	8.4780e+004	3.1369e+009
Cs-137	1.3138e+005	4.8611e+015	3.4610e+005	1.2806e+010
Cs-138	2.0704e+003	7.6604e+013	5.4540e+003	2.0180e+008
Cs-139	1.0367e+002	3.8358e+012	2.7310e+002	1.0105e+007
Eu-154	1.0481e+001	3.8779e+011	2.7610e+001	1.0216e+006
Eu-155	7.4365e+000	2.7515e+011	1.9590e+001	7.2483e+005
Eu-156	6.8481e+001	2.5338e+012	1.8040e+002	6.6748e+006
I-128	6.8860e+000	2.5478e+011	1.8140e+001	6.7118e+005
I-130	1.7124e+003	6.3359e+013	4.5110e+003	1.6691e+008
I-131	3.9896e+005	1.4762e+016	1.0510e+006	3.8887e+010
I-132	3.0084e+005	1.1131e+016	7.9250e+005	2.9322e+010
I-133	1.5116e+005	5.5929e+015	3.9820e+005	1.4733e+010
I-134	8.5829e+003	3.1757e+014	2.2610e+004	8.3657e+008
I-135	4.9273e+004	1.8231e+015	1.2980e+005	4.8026e+009
I-136	6.8177e-001	2.5226e+010	1.7960e+000	6.6452e+004
La-140	5.3524e+004	1.9804e+015	1.4100e+005	5.2170e+009
La-141	1.7177e+001	6.3555e+011	4.5250e+001	1.6743e+006

DOS File: LGSCS-AA.MS5
Run Date: June 8, 2006
Run Time: 4:00:08 PM
Duration: 00:00:11

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
La-142	5.1247e+000	1.8961e+011	1.3500e+001	4.9950e+005
Mo-99	2.8315e+003	1.0476e+014	7.4590e+003	2.7598e+008
Mo-101	8.3513e-001	3.0900e+010	2.2000e+000	8.1400e+004
Nb-95	1.0189e+003	3.7698e+013	2.6840e+003	9.9308e+007
Nb-95m	6.6469e+000	2.4593e+011	1.7510e+001	6.4787e+005
Nb-97	7.1366e+001	2.6405e+012	1.8800e+002	6.9560e+006
Nb-97m	6.3888e+001	2.3638e+012	1.6830e+002	6.2271e+006
Nd-147	2.0939e+002	7.7474e+012	5.5160e+002	2.0409e+007
Nd-149	1.3328e+000	4.9313e+010	3.5110e+000	1.2991e+005
Np-239	5.0867e+003	1.8821e+014	1.3400e+004	4.9580e+008
Pd-109	1.4516e+002	5.3710e+012	3.8240e+002	1.4149e+007
Pm-147	1.1005e+002	4.0718e+012	2.8990e+002	1.0726e+007
Pm-148	5.5764e+001	2.0633e+012	1.4690e+002	5.4353e+006
Pm-148m	2.1691e+001	8.0255e+011	5.7140e+001	2.1142e+006
Pm-149	5.9256e+001	2.1925e+012	1.5610e+002	5.7757e+006
Pm-151	1.2569e+001	4.6504e+011	3.3110e+001	1.2251e+006
Pr-142	3.6909e+000	1.3656e+011	9.7230e+000	3.5975e+005
Pr-143	5.6789e+002	2.1012e+013	1.4960e+003	5.5352e+007
Pr-144	8.0628e+002	2.9832e+013	2.1240e+003	7.8588e+007
Pr-144m	9.6723e+000	3.5788e+011	2.5480e+001	9.4276e+005
Pu-238	1.0439e+001	3.8625e+011	2.7500e+001	1.0175e+006
Pu-239	7.0607e-001	2.6124e+010	1.8600e+000	6.8820e+004
Pu-240	7.4782e-001	2.7669e+010	1.9700e+000	7.2890e+004
Pu-241	3.5873e+002	1.3273e+013	9.4500e+002	3.4965e+007
Rb-86	1.2079e+003	4.4692e+013	3.1820e+003	1.1773e+008
Rb-88	6.6203e+003	2.4495e+014	1.7440e+004	6.4528e+008
Rb-89	1.7192e+002	6.3612e+012	4.5290e+002	1.6757e+007
Rb-90	3.7311e+000	1.3805e+011	9.8290e+000	3.6367e+005
Rb-90m	2.3372e+000	8.6477e+010	6.1570e+000	2.2781e+005
Rh-103m	8.7347e+003	3.2318e+014	2.3010e+004	8.5137e+008
Rh-105	1.0682e+003	3.9524e+013	2.8140e+003	1.0412e+008
Rh-105m	4.3123e+001	1.5956e+012	1.1360e+002	4.2032e+006
Rh-106	4.8855e+003	1.8076e+014	1.2870e+004	4.7619e+008
Ru-103	9.6799e+003	3.5816e+014	2.5500e+004	9.4350e+008
Ru-105	1.5359e+002	5.6828e+012	4.0460e+002	1.4970e+007
Ru-106	4.8855e+003	1.8076e+014	1.2870e+004	4.7619e+008
Sb-122	7.4706e+001	2.7641e+012	1.9680e+002	7.2816e+006
Sb-124	2.1011e+002	7.7741e+012	5.5350e+002	2.0479e+007
Sb-125	2.9427e+003	1.0888e+014	7.7520e+003	2.8682e+008
Sb-126	9.3725e+001	3.4678e+012	2.4690e+002	9.1353e+006
Sb-126m	2.0499e-001	7.5845e+009	5.4000e-001	1.9980e+004
Sb-127	4.2402e+003	1.5689e+014	1.1170e+004	4.1329e+008
Sb-129	8.6892e+002	3.2150e+013	2.2890e+003	8.4693e+007
Sm-151	4.9197e-001	1.8203e+010	1.2960e+000	4.7952e+004
Sm-153	4.4224e+001	1.6363e+012	1.1650e+002	4.3105e+006
Sr-89	4.8703e+004	1.8020e+015	1.2830e+005	4.7471e+009
Sr-90	7.3567e+003	2.7220e+014	1.9380e+004	7.1706e+008
Sr-91	2.8398e+003	1.0507e+014	7.4810e+003	2.7680e+008
Sr-92	7.8161e+002	2.8919e+013	2.0590e+003	7.6183e+007
Sr-93	2.8801e-001	1.0656e+010	7.5870e-001	2.8072e+004
Tc-99	1.6562e-001	6.1280e+009	4.3630e-001	1.6143e+004
Tc-99m	2.6963e+003	9.9764e+013	7.1030e+003	2.6281e+008
Tc-101	3.6575e+000	1.3533e+011	9.6350e+000	3.5649e+005
Te-123m	3.5895e+000	1.3281e+011	9.4560e+000	3.4987e+005
Te-125m	6.5178e+002	2.4116e+013	1.7170e+003	6.3529e+007
Te-127	6.0509e+003	2.2388e+014	1.5940e+004	5.8978e+008
Te-127m	2.1076e+003	7.7980e+013	5.5520e+003	2.0542e+008
Te-129	4.6729e+003	1.7290e+014	1.2310e+004	4.5547e+008
Te-129m	5.6637e+003	2.0956e+014	1.4920e+004	5.5204e+008
Te-131	6.6773e+002	2.4706e+013	1.7590e+003	6.5083e+007
Te-131m	2.3368e+003	8.6463e+013	6.1560e+003	2.2777e+008
Te-132	4.8551e+004	1.7964e+015	1.2790e+005	4.7323e+009
Te-133	4.4186e+001	1.6349e+012	1.1640e+002	4.3068e+006
Te-133m	2.2511e+002	8.3289e+012	5.9300e+002	2.1941e+007
Te-134	2.9723e+002	1.0998e+013	7.8300e+002	2.8971e+007
Y-90	7.3567e+003	2.7220e+014	1.9380e+004	7.1706e+008
Y-91	2.8398e+003	1.0507e+014	7.4810e+003	2.7680e+008
Y-91m	1.6186e+003	5.9890e+013	4.2640e+003	1.5777e+008
Y-92	7.8161e+002	2.8919e+013	2.0590e+003	7.6183e+007
Y-93	3.8454e+001	1.4228e+012	1.0130e+002	3.7481e+006
Zr-95	9.0080e+002	3.3330e+013	2.3730e+003	8.7801e+007
Zr-97	7.4023e+001	2.7389e+012	1.9500e+002	7.2150e+006

Buildup
The material reference is : Shield 3

Integration Parameters

Radial	10
Circumferential	10
Y Direction (axial)	20

Results - Dose Point # 1 - (4.5,6,1) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	3.195e-10	7.713e-08	4.891e-13	1.181e-10
0.3656	1.658e+16	1.686e-01	4.353e+01	3.265e-04	8.428e-02
0.6172	3.926e+16	7.886e+01	7.771e+03	1.537e-01	1.514e+01
0.8096	2.283e+16	5.793e+02	3.411e+04	1.100e+00	6.479e+01
1.0825	3.228e+15	1.061e+03	3.663e+04	1.928e+00	6.655e+01
1.3401	3.232e+15	6.207e+03	1.487e+05	1.075e+01	2.576e+02
1.6044	2.234e+15	1.721e+04	3.118e+05	2.842e+01	5.149e+02
1.8388	4.112e+14	8.485e+03	1.267e+05	1.346e+01	2.011e+02
2.0402	1.931e+14	8.117e+03	1.053e+05	1.247e+01	1.619e+02
2.3212	9.035e+13	8.772e+03	9.629e+04	1.293e+01	1.420e+02
2.5398	8.358e+13	1.411e+04	1.385e+05	2.020e+01	1.984e+02
2.7426	6.219e+11	1.651e+02	1.479e+03	2.305e-01	2.065e+00
3.0171	8.007e+11	3.637e+02	2.922e+03	4.925e-01	3.957e+00
3.2809	1.203e+12	8.566e+02	6.278e+03	1.130e+00	8.279e+00
3.4931	4.130e+11	4.062e+02	2.784e+03	5.253e-01	3.600e+00
3.7009	7.277e+09	9.543e+00	6.157e+01	1.211e-02	7.815e-02
3.9384	5.005e+11	8.848e+02	5.355e+03	1.100e+00	6.660e+00
4.3428	1.578e+10	4.365e+01	2.394e+02	5.249e-02	2.879e-01
4.48	1.312e+09	4.161e+00	2.213e+01	4.950e-03	2.633e-02
4.7418	3.548e+11	1.433e+03	7.223e+03	1.672e+00	8.427e+00
5.0016	6.040e+08	3.039e+00	1.459e+01	3.484e-03	1.672e-02
5.2304	2.795e+09	1.680e+01	7.758e+01	1.899e-02	8.769e-02
5.608	3.851e+07	3.021e-01	1.317e+00	3.345e-04	1.458e-03
5.8005	3.326e+07	2.954e-01	1.253e+00	3.239e-04	1.374e-03
6.1042	3.501e+07	3.730e-01	1.518e+00	4.031e-04	1.640e-03
TOTALS:	9.494e+16	6.881e+04	1.032e+06	1.067e+02	1.656e+03

Results - Dose Point # 2 - (5.5,6,1) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	3.416e-10	8.164e-08	5.229e-13	1.250e-10
0.3656	1.658e+16	1.636e-01	4.170e+01	3.168e-04	8.074e-02
0.6172	3.926e+16	7.440e+01	7.251e+03	1.450e-01	1.413e+01
0.8096	2.283e+16	5.390e+02	3.143e+04	1.024e+00	5.969e+01
1.0825	3.228e+15	9.735e+02	3.330e+04	1.769e+00	6.051e+01
1.3401	3.232e+15	5.638e+03	1.339e+05	9.768e+00	2.320e+02
1.6044	2.234e+15	1.551e+04	2.787e+05	2.562e+01	4.603e+02
1.8388	4.112e+14	7.605e+03	1.127e+05	1.207e+01	1.788e+02
2.0402	1.931e+14	7.246e+03	9.332e+04	1.113e+01	1.434e+02
2.3212	9.035e+13	7.793e+03	8.492e+04	1.149e+01	1.252e+02
2.5398	8.358e+13	1.250e+04	1.218e+05	1.789e+01	1.744e+02
2.7426	6.219e+11	1.458e+02	1.297e+03	2.036e-01	1.812e+00
3.0171	8.007e+11	3.202e+02	2.555e+03	4.337e-01	3.461e+00
3.2809	1.203e+12	7.523e+02	5.476e+03	9.922e-01	7.222e+00
3.4931	4.130e+11	3.561e+02	2.424e+03	4.604e-01	3.135e+00
3.7009	7.277e+09	8.351e+00	5.352e+01	1.060e-02	6.793e-02
3.9384	5.005e+11	7.729e+02	4.647e+03	9.612e-01	5.779e+00
4.3428	1.578e+10	3.803e+01	2.072e+02	4.573e-02	2.492e-01
4.48	1.312e+09	3.622e+00	1.914e+01	4.309e-03	2.277e-02
4.7418	3.548e+11	1.246e+03	6.238e+03	1.453e+00	7.278e+00
5.0016	6.040e+08	2.638e+00	1.258e+01	3.024e-03	1.443e-02
5.2304	2.795e+09	1.457e+01	6.685e+01	1.647e-02	7.556e-02
5.608	3.851e+07	2.616e-01	1.133e+00	2.896e-04	1.254e-03
5.8005	3.326e+07	2.556e-01	1.077e+00	2.802e-04	1.181e-03
6.1042	3.501e+07	3.224e-01	1.304e+00	3.484e-04	1.409e-03
TOTALS:	9.494e+16	6.154e+04	9.204e+05	9.549e+01	1.478e+03

Results - Dose Point # 3 - (6.5,6,1) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	3.390e-10	8.053e-08	5.189e-13	1.233e-10
0.3656	1.658e+16	1.531e-01	3.873e+01	2.965e-04	7.499e-02
0.6172	3.926e+16	6.845e+01	6.627e+03	1.334e-01	1.291e+01
0.8096	2.283e+16	4.918e+02	2.849e+04	9.340e-01	5.412e+01
1.0825	3.228e+15	8.804e+02	2.995e+04	1.600e+00	5.442e+01
1.3401	3.232e+15	5.068e+03	1.197e+05	8.781e+00	2.075e+02
1.6044	2.234e+15	1.387e+04	2.480e+05	2.291e+01	4.096e+02
1.8388	4.112e+14	6.778e+03	9.991e+04	1.076e+01	1.586e+02
2.0402	1.931e+14	6.440e+03	8.253e+04	9.897e+00	1.268e+02
2.3212	9.035e+13	6.905e+03	7.487e+04	1.018e+01	1.104e+02
2.5398	8.358e+13	1.105e+04	1.072e+05	1.582e+01	1.535e+02

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
2.7426	6.219e+11	1.287e+02	1.139e+03	1.797e-01	1.591e+00
3.0171	8.007e+11	2.820e+02	2.239e+03	3.819e-01	3.033e+00
3.2809	1.203e+12	6.613e+02	4.789e+03	8.721e-01	6.316e+00
3.4931	4.130e+11	3.126e+02	2.117e+03	4.042e-01	2.738e+00
3.7009	7.277e+09	7.321e+00	4.669e+01	9.292e-03	5.926e-02
3.9384	5.005e+11	6.767e+02	4.049e+03	8.416e-01	5.035e+00
4.3428	1.578e+10	3.323e+01	1.802e+02	3.996e-02	2.166e-01
4.48	1.312e+09	3.163e+00	1.663e+01	3.762e-03	1.979e-02
4.7418	3.548e+11	1.087e+03	5.414e+03	1.268e+00	6.316e+00
5.0016	6.040e+08	2.299e+00	1.091e+01	2.635e-03	1.251e-02
5.2304	2.795e+09	1.268e+01	5.791e+01	1.434e-02	6.545e-02
5.608	3.851e+07	2.275e-01	9.800e-01	2.518e-04	1.085e-03
5.8005	3.326e+07	2.221e-01	9.311e-01	2.435e-04	1.021e-03
6.1042	3.501e+07	2.799e-01	1.126e+00	3.025e-04	1.217e-03
TOTALS:	9.494e+16	5.476e+04	8.174e+05	8.503e+01	1.313e+03

Results - Dose Point # 4 - (7.5,6,1) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	3.250e-10	7.691e-08	4.975e-13	1.177e-10
0.3656	1.658e+16	1.414e-01	3.559e+01	2.738e-04	6.891e-02
0.6172	3.926e+16	6.251e+01	6.025e+03	1.218e-01	1.174e+01
0.8096	2.283e+16	4.466e+02	2.577e+04	8.482e-01	4.894e+01
1.0825	3.228e+15	7.948e+02	2.693e+04	1.444e+00	4.893e+01
1.3401	3.232e+15	4.555e+03	1.072e+05	7.892e+00	1.857e+02
1.6044	2.234e+15	1.242e+04	2.212e+05	2.052e+01	3.654e+02
1.8388	4.112e+14	6.053e+03	8.887e+04	9.605e+00	1.410e+02
2.0402	1.931e+14	5.740e+03	7.325e+04	8.820e+00	1.126e+02
2.3212	9.035e+13	6.138e+03	6.628e+04	9.050e+00	9.773e+01
2.5398	8.358e+13	9.803e+03	9.471e+04	1.404e+01	1.356e+02
2.7426	6.219e+11	1.140e+02	1.005e+03	1.592e-01	1.404e+00
3.0171	8.007e+11	2.494e+02	1.972e+03	3.377e-01	2.671e+00
3.2809	1.203e+12	5.838e+02	4.211e+03	7.700e-01	5.553e+00
3.4931	4.130e+11	2.757e+02	1.859e+03	3.564e-01	2.404e+00
3.7009	7.277e+09	6.449e+00	4.095e+01	8.186e-03	5.197e-02
3.9384	5.005e+11	5.955e+02	3.547e+03	7.405e-01	4.411e+00
4.3428	1.578e+10	2.918e+01	1.575e+02	3.510e-02	1.894e-01
4.48	1.312e+09	2.776e+00	1.454e+01	3.303e-03	1.729e-02
4.7418	3.548e+11	9.530e+02	4.726e+03	1.112e+00	5.514e+00
5.0016	6.040e+08	2.014e+00	9.516e+00	2.309e-03	1.091e-02
5.2304	2.795e+09	1.111e+01	5.046e+01	1.255e-02	5.704e-02
5.608	3.851e+07	1.989e-01	8.530e-01	2.202e-04	9.444e-04
5.8005	3.326e+07	1.941e-01	8.100e-01	2.129e-04	8.881e-04
6.1042	3.501e+07	2.445e-01	9.788e-01	2.642e-04	1.058e-03
TOTALS:	9.494e+16	4.884e+04	7.279e+05	7.587e+01	1.170e+03

Results - Dose Point # 5 - (8.5,6,1) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	3.067e-10	7.238e-08	4.695e-13	1.108e-10
0.3656	1.658e+16	1.301e-01	3.262e+01	2.519e-04	6.317e-02
0.6172	3.926e+16	5.705e+01	5.480e+03	1.112e-01	1.068e+01
0.8096	2.283e+16	4.058e+02	2.334e+04	7.708e-01	4.433e+01
1.0825	3.228e+15	7.189e+02	2.428e+04	1.306e+00	4.411e+01
1.3401	3.232e+15	4.106e+03	9.630e+04	7.113e+00	1.668e+02
1.6044	2.234e+15	1.116e+04	1.981e+05	1.843e+01	3.272e+02
1.8388	4.112e+14	5.425e+03	7.937e+04	8.609e+00	1.260e+02
2.0402	1.931e+14	5.135e+03	6.530e+04	7.891e+00	1.003e+02
2.3212	9.035e+13	5.479e+03	5.894e+04	8.078e+00	8.691e+01
2.5398	8.358e+13	8.736e+03	8.408e+04	1.251e+01	1.204e+02
2.7426	6.219e+11	1.014e+02	8.911e+02	1.417e-01	1.244e+00
3.0171	8.007e+11	2.215e+02	1.745e+03	3.000e-01	2.363e+00
3.2809	1.203e+12	5.179e+02	3.720e+03	6.830e-01	4.906e+00
3.4931	4.130e+11	2.442e+02	1.641e+03	3.158e-01	2.121e+00
3.7009	7.277e+09	5.708e+00	3.609e+01	7.245e-03	4.581e-02
3.9384	5.005e+11	5.265e+02	3.123e+03	6.547e-01	3.883e+00
4.3428	1.578e+10	2.576e+01	1.385e+02	3.098e-02	1.665e-01
4.48	1.312e+09	2.449e+00	1.277e+01	2.914e-03	1.519e-02
4.7418	3.548e+11	8.400e+02	4.148e+03	9.800e-01	4.839e+00
5.0016	6.040e+08	1.774e+00	8.343e+00	2.033e-03	9.564e-03
5.2304	2.795e+09	9.773e+00	4.422e+01	1.105e-02	4.998e-02
5.608	3.851e+07	1.749e-01	7.466e-01	1.936e-04	8.265e-04

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
5.8005	3.326e+07	1.706e-01	7.085e-01	1.870e-04	7.768e-04
6.1042	3.501e+07	2.146e-01	8.555e-01	2.320e-04	9.246e-04
TOTALS:	9.494e+16	4.372e+04	6.507e+05	6.795e+01	1.046e+03

Results - Dose Point # 6 - (9.5,6,1) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	2.873e-10	6.769e-08	4.398e-13	1.036e-10
0.3656	1.658e+16	1.197e-01	2.993e+01	2.318e-04	5.796e-02
0.6172	3.926e+16	5.216e+01	4.996e+03	1.016e-01	9.736e+00
0.8096	2.283e+16	3.697e+02	2.120e+04	7.022e-01	4.027e+01
1.0825	3.228e+15	6.522e+02	2.196e+04	1.185e+00	3.990e+01
1.3401	3.232e+15	3.712e+03	8.681e+04	6.432e+00	1.504e+02
1.6044	2.234e+15	1.006e+04	1.780e+05	1.662e+01	2.940e+02
1.8388	4.112e+14	4.880e+03	7.116e+04	7.745e+00	1.129e+02
2.0402	1.931e+14	4.611e+03	5.843e+04	7.086e+00	8.979e+01
2.3212	9.035e+13	4.909e+03	5.262e+04	7.238e+00	7.758e+01
2.5398	8.358e+13	7.815e+03	7.494e+04	1.119e+01	1.073e+02
2.7426	6.219e+11	9.063e+01	7.931e+02	1.266e-01	1.108e+00
3.0171	8.007e+11	1.976e+02	1.550e+03	2.676e-01	2.100e+00
3.2809	1.203e+12	4.612e+02	3.300e+03	6.083e-01	4.352e+00
3.4931	4.130e+11	2.173e+02	1.454e+03	2.810e-01	1.880e+00
3.7009	7.277e+09	5.074e+00	3.195e+01	6.440e-03	4.056e-02
3.9384	5.005e+11	4.675e+02	2.762e+03	5.813e-01	3.434e+00
4.3428	1.578e+10	2.284e+01	1.223e+02	2.746e-02	1.470e-01
4.48	1.312e+09	2.170e+00	1.127e+01	2.582e-03	1.341e-02
4.7418	3.548e+11	7.436e+02	3.657e+03	8.675e-01	4.267e+00
5.0016	6.040e+08	1.569e+00	7.350e+00	1.799e-03	8.425e-03
5.2304	2.795e+09	8.639e+00	3.892e+01	9.765e-03	4.400e-02
5.608	3.851e+07	1.544e-01	6.566e-01	1.710e-04	7.268e-04
5.8005	3.326e+07	1.506e-01	6.228e-01	1.651e-04	6.828e-04
6.1042	3.501e+07	1.893e-01	7.515e-01	2.046e-04	8.121e-04
TOTALS:	9.494e+16	3.928e+04	5.839e+05	6.108e+01	9.394e+02

MicroShield v5.05 (5.05-00210)
Raytheon Engineers & Constructors

Page : 1
DOS File: LGSCS-AB.MS5
Run Date: June 8, 2006
Run Time: 4:00:30 PM
Duration: 00:00:11

File Ref: _____
Date: _____
By: _____
Checked: _____

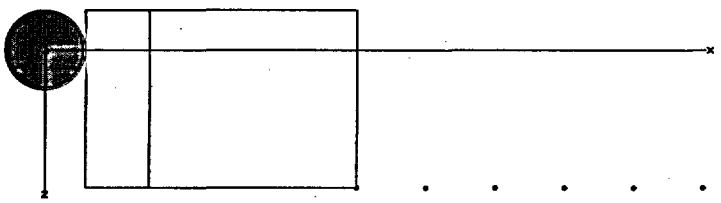
Case Title: LGS CS Pipe
Description: Case B, with 110 isotopes, 1 ft. from East Cabinet Wall
Geometry: 7 - Cylinder Volume - Side Shields

Source Dimensions

Height	426.72 cm	14 ft 0.0 in
Radius	16.828 cm	6.6 in

Dose Points

	X	Y	Z
# 1	137.16 cm 4 ft 6.0 in	182.88 cm 6 ft	60.96 cm 2 ft
# 2	167.64 cm 5 ft 6.0 in	182.88 cm 6 ft	60.96 cm 2 ft
# 3	198.12 cm 6 ft 6.0 in	182.88 cm 6 ft	60.96 cm 2 ft
# 4	228.6 cm 7 ft 6.0 in	182.88 cm 6 ft	60.96 cm 2 ft
# 5	259.08 cm 8 ft 6.0 in	182.88 cm 6 ft	60.96 cm 2 ft
# 6	289.56 cm 9 ft 6.0 in	182.88 cm 6 ft	60.96 cm 2 ft



Shields

Shield Name	Dimension	Material	Density
Source	13.406 ft³	Water	1
Transition		Air	0.00122
Shield 2	.917 ft	Air	0.00122
Shield 3	3.0 ft	Concrete	2.35
Air Gap		Air	0.00122
Wall Clad	.031 ft	Iron	7.86

Source Input
Grouping Method : Linear Energy
Number of Groups : 25
Lower Energy Cutoff : 0.015
Photons < 0.015 : Excluded
Library : Grove

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Am-241	2.4333e-001	9.0031e+009	6.4100e-001	2.3717e+004
Ba-137m	1.2421e+005	4.5957e+015	3.2720e+005	1.2106e+010
Ba-139	4.9197e+002	1.8203e+013	1.2960e+003	4.7952e+007
Ba-140	5.9256e+004	2.1925e+015	1.5610e+005	5.7757e+009
Ba-141	1.3810e+001	5.1097e+011	3.6380e+001	1.3461e+006
Ba-142	1.7769e+000	6.5746e+010	4.6810e+000	1.7320e+005
Br-82	6.8595e+002	2.5380e+013	1.8070e+003	6.6859e+007
Br-83	1.0826e+003	4.0057e+013	2.8520e+003	1.0552e+008
Br-84	1.8434e+002	6.8204e+012	4.8560e+002	1.7967e+007
Br-85	1.3039e+000	4.8246e+010	3.4350e+000	1.2709e+005
Ce-141	1.9876e+003	7.3542e+013	5.2360e+003	1.9373e+008
Ce-143	2.6925e+002	9.9624e+012	7.0930e+002	2.6244e+007
Ce-144	2.0153e+003	7.4567e+013	5.3090e+003	1.9643e+008
Cm-242	5.2386e+001	1.9383e+012	1.3800e+002	5.1060e+006
Cm-244	6.0357e+000	2.2332e+011	1.5900e+001	5.8830e+005
Co-58	3.9099e+001	1.4467e+012	1.0300e+002	3.8110e+006
Co-60	5.2765e+001	1.9523e+012	1.3900e+002	5.1430e+006
Cs-132	7.4554e+001	2.7585e+012	1.9640e+002	7.2668e+006
Cs-134	2.0837e+005	7.7095e+015	5.4890e+005	2.0309e+010
Cs-134m	4.9349e+002	1.8259e+013	1.3000e+003	4.8100e+007
Cs-135	7.4554e-001	2.7585e+010	1.9640e+000	7.2668e+004
Cs-136	3.2183e+004	1.1908e+015	8.4780e+004	3.1369e+009
Cs-137	1.3138e+005	4.8611e+015	3.4610e+005	1.2806e+010
Cs-138	2.0704e+003	7.6604e+013	5.4540e+003	2.0180e+008
Cs-139	1.0367e+002	3.8358e+012	2.7310e+002	1.0105e+007
Eu-154	1.0481e+001	3.8779e+011	2.7610e+001	1.0216e+006
Eu-155	7.4365e+000	2.7515e+011	1.9590e+001	7.2483e+005
Eu-156	6.8481e+001	2.5338e+012	1.8040e+002	6.6748e+006
I-128	6.8860e+000	2.5478e+011	1.8140e+001	6.7118e+005
I-130	1.7124e+003	6.3359e+013	4.5110e+003	1.6691e+008
I-131	3.9896e+005	1.4762e+016	1.0510e+006	3.8887e+010
I-132	3.0084e+005	1.1131e+016	7.9250e+005	2.9322e+010
I-133	1.5116e+005	5.5929e+015	3.9820e+005	1.4733e+010
I-134	8.5829e+003	3.1757e+014	2.2610e+004	8.3657e+008
I-135	4.9273e+004	1.8231e+015	1.2980e+005	4.8026e+009
I-136	6.8177e-001	2.5226e+010	1.7960e+000	6.6452e+004
La-140	5.3524e+004	1.9804e+015	1.4100e+005	5.2170e+009
La-141	1.7177e+001	6.3555e+011	4.5250e+001	1.6743e+006

DOS File: LGSCS-AB.MS5
Run Date: June 8, 2006
Run Time: 4:00:30 PM
Duration: 00:00:11

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
La-142	5.1247e+000	1.8961e+011	1.3500e+001	4.9950e+005
Mo-99	2.8315e+003	1.0476e+014	7.4590e+003	2.7598e+008
Mo-101	8.3513e-001	3.0900e+010	2.2000e+000	8.1400e+004
Nb-95	1.0189e+003	3.7698e+013	2.6840e+003	9.9308e+007
Nb-95m	6.6469e+000	2.4593e+011	1.7510e+001	6.4787e+005
Nb-97	7.1366e+001	2.6405e+012	1.8800e+002	6.9560e+006
Nb-97m	6.3888e+001	2.3638e+012	1.6830e+002	6.2271e+006
Nd-147	2.0939e+002	7.7474e+012	5.5160e+002	2.0409e+007
Nd-149	1.3328e+000	4.9313e+010	3.5110e+000	1.2991e+005
Np-239	5.0867e+003	1.8821e+014	1.3400e+004	4.9580e+008
Pd-109	1.4516e+002	5.3710e+012	3.8240e+002	1.4149e+007
Pm-147	1.1005e+002	4.0718e+012	2.8990e+002	1.0726e+007
Pm-148	5.5764e+001	2.0633e+012	1.4690e+002	5.4353e+006
Pm-148m	2.1691e+001	8.0255e+011	5.7140e+001	2.1142e+006
Pm-149	5.9256e+001	2.1925e+012	1.5610e+002	5.7757e+006
Pm-151	1.2569e+001	4.6504e+011	3.3110e+001	1.2251e+006
Pr-142	3.6909e+000	1.3656e+011	9.7230e+000	3.5975e+005
Pr-143	5.6789e+002	2.1012e+013	1.4960e+003	5.5352e+007
Pr-144	8.0628e+002	2.9832e+013	2.1240e+003	7.8588e+007
Pr-144m	9.6723e+000	3.5788e+011	2.5480e+001	9.4276e+005
Pu-238	1.0439e+001	3.8625e+011	2.7500e+001	1.0175e+006
Pu-239	7.0607e-001	2.6124e+010	1.8600e+000	6.8820e+004
Pu-240	7.4782e-001	2.7669e+010	1.9700e+000	7.2890e+004
Pu-241	3.5873e+002	1.3273e+013	9.4500e+002	3.4965e+007
Rb-86	1.2079e+003	4.4692e+013	3.1820e+003	1.1773e+008
Rb-88	6.6203e+003	2.4495e+014	1.7440e+004	6.4528e+008
Rb-89	1.7192e+002	6.3612e+012	4.5290e+002	1.6757e+007
Rb-90	3.7311e+000	1.3805e+011	9.8290e+000	3.6367e+005
Rb-90m	2.3372e+000	8.6477e+010	6.1570e+000	2.2781e+005
Rh-103m	8.7347e+003	3.2318e+014	2.3010e+004	8.5137e+008
Rh-105	1.0682e+003	3.9524e+013	2.8140e+003	1.0412e+008
Rh-105m	4.3123e+001	1.5956e+012	1.1360e+002	4.2032e+006
Rh-106	4.8855e+003	1.8076e+014	1.2870e+004	4.7619e+008
Ru-103	9.6799e+003	3.5816e+014	2.5500e+004	9.4350e+008
Ru-105	1.5359e+002	5.6828e+012	4.0460e+002	1.4970e+007
Ru-106	4.8855e+003	1.8076e+014	1.2870e+004	4.7619e+008
Sb-122	7.4706e+001	2.7641e+012	1.9680e+002	7.2816e+006
Sb-124	2.1011e+002	7.7741e+012	5.5350e+002	2.0479e+007
Sb-125	2.9427e+003	1.0888e+014	7.7520e+003	2.8682e+008
Sb-126	9.3725e+001	3.4678e+012	2.4690e+002	9.1353e+006
Sb-126m	2.0499e-001	7.5845e+009	5.4000e-001	1.9980e+004
Sb-127	4.2402e+003	1.5689e+014	1.1170e+004	4.1329e+008
Sb-129	8.6892e+002	3.2150e+013	2.2890e+003	8.4693e+007
Sm-151	4.9197e-001	1.8203e+010	1.2960e+000	4.7952e+004
Sm-153	4.4224e+001	1.6363e+012	1.1650e+002	4.3105e+006
Sr-89	4.8703e+004	1.8020e+015	1.2830e+005	4.7471e+009
Sr-90	7.3567e+003	2.7220e+014	1.9380e+004	7.1706e+008
Sr-91	2.8398e+003	1.0507e+014	7.4810e+003	2.7680e+008
Sr-92	7.8161e+002	2.8919e+013	2.0590e+003	7.6183e+007
Sr-93	2.8801e-001	1.0656e+010	7.5870e-001	2.8072e+004
Tc-99	1.6562e-001	6.1280e+009	4.3630e-001	1.6143e+004
Tc-99m	2.6963e+003	9.9764e+013	7.1030e+003	2.6281e+008
Tc-101	3.6575e+000	1.3533e+011	9.6350e+000	3.5649e+005
Te-123m	3.5895e+000	1.3281e+011	9.4560e+000	3.4987e+005
Te-125m	6.5178e+002	2.4116e+013	1.7170e+003	6.3529e+007
Te-127	6.0509e+003	2.2388e+014	1.5940e+004	5.8978e+008
Te-127m	2.1076e+003	7.7980e+013	5.5520e+003	2.0542e+008
Te-129	4.6729e+003	1.7290e+014	1.2310e+004	4.5547e+008
Te-129m	5.6637e+003	2.0956e+014	1.4920e+004	5.5204e+008
Te-131	6.6773e+002	2.4706e+013	1.7590e+003	6.5083e+007
Te-131m	2.3368e+003	8.6463e+013	6.1560e+003	2.2777e+008
Te-132	4.8551e+004	1.7964e+015	1.2790e+005	4.7323e+009
Te-133	4.4186e+001	1.6349e+012	1.1640e+002	4.3068e+006
Te-133m	2.2511e+002	8.3289e+012	5.9300e+002	2.1941e+007
Te-134	2.9723e+002	1.0998e+013	7.8300e+002	2.8971e+007
Y-90	7.3567e+003	2.7220e+014	1.9380e+004	7.1706e+008
Y-91	2.8398e+003	1.0507e+014	7.4810e+003	2.7680e+008
Y-91m	1.6186e+003	5.9890e+013	4.2640e+003	1.5777e+008
Y-92	7.8161e+002	2.8919e+013	2.0590e+003	7.6183e+007
Y-93	3.8454e+001	1.4228e+012	1.0130e+002	3.7481e+006
Zr-95	9.0080e+002	3.3330e+013	2.3730e+003	8.7801e+007
Zr-97	7.4023e+001	2.7389e+012	1.9500e+002	7.2150e+006

Buildup
The material reference is : Shield 3

Integration Parameters

Radial	10
Circumferential	10
Y Direction (axial)	20

Results - Dose Point # 1 - (4.5,6,2) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	2.868e-11	7.573e-09	4.390e-14	1.159e-11
0.3656	1.658e+16	3.819e-02	1.107e+01	7.394e-05	2.143e-02
0.6172	3.926e+16	2.317e+01	2.515e+03	4.515e-02	4.901e+00
0.8096	2.283e+16	1.928e+02	1.239e+04	3.663e-01	2.354e+01
1.0825	3.228e+15	4.006e+02	1.495e+04	7.279e-01	2.715e+01
1.3401	3.232e+15	2.555e+03	6.573e+04	4.427e+00	1.139e+02
1.6044	2.234e+15	7.580e+03	1.468e+05	1.252e+01	2.425e+02
1.8388	4.112e+14	3.920e+03	6.239e+04	6.220e+00	9.901e+01
2.0402	1.931e+14	3.880e+03	5.355e+04	5.962e+00	8.229e+01
2.3212	9.035e+13	4.363e+03	5.078e+04	6.434e+00	7.488e+01
2.5398	8.358e+13	7.204e+03	7.484e+04	1.032e+01	1.072e+02
2.7426	6.219e+11	8.607e+01	8.146e+02	1.202e-01	1.138e+00
3.0171	8.007e+11	1.944e+02	1.647e+03	2.633e-01	2.231e+00
3.2809	1.203e+12	4.676e+02	3.607e+03	6.167e-01	4.758e+00
3.4931	4.130e+11	2.250e+02	1.622e+03	2.910e-01	2.097e+00
3.7009	7.277e+09	5.355e+00	3.630e+01	6.797e-03	4.607e-02
3.9384	5.005e+11	5.032e+02	3.196e+03	6.258e-01	3.975e+00
4.3428	1.578e+10	2.532e+01	1.455e+02	3.045e-02	1.749e-01
4.48	1.312e+09	2.428e+00	1.352e+01	2.888e-03	1.609e-02
4.7418	3.548e+11	8.452e+02	4.456e+03	9.861e-01	5.198e+00
5.0016	6.040e+08	1.809e+00	9.079e+00	2.074e-03	1.041e-02
5.2304	2.795e+09	1.008e+01	4.863e+01	1.139e-02	5.496e-02
5.608	3.851e+07	1.832e-01	8.339e-01	2.029e-04	9.232e-04
5.8005	3.326e+07	1.801e-01	7.971e-01	1.975e-04	8.739e-04
6.1042	3.501e+07	2.291e-01	9.723e-01	2.476e-04	1.051e-03
TOTALS:	9.494e+16	3.249e+04	4.996e+05	4.997e+01	7.950e+02

Results - Dose Point # 2 - (5.5,6,2) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	6.318e-11	1.611e-08	9.671e-14	2.467e-11
0.3656	1.658e+16	5.787e-02	1.603e+01	1.121e-04	3.104e-02
0.6172	3.926e+16	3.166e+01	3.308e+03	6.168e-02	6.445e+00
0.8096	2.283e+16	2.506e+02	1.555e+04	4.759e-01	2.954e+01
1.0825	3.228e+15	4.946e+02	1.788e+04	8.987e-01	3.249e+01
1.3401	3.232e+15	3.045e+03	7.610e+04	5.275e+00	1.318e+02
1.6044	2.234e+15	8.784e+03	1.656e+05	1.451e+01	2.734e+02
1.8388	4.112e+14	4.453e+03	6.905e+04	7.067e+00	1.096e+02
2.0402	1.931e+14	4.345e+03	5.847e+04	6.678e+00	8.985e+01
2.3212	9.035e+13	4.806e+03	5.458e+04	7.086e+00	8.048e+01
2.5398	8.358e+13	7.848e+03	7.962e+04	1.124e+01	1.140e+02
2.7426	6.219e+11	9.292e+01	8.594e+02	1.298e-01	1.200e+00
3.0171	8.007e+11	2.077e+02	1.720e+03	2.813e-01	2.330e+00
3.2809	1.203e+12	4.950e+02	3.736e+03	6.528e-01	4.927e+00
3.4931	4.130e+11	2.367e+02	1.670e+03	3.061e-01	2.159e+00
3.7009	7.277e+09	5.601e+00	3.717e+01	7.110e-03	4.718e-02
3.9384	5.005e+11	5.233e+02	3.255e+03	6.508e-01	4.047e+00
4.3428	1.578e+10	2.610e+01	1.469e+02	3.139e-02	1.767e-01
4.48	1.312e+09	2.496e+00	1.363e+01	2.970e-03	1.621e-02
4.7418	3.548e+11	8.649e+02	4.470e+03	1.009e+00	5.215e+00
5.0016	6.040e+08	1.844e+00	9.072e+00	2.113e-03	1.040e-02
5.2304	2.795e+09	1.023e+01	4.843e+01	1.157e-02	5.473e-02
5.608	3.851e+07	1.852e-01	8.265e-01	2.050e-04	9.150e-04
5.8005	3.326e+07	1.816e-01	7.883e-01	1.991e-04	8.642e-04
6.1042	3.501e+07	2.302e-01	9.585e-01	2.487e-04	1.036e-03
TOTALS:	9.494e+16	3.653e+04	5.561e+05	5.637e+01	8.879e+02

Results - Dose Point # 3 - (6.5,6,2) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	9.796e-11	2.444e-08	1.499e-13	3.741e-11
0.3656	1.658e+16	7.133e-02	1.920e+01	1.381e-04	3.717e-02
0.6172	3.926e+16	3.656e+01	3.729e+03	7.125e-02	7.265e+00
0.8096	2.283e+16	2.805e+02	1.703e+04	5.327e-01	3.234e+01
1.0825	3.228e+15	5.362e+02	1.901e+04	9.743e-01	3.454e+01
1.3401	3.232e+15	3.229e+03	7.922e+04	5.594e+00	1.373e+02
1.6044	2.234e+15	9.153e+03	1.695e+05	1.512e+01	2.800e+02
1.8388	4.112e+14	4.583e+03	6.987e+04	7.273e+00	1.109e+02
2.0402	1.931e+14	4.432e+03	5.866e+04	6.811e+00	9.015e+01
2.3212	9.035e+13	4.850e+03	5.422e+04	7.151e+00	7.995e+01
2.5398	8.358e+13	7.864e+03	7.857e+04	1.126e+01	1.125e+02

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
2.7426	6.219e+11	9.258e+01	8.435e+02	1.293e-01	1.178e+00
3.0171	8.007e+11	2.055e+02	1.677e+03	2.783e-01	2.272e+00
3.2809	1.203e+12	4.870e+02	3.623e+03	6.423e-01	4.778e+00
3.4931	4.130e+11	2.319e+02	1.613e+03	2.999e-01	2.085e+00
3.7009	7.277e+09	5.468e+00	3.577e+01	6.941e-03	4.541e-02
3.9384	5.005e+11	5.089e+02	3.121e+03	6.329e-01	3.882e+00
4.3428	1.578e+10	2.524e+01	1.402e+02	3.035e-02	1.685e-01
4.48	1.312e+09	2.410e+00	1.298e+01	2.866e-03	1.544e-02
4.7418	3.548e+11	8.323e+02	4.244e+03	9.710e-01	4.951e+00
5.0016	6.040e+08	1.769e+00	8.590e+00	2.028e-03	9.847e-03
5.2304	2.795e+09	9.798e+00	4.575e+01	1.107e-02	5.171e-02
5.608	3.851e+07	1.767e-01	7.783e-01	1.956e-04	8.617e-04
5.8005	3.326e+07	1.730e-01	7.412e-01	1.897e-04	8.126e-04
6.1042	3.501e+07	2.188e-01	8.993e-01	2.365e-04	9.719e-04
TOTALS:	9.494e+16	3.737e+04	5.652e+05	5.779e+01	9.043e+02

Results - Dose Point # 4 - (7.5,6,2) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	1.259e-10	3.093e-08	1.927e-13	4.735e-11
0.3656	1.658e+16	7.889e-02	2.083e+01	1.527e-04	4.033e-02
0.6172	3.926e+16	3.874e+01	3.886e+03	7.548e-02	7.572e+00
0.8096	2.283e+16	2.910e+02	1.740e+04	5.527e-01	3.306e+01
1.0825	3.228e+15	5.446e+02	1.905e+04	9.895e-01	3.461e+01
1.3401	3.232e+15	3.231e+03	7.827e+04	5.597e+00	1.356e+02
1.6044	2.234e+15	9.050e+03	1.656e+05	1.495e+01	2.735e+02
1.8388	4.112e+14	4.493e+03	6.769e+04	7.130e+00	1.074e+02
2.0402	1.931e+14	4.318e+03	5.649e+04	6.635e+00	8.681e+01
2.3212	9.035e+13	4.690e+03	5.185e+04	6.915e+00	7.644e+01
2.5398	8.358e+13	7.567e+03	7.477e+04	1.083e+01	1.071e+02
2.7426	6.219e+11	8.872e+01	7.996e+02	1.239e-01	1.117e+00
3.0171	8.007e+11	1.960e+02	1.583e+03	2.654e-01	2.143e+00
3.2809	1.203e+12	4.625e+02	3.404e+03	6.099e-01	4.490e+00
3.4931	4.130e+11	2.196e+02	1.511e+03	2.839e-01	1.954e+00
3.7009	7.277e+09	5.163e+00	3.343e+01	6.554e-03	4.243e-02
3.9384	5.005e+11	4.792e+02	2.909e+03	5.959e-01	3.617e+00
4.3428	1.578e+10	2.367e+01	1.301e+02	2.846e-02	1.564e-01
4.48	1.312e+09	2.257e+00	1.203e+01	2.684e-03	1.431e-02
4.7418	3.548e+11	7.777e+02	3.926e+03	9.073e-01	4.580e+00
5.0016	6.040e+08	1.650e+00	7.930e+00	1.891e-03	9.090e-03
5.2304	2.795e+09	9.121e+00	4.217e+01	1.031e-02	4.766e-02
5.608	3.851e+07	1.641e-01	7.156e-01	1.816e-04	7.922e-04
5.8005	3.326e+07	1.604e-01	6.807e-01	1.759e-04	7.463e-04
6.1042	3.501e+07	2.026e-01	8.245e-01	2.189e-04	8.910e-04
TOTALS:	9.494e+16	3.649e+04	5.494e+05	5.651e+01	8.803e+02

Results - Dose Point # 5 - (8.5,6,2) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	1.453e-10	3.533e-08	2.223e-13	5.409e-11
0.3656	1.658e+16	8.215e-02	2.140e+01	1.591e-04	4.143e-02
0.6172	3.926e+16	3.915e+01	3.882e+03	7.628e-02	7.564e+00
0.8096	2.283e+16	2.897e+02	1.714e+04	5.503e-01	3.256e+01
1.0825	3.228e+15	5.340e+02	1.849e+04	9.702e-01	3.360e+01
1.3401	3.232e+15	3.133e+03	7.521e+04	5.429e+00	1.303e+02
1.6044	2.234e+15	8.700e+03	1.578e+05	1.437e+01	2.605e+02
1.8388	4.112e+14	4.291e+03	6.408e+04	6.810e+00	1.017e+02
2.0402	1.931e+14	4.105e+03	5.323e+04	6.308e+00	8.180e+01
2.3212	9.035e+13	4.433e+03	4.858e+04	6.537e+00	7.164e+01
2.5398	8.358e+13	7.126e+03	6.981e+04	1.020e+01	9.996e+01
2.7426	6.219e+11	8.328e+01	7.442e+02	1.163e-01	1.039e+00
3.0171	8.007e+11	1.833e+02	1.468e+03	2.482e-01	1.987e+00
3.2809	1.203e+12	4.311e+02	3.147e+03	5.685e-01	4.150e+00
3.4931	4.130e+11	2.042e+02	1.393e+03	2.640e-01	1.802e+00
3.7009	7.277e+09	4.791e+00	3.076e+01	6.082e-03	3.905e-02
3.9384	5.005e+11	4.437e+02	2.671e+03	5.518e-01	3.322e+00
4.3428	1.578e+10	2.184e+01	1.191e+02	2.626e-02	1.432e-01
4.48	1.312e+09	2.080e+00	1.100e+01	2.475e-03	1.309e-02
4.7418	3.548e+11	7.156e+02	3.584e+03	8.349e-01	4.181e+00
5.0016	6.040e+08	1.515e+00	7.227e+00	1.737e-03	8.284e-03
5.2304	2.795e+09	8.368e+00	3.838e+01	9.459e-03	4.338e-02
5.608	3.851e+07	1.502e-01	6.500e-01	1.663e-04	7.196e-04

DOS File: LGSCS-AB.MS5
Run Date: June 8, 2006
Run Time: 4:00:30 PM
Duration: 00:00:11

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
5.8005	3.326e+07	1.468e-01	6.177e-01	1.609e-04	6.772e-04
6.1042	3.501e+07	1.851e-01	7.473e-01	2.000e-04	8.076e-04
TOTALS:	9.494e+16	3.475e+04	5.214e+05	5.388e+01	8.364e+02

Results - Dose Point # 6 - (9.5,6,2) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	1.572e-10	3.795e-08	2.406e-13	5.809e-11
0.3656	1.658e+16	8.258e-02	2.130e+01	1.599e-04	4.124e-02
0.6172	3.926e+16	3.849e+01	3.783e+03	7.499e-02	7.371e+00
0.8096	2.283e+16	2.817e+02	1.653e+04	5.350e-01	3.140e+01
1.0825	3.228e+15	5.131e+02	1.763e+04	9.323e-01	3.204e+01
1.3401	3.232e+15	2.985e+03	7.111e+04	5.172e+00	1.232e+02
1.6044	2.234e+15	8.231e+03	1.481e+05	1.359e+01	2.446e+02
1.8388	4.112e+14	4.039e+03	5.987e+04	6.409e+00	9.500e+01
2.0402	1.931e+14	3.848e+03	4.954e+04	5.914e+00	7.614e+01
2.3212	9.035e+13	4.137e+03	4.502e+04	6.100e+00	6.638e+01
2.5398	8.358e+13	6.629e+03	6.449e+04	9.492e+00	9.234e+01
2.7426	6.219e+11	7.728e+01	6.857e+02	1.079e-01	9.576e-01
3.0171	8.007e+11	1.695e+02	1.348e+03	2.296e-01	1.826e+00
3.2809	1.203e+12	3.977e+02	2.883e+03	5.245e-01	3.802e+00
3.4931	4.130e+11	1.880e+02	1.274e+03	2.431e-01	1.648e+00
3.7009	7.277e+09	4.404e+00	2.808e+01	5.590e-03	3.565e-02
3.9384	5.005e+11	4.071e+02	2.434e+03	5.063e-01	3.027e+00
4.3428	1.578e+10	1.998e+01	1.082e+02	2.403e-02	1.301e-01
4.48	1.312e+09	1.902e+00	9.989e+00	2.262e-03	1.188e-02
4.7418	3.548e+11	6.533e+02	3.249e+03	7.621e-01	3.791e+00
5.0016	6.040e+08	1.382e+00	6.544e+00	1.584e-03	7.501e-03
5.2304	2.795e+09	7.620e+00	3.471e+01	8.613e-03	3.924e-02
5.608	3.851e+07	1.366e-01	5.869e-01	1.512e-04	6.498e-04
5.8005	3.326e+07	1.333e-01	5.574e-01	1.462e-04	6.111e-04
6.1042	3.501e+07	1.679e-01	6.736e-01	1.815e-04	7.279e-04
TOTALS:	9.494e+16	3.263e+04	4.882e+05	5.064e+01	7.838e+02

Page : 1
DOS File: LGSCS-AC.MS5
Run Date: June 8, 2006
Run Time: 4:59:45 PM
Duration: 00:00:11

File Ref: _____
Date: _____
By: _____
Checked: _____

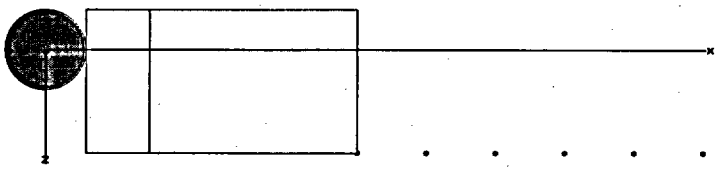
Case Title: LGS CS Pipe
Description: Case C, with 110 isotopes, Cabinet West Wall
Geometry: 7 - Cylinder Volume - Side Shields

Source Dimensions

Height	426.72 cm	14 ft 0.0 in
Radius	16.828 cm	6.6 in

Dose Points

	X	Y	Z
# 1	137.16 cm	182.88 cm	45.72 cm
	4 ft 6.0 in	6 ft	1 ft 6.0 in
# 2	167.64 cm	182.88 cm	45.72 cm
	5 ft 6.0 in	6 ft	1 ft 6.0 in
# 3	198.12 cm	182.88 cm	45.72 cm
	6 ft 6.0 in	6 ft	1 ft 6.0 in
# 4	228.6 cm	182.88 cm	45.72 cm
	7 ft 6.0 in	6 ft	1 ft 6.0 in
# 5	259.08 cm	182.88 cm	45.72 cm
	8 ft 6.0 in	6 ft	1 ft 6.0 in
# 6	289.56 cm	182.88 cm	45.72 cm
	9 ft 6.0 in	6 ft	1 ft 6.0 in



Shields

Shield Name	Dimension	Material	Density
Source	13.406 ft³	Water	1
Transition		Air	0.00122
Shield 2	.917 ft	Air	0.00122
Shield 3	3.0 ft	Concrete	2.35
Air Gap		Air	0.00122
Wall Clad	.031 ft	Iron	7.86

Source Input
Grouping Method : Linear Energy
Number of Groups : 25
Lower Energy Cutoff : 0.015
Photons < 0.015 : Excluded
Library : Grove

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Am-241	2.4333e-001	9.0031e+009	6.4100e-001	2.3717e+004
Ba-137m	1.2421e+005	4.5957e+015	3.2720e+005	1.2106e+010
Ba-139	4.9197e+002	1.8203e+013	1.2960e+003	4.7952e+007
Ba-140	5.9256e+004	2.1925e+015	1.5610e+005	5.7757e+009
Ba-141	1.3810e+001	5.1097e+011	3.6380e+001	1.3461e+006
Ba-142	1.7769e+000	6.5746e+010	4.6810e+000	1.7320e+005
Br-82	6.8595e+002	2.5380e+013	1.8070e+003	6.6859e+007
Br-83	1.0826e+003	4.0057e+013	2.8520e+003	1.0552e+008
Br-84	1.8434e+002	6.8204e+012	4.8560e+002	1.7967e+007
Br-85	1.3039e+000	4.8246e+010	3.4350e+000	1.2709e+005
Ce-141	1.9876e+003	7.3542e+013	5.2360e+003	1.9373e+008
Ce-143	2.6925e+002	9.9624e+012	7.0930e+002	2.6244e+007
Ce-144	2.0153e+003	7.4567e+013	5.3090e+003	1.9643e+008
Cm-242	5.2386e+001	1.9383e+012	1.3800e+002	5.1060e+006
Cm-244	6.0357e+000	2.2332e+011	1.5900e+001	5.8830e+005
Co-58	3.9099e+001	1.4467e+012	1.0300e+002	3.8110e+006
Co-60	5.2765e+001	1.9523e+012	1.3900e+002	5.1430e+006
Cs-132	7.4554e+001	2.7585e+012	1.9640e+002	7.2668e+006
Cs-134	2.0837e+005	7.7095e+015	5.4890e+005	2.0309e+010
Cs-134m	4.9349e+002	1.8259e+013	1.3000e+003	4.8100e+007
Cs-135	7.4554e-001	2.7585e+010	1.9640e+000	7.2668e+004
Cs-136	3.2183e+004	1.1908e+015	8.4780e+004	3.1369e+009
Cs-137	1.3138e+005	4.8611e+015	3.4610e+005	1.2806e+010
Cs-138	2.0704e+003	7.6604e+013	5.4540e+003	2.0180e+008
Cs-139	1.0367e+002	3.8358e+012	2.7310e+002	1.0105e+007
Eu-154	1.0481e+001	3.8779e+011	2.7610e+001	1.0216e+006
Eu-155	7.4365e+000	2.7515e+011	1.9590e+001	7.2483e+005
Eu-156	6.8481e+001	2.5338e+012	1.8040e+002	6.6748e+006
I-128	6.8860e+000	2.5478e+011	1.8140e+001	6.7118e+005
I-130	1.7124e+003	6.3359e+013	4.5110e+003	1.6691e+008
I-131	3.9896e+005	1.4762e+016	1.0510e+006	3.8887e+010
I-132	3.0084e+005	1.1131e+016	7.9250e+005	2.9322e+010
I-133	1.5116e+005	5.5929e+015	3.9820e+005	1.4733e+010
I-134	8.5829e+003	3.1757e+014	2.2610e+004	8.3657e+008
I-135	4.9273e+004	1.8231e+015	1.2980e+005	4.8026e+009
I-136	6.8177e-001	2.5226e+010	1.7960e+000	6.6452e+004
La-140	5.3524e+004	1.9804e+015	1.4100e+005	5.2170e+009
La-141	1.7177e+001	6.3555e+011	4.5250e+001	1.6743e+006

DOS File: LGSCS-AC.MS5
Run Date: June 8, 2006
Run Time: 4:59:45 PM
Duration: 00:00:11

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
La-142	5.1247e+000	1.8961e+011	1.3500e+001	4.9950e+005
Mo-99	2.8315e+003	1.0476e+014	7.4590e+003	2.7598e+008
Mo-101	8.3513e-001	3.0900e+010	2.2000e+000	8.1400e+004
Nb-95	1.0189e+003	3.7698e+013	2.6840e+003	9.9308e+007
Nb-95m	6.6469e+000	2.4593e+011	1.7510e+001	6.4787e+005
Nb-97	7.1366e+001	2.6405e+012	1.8800e+002	6.9560e+006
Nb-97m	6.3888e+001	2.3638e+012	1.6830e+002	6.2271e+006
Nd-147	2.0939e+002	7.7474e+012	5.5160e+002	2.0409e+007
Nd-149	1.3328e+000	4.9313e+010	3.5110e+000	1.2991e+005
Np-239	5.0867e+003	1.8821e+014	1.3400e+004	4.9580e+008
Pd-109	1.4516e+002	5.3710e+012	3.8240e+002	1.4149e+007
Pm-147	1.1005e+002	4.0718e+012	2.8990e+002	1.0726e+007
Pm-148	5.5764e+001	2.0633e+012	1.4690e+002	5.4353e+006
Pm-148m	2.1691e+001	8.0255e+011	5.7140e+001	2.1142e+006
Pm-149	5.9256e+001	2.1925e+012	1.5610e+002	5.7757e+006
Pm-151	1.2569e+001	4.6504e+011	3.3110e+001	1.2251e+006
Pr-142	3.6909e+000	1.3656e+011	9.7230e+000	3.5975e+005
Pr-143	5.6789e+002	2.1012e+013	1.4960e+003	5.5352e+007
Pr-144	8.0628e+002	2.9832e+013	2.1240e+003	7.8588e+007
Pr-144m	9.6723e+000	3.5788e+011	2.5480e+001	9.4276e+005
Pu-238	1.0439e+001	3.8625e+011	2.7500e+001	1.0175e+006
Pu-239	7.0607e-001	2.6124e+010	1.8600e+000	6.8820e+004
Pu-240	7.4782e-001	2.7669e+010	1.9700e+000	7.2890e+004
Pu-241	3.5873e+002	1.3273e+013	9.4500e+002	3.4965e+007
Rb-86	1.2079e+003	4.4692e+013	3.1820e+003	1.1773e+008
Rb-88	6.6203e+003	2.4495e+014	1.7440e+004	6.4528e+008
Rb-89	1.7192e+002	6.3612e+012	4.5290e+002	1.6757e+007
Rb-90	3.7311e+000	1.3805e+011	9.8290e+000	3.6367e+005
Rb-90m	2.3372e+000	8.6477e+010	6.1570e+000	2.2781e+005
Rh-103m	8.7347e+003	3.2318e+014	2.3010e+004	8.5137e+008
Rh-105	1.0682e+003	3.9524e+013	2.8140e+003	1.0412e+008
Rh-105m	4.3123e+001	1.5956e+012	1.1360e+002	4.2032e+006
Rh-106	4.8855e+003	1.8076e+014	1.2870e+004	4.7619e+008
Ru-103	9.6799e+003	3.5816e+014	2.5500e+004	9.4350e+008
Ru-105	1.5359e+002	5.6828e+012	4.0460e+002	1.4970e+007
Ru-106	4.8855e+003	1.8076e+014	1.2870e+004	4.7619e+008
Sb-122	7.4706e+001	2.7641e+012	1.9680e+002	7.2816e+006
Sb-124	2.1011e+002	7.7741e+012	5.5350e+002	2.0479e+007
Sb-125	2.9427e+003	1.0888e+014	7.7520e+003	2.8682e+008
Sb-126	9.3725e+001	3.4678e+012	2.4690e+002	9.1353e+006
Sb-126m	2.0499e-001	7.5845e+009	5.4000e-001	1.9980e+004
Sb-127	4.2402e+003	1.5689e+014	1.1170e+004	4.1329e+008
Sb-129	8.6892e+002	3.2150e+013	2.2890e+003	8.4693e+007
Sm-151	4.9197e-001	1.8203e+010	1.2960e+000	4.7952e+004
Sm-153	4.4224e+001	1.6363e+012	1.1650e+002	4.3105e+006
Sr-89	4.8703e+004	1.8020e+015	1.2830e+005	4.7471e+009
Sr-90	7.3567e+003	2.7220e+014	1.9380e+004	7.1706e+008
Sr-91	2.8398e+003	1.0507e+014	7.4810e+003	2.7680e+008
Sr-92	7.8161e+002	2.8919e+013	2.0590e+003	7.6183e+007
Sr-93	2.8801e-001	1.0656e+010	7.5870e-001	2.8072e+004
Tc-99	1.6562e-001	6.1280e+009	4.3630e-001	1.6143e+004
Tc-99m	2.6963e+003	9.9764e+013	7.1030e+003	2.6281e+008
Tc-101	3.6575e+000	1.3533e+011	9.6350e+000	3.5649e+005
Te-123m	3.5895e+000	1.3281e+011	9.4560e+000	3.4987e+005
Te-125m	6.5178e+002	2.4116e+013	1.7170e+003	6.3529e+007
Te-127	6.0509e+003	2.2388e+014	1.5940e+004	5.8978e+008
Te-127m	2.1076e+003	7.7980e+013	5.5520e+003	2.0542e+008
Te-129	4.6729e+003	1.7290e+014	1.2310e+004	4.5547e+008
Te-129m	5.6637e+003	2.0956e+014	1.4920e+004	5.5204e+008
Te-131	6.6773e+002	2.4706e+013	1.7590e+003	6.5083e+007
Te-131m	2.3368e+003	8.6463e+013	6.1560e+003	2.2777e+008
Te-132	4.8551e+004	1.7964e+015	1.2790e+005	4.7323e+009
Te-133	4.4186e+001	1.6349e+012	1.1640e+002	4.3068e+006
Te-133m	2.2511e+002	8.3289e+012	5.9300e+002	2.1941e+007
Te-134	2.9723e+002	1.0998e+013	7.8300e+002	2.8971e+007
Y-90	7.3567e+003	2.7220e+014	1.9380e+004	7.1706e+008
Y-91	2.8398e+003	1.0507e+014	7.4810e+003	2.7680e+008
Y-91m	1.6186e+003	5.9890e+013	4.2640e+003	1.5777e+008
Y-92	7.8161e+002	2.8919e+013	2.0590e+003	7.6183e+007
Y-93	3.8454e+001	1.4228e+012	1.0130e+002	3.7481e+006
Zr-95	9.0080e+002	3.3330e+013	2.3730e+003	8.7801e+007
Zr-97	7.4023e+001	2.7389e+012	1.9500e+002	7.2150e+006

Buildup
The material reference is : Shield 3

Integration Parameters

Radial	10
Circumferential	10
Y Direction (axial)	20

Results - Dose Point # 1 - (4.5,6,1.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	1.151e-10	2.888e-08	1.762e-13	4.420e-11
0.3656	1.658e+16	8.955e-02	2.429e+01	1.734e-04	4.703e-02
0.6172	3.926e+16	4.676e+01	4.804e+03	9.111e-02	9.361e+00
0.8096	2.283e+16	3.622e+02	2.215e+04	6.879e-01	4.206e+01
1.0825	3.228e+15	6.999e+02	2.499e+04	1.272e+00	4.539e+01
1.3401	3.232e+15	4.248e+03	1.049e+05	7.359e+00	1.818e+02
1.6044	2.234e+15	1.212e+04	2.261e+05	2.002e+01	3.733e+02
1.8388	4.112e+14	6.099e+03	9.363e+04	9.679e+00	1.486e+02
2.0402	1.931e+14	5.920e+03	7.890e+04	9.098e+00	1.213e+02
2.3212	9.035e+13	6.508e+03	7.326e+04	9.595e+00	1.080e+02
2.5398	8.358e+13	1.059e+04	1.065e+05	1.516e+01	1.525e+02
2.7426	6.219e+11	1.249e+02	1.146e+03	1.745e-01	1.601e+00
3.0171	8.007e+11	2.782e+02	2.287e+03	3.768e-01	3.098e+00
3.2809	1.203e+12	6.612e+02	4.954e+03	8.720e-01	6.534e+00
3.4931	4.130e+11	3.155e+02	2.210e+03	4.080e-01	2.858e+00
3.7009	7.277e+09	7.453e+00	4.912e+01	9.460e-03	6.235e-02
3.9384	5.005e+11	6.950e+02	4.295e+03	8.643e-01	5.341e+00
4.3428	1.578e+10	3.458e+01	1.935e+02	4.158e-02	2.327e-01
4.48	1.312e+09	3.304e+00	1.793e+01	3.931e-03	2.133e-02
4.7418	3.548e+11	1.143e+03	5.875e+03	1.334e+00	6.854e+00
5.0016	6.040e+08	2.434e+00	1.191e+01	2.790e-03	1.365e-02
5.2304	2.795e+09	1.350e+01	6.354e+01	1.526e-02	7.181e-02
5.608	3.851e+07	2.439e-01	1.083e+00	2.700e-04	1.199e-03
5.8005	3.326e+07	2.390e-01	1.033e+00	2.621e-04	1.132e-03
6.1042	3.501e+07	3.028e-01	1.255e+00	3.272e-04	1.356e-03
TOTALS:	9.494e+16	4.987e+04	7.564e+05	7.706e+01	1.209e+03

Results - Dose Point # 2 - (5.5,6,1.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	1.676e-10	4.120e-08	2.566e-13	6.306e-11
0.3656	1.658e+16	1.054e-01	2.782e+01	2.040e-04	5.387e-02
0.6172	3.926e+16	5.180e+01	5.200e+03	1.009e-01	1.013e+01
0.8096	2.283e+16	3.895e+02	2.332e+04	7.399e-01	4.430e+01
1.0825	3.228e+15	7.305e+02	2.559e+04	1.327e+00	4.649e+01
1.3401	3.232e+15	4.342e+03	1.054e+05	7.522e+00	1.826e+02
1.6044	2.234e+15	1.219e+04	2.235e+05	2.013e+01	3.691e+02
1.8388	4.112e+14	6.060e+03	9.155e+04	9.617e+00	1.453e+02
2.0402	1.931e+14	5.832e+03	7.653e+04	8.963e+00	1.176e+02
2.3212	9.035e+13	6.348e+03	7.041e+04	9.359e+00	1.038e+02
2.5398	8.358e+13	1.026e+04	1.017e+05	1.469e+01	1.456e+02
2.7426	6.219e+11	1.204e+02	1.089e+03	1.682e-01	1.521e+00
3.0171	8.007e+11	2.665e+02	2.161e+03	3.609e-01	2.926e+00
3.2809	1.203e+12	6.298e+02	4.656e+03	8.307e-01	6.141e+00
3.4931	4.130e+11	2.994e+02	2.070e+03	3.872e-01	2.676e+00
3.7009	7.277e+09	7.048e+00	4.585e+01	8.946e-03	5.820e-02
3.9384	5.005e+11	6.550e+02	3.995e+03	8.145e-01	4.969e+00
4.3428	1.578e+10	3.241e+01	1.791e+02	3.898e-02	2.154e-01
4.48	1.312e+09	3.092e+00	1.657e+01	3.679e-03	1.971e-02
4.7418	3.548e+11	1.067e+03	5.415e+03	1.245e+00	6.318e+00
5.0016	6.040e+08	2.266e+00	1.095e+01	2.597e-03	1.255e-02
5.2304	2.795e+09	1.254e+01	5.830e+01	1.417e-02	6.590e-02
5.608	3.851e+07	2.259e-01	9.909e-01	2.501e-04	1.097e-03
5.8005	3.326e+07	2.210e-01	9.433e-01	2.423e-04	1.034e-03
6.1042	3.501e+07	2.794e-01	1.144e+00	3.019e-04	1.236e-03
TOTALS:	9.494e+16	4.929e+04	7.429e+05	7.632e+01	1.190e+03

Results - Dose Point # 3 - (6.5,6,1.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	2.011e-10	4.879e-08	3.079e-13	7.468e-11
0.3656	1.658e+16	1.110e-01	2.881e+01	2.148e-04	5.578e-02
0.6172	3.926e+16	5.254e+01	5.200e+03	1.024e-01	1.013e+01
0.8096	2.283e+16	3.880e+02	2.293e+04	7.369e-01	4.355e+01
1.0825	3.228e+15	7.141e+02	2.472e+04	1.297e+00	4.492e+01
1.3401	3.232e+15	4.190e+03	1.006e+05	7.258e+00	1.743e+02
1.6044	2.234e+15	1.164e+04	2.112e+05	1.922e+01	3.488e+02
1.8388	4.112e+14	5.745e+03	8.591e+04	9.117e+00	1.363e+02
2.0402	1.931e+14	5.500e+03	7.145e+04	8.452e+00	1.098e+02
2.3212	9.035e+13	5.948e+03	6.534e+04	8.770e+00	9.634e+01
2.5398	8.358e+13	9.570e+03	9.401e+04	1.370e+01	1.346e+02

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
2.7426	6.219e+11	1.120e+02	1.003e+03	1.564e-01	1.401e+00
3.0171	8.007e+11	2.467e+02	1.982e+03	3.341e-01	2.684e+00
3.2809	1.203e+12	5.811e+02	4.257e+03	7.664e-01	5.614e+00
3.4931	4.130e+11	2.755e+02	1.888e+03	3.563e-01	2.441e+00
3.7009	7.277e+09	6.472e+00	4.172e+01	8.214e-03	5.296e-02
3.9384	5.005e+11	5.999e+02	3.627e+03	7.461e-01	4.511e+00
4.3428	1.578e+10	2.958e+01	1.620e+02	3.557e-02	1.949e-01
4.48	1.312e+09	2.819e+00	1.498e+01	3.354e-03	1.782e-02
4.7418	3.548e+11	9.709e+02	4.885e+03	1.133e+00	5.699e+00
5.0016	6.040e+08	2.058e+00	9.862e+00	2.359e-03	1.130e-02
5.2304	2.795e+09	1.137e+01	5.242e+01	1.285e-02	5.925e-02
5.608	3.851e+07	2.044e-01	8.891e-01	2.263e-04	9.843e-04
5.8005	3.326e+07	1.998e-01	8.456e-01	2.191e-04	9.271e-04
6.1042	3.501e+07	2.522e-01	1.024e+00	2.726e-04	1.107e-03
TOTALS:	9.494e+16	4.659e+04	6.993e+05	7.221e+01	1.122e+03

Results - Dose Point # 4 - (7.5,6,1.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	2.183e-10	5.250e-08	3.342e-13	8.036e-11
0.3656	1.658e+16	1.106e-01	2.841e+01	2.142e-04	5.501e-02
0.6172	3.926e+16	5.111e+01	5.010e+03	9.959e-02	9.762e+00
0.8096	2.283e+16	3.729e+02	2.185e+04	7.083e-01	4.149e+01
1.0825	3.228e+15	6.779e+02	2.328e+04	1.232e+00	4.229e+01
1.3401	3.232e+15	3.942e+03	9.392e+04	6.829e+00	1.627e+02
1.6044	2.234e+15	1.087e+04	1.959e+05	1.796e+01	3.234e+02
1.8388	4.112e+14	5.339e+03	7.925e+04	8.472e+00	1.258e+02
2.0402	1.931e+14	5.091e+03	6.567e+04	7.824e+00	1.009e+02
2.3212	9.035e+13	5.480e+03	5.977e+04	8.081e+00	8.813e+01
2.5398	8.358e+13	8.791e+03	8.574e+04	1.259e+01	1.228e+02
2.7426	6.219e+11	1.026e+02	9.129e+02	1.432e-01	1.275e+00
3.0171	8.007e+11	2.253e+02	1.798e+03	3.051e-01	2.434e+00
3.2809	1.203e+12	5.293e+02	3.850e+03	6.980e-01	5.078e+00
3.4931	4.130e+11	2.505e+02	1.704e+03	3.239e-01	2.203e+00
3.7009	7.277e+09	5.873e+00	3.760e+01	7.454e-03	4.772e-02
3.9384	5.005e+11	5.434e+02	3.263e+03	6.758e-01	4.057e+00
4.3428	1.578e+10	2.672e+01	1.453e+02	3.213e-02	1.748e-01
4.48	1.312e+09	2.544e+00	1.342e+01	3.027e-03	1.597e-02
4.7418	3.548e+11	8.748e+02	4.371e+03	1.021e+00	5.100e+00
5.0016	6.040e+08	1.852e+00	8.812e+00	2.123e-03	1.010e-02
5.2304	2.795e+09	1.022e+01	4.679e+01	1.155e-02	5.288e-02
5.608	3.851e+07	1.834e-01	7.922e-01	2.031e-04	8.770e-04
5.8005	3.326e+07	1.792e-01	7.528e-01	1.964e-04	8.253e-04
6.1042	3.501e+07	2.259e-01	9.106e-01	2.441e-04	9.840e-04
TOTALS:	9.494e+16	4.319e+04	6.465e+05	6.701e+01	1.038e+03

Results - Dose Point # 5 - (8.5,6,1.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	2.243e-10	5.361e-08	3.433e-13	8.206e-11
0.3656	1.658e+16	1.073e-01	2.733e+01	2.077e-04	5.292e-02
0.6172	3.926e+16	4.871e+01	4.742e+03	9.490e-02	9.239e+00
0.8096	2.283e+16	3.523e+02	2.050e+04	6.691e-01	3.895e+01
1.0825	3.228e+15	6.345e+02	2.166e+04	1.153e+00	3.935e+01
1.3401	3.232e+15	3.665e+03	8.681e+04	6.350e+00	1.504e+02
1.6044	2.234e+15	1.005e+04	1.800e+05	1.660e+01	2.973e+02
1.8388	4.112e+14	4.916e+03	7.255e+04	7.802e+00	1.151e+02
2.0402	1.931e+14	4.674e+03	5.993e+04	7.183e+00	9.209e+01
2.3212	9.035e+13	5.012e+03	5.435e+04	7.390e+00	8.013e+01
2.5398	8.358e+13	8.019e+03	7.776e+04	1.148e+01	1.113e+02
2.7426	6.219e+11	9.337e+01	8.262e+02	1.304e-01	1.154e+00
3.0171	8.007e+11	2.046e+02	1.623e+03	2.770e-01	2.197e+00
3.2809	1.203e+12	4.795e+02	3.467e+03	6.323e-01	4.573e+00
3.4931	4.130e+11	2.265e+02	1.532e+03	2.929e-01	1.981e+00
3.7009	7.277e+09	5.303e+00	3.375e+01	6.732e-03	4.284e-02
3.9384	5.005e+11	4.900e+02	2.924e+03	6.093e-01	3.637e+00
4.3428	1.578e+10	2.403e+01	1.300e+02	2.890e-02	1.563e-01
4.48	1.312e+09	2.287e+00	1.199e+01	2.721e-03	1.427e-02
4.7418	3.548e+11	7.853e+02	3.901e+03	9.162e-01	4.551e+00
5.0016	6.040e+08	1.660e+00	7.855e+00	1.903e-03	9.004e-03
5.2304	2.795e+09	9.156e+00	4.166e+01	1.035e-02	4.709e-02
5.608	3.851e+07	1.641e-01	7.043e-01	1.816e-04	7.797e-04

DOS File: LGSCS-AC.MS5
Run Date: June 8, 2006
Run Time: 4:59:45 PM
Duration: 00:00:11

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
5.8005	3.326e+07	1.601e-01	6.689e-01	1.756e-04	7.333e-04
6.1042	3.501e+07	2.017e-01	8.083e-01	2.180e-04	8.735e-04
TOTALS:	9.494e+16	3.970e+04	5.929e+05	6.164e+01	9.524e+02

Results - Dose Point # 6 - (9.5,6,1.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	2.232e-10	5.313e-08	3.417e-13	8.133e-11
0.3656	1.658e+16	1.025e-01	2.595e+01	1.984e-04	5.025e-02
0.6172	3.926e+16	4.592e+01	4.446e+03	8.947e-02	8.664e+00
0.8096	2.283e+16	3.299e+02	1.910e+04	6.266e-01	3.628e+01
1.0825	3.228e+15	5.898e+02	2.003e+04	1.072e+00	3.640e+01
1.3401	3.232e+15	3.388e+03	7.985e+04	5.870e+00	1.383e+02
1.6044	2.234e+15	9.250e+03	1.648e+05	1.528e+01	2.722e+02
1.8388	4.112e+14	4.508e+03	6.619e+04	7.154e+00	1.050e+02
2.0402	1.931e+14	4.274e+03	5.452e+04	6.569e+00	8.379e+01
2.3212	9.035e+13	4.569e+03	4.929e+04	6.737e+00	7.267e+01
2.5398	8.358e+13	7.294e+03	7.037e+04	1.044e+01	1.008e+02
2.7426	6.219e+11	8.477e+01	7.462e+02	1.184e-01	1.042e+00
3.0171	8.007e+11	1.853e+02	1.462e+03	2.509e-01	1.980e+00
3.2809	1.203e+12	4.334e+02	3.118e+03	5.716e-01	4.112e+00
3.4931	4.130e+11	2.045e+02	1.376e+03	2.644e-01	1.779e+00
3.7009	7.277e+09	4.781e+00	3.027e+01	6.069e-03	3.842e-02
3.9384	5.005e+11	4.411e+02	2.619e+03	5.486e-01	3.257e+00
4.3428	1.578e+10	2.159e+01	1.162e+02	2.597e-02	1.397e-01
4.48	1.312e+09	2.053e+00	1.071e+01	2.443e-03	1.274e-02
4.7418	3.548e+11	7.043e+02	3.480e+03	8.217e-01	4.060e+00
5.0016	6.040e+08	1.487e+00	7.001e+00	1.705e-03	8.025e-03
5.2304	2.795e+09	8.196e+00	3.710e+01	9.264e-03	4.193e-02
5.608	3.851e+07	1.467e-01	6.264e-01	1.624e-04	6.935e-04
5.8005	3.326e+07	1.431e-01	5.945e-01	1.569e-04	6.518e-04
6.1042	3.501e+07	1.800e-01	7.178e-01	1.946e-04	7.757e-04
TOTALS:	9.494e+16	3.634e+04	5.416e+05	5.646e+01	8.706e+02

MicroShield v5.05 (5.05-00210)
Raytheon Engineers & Constructors

Page : 1
DOS File: LGSCS-AD.MS5
Run Date: June 8, 2006
Run Time: 4:58:13 PM
Duration: 00:00:11

File Ref: _____
Date: _____
By: _____
Checked: _____

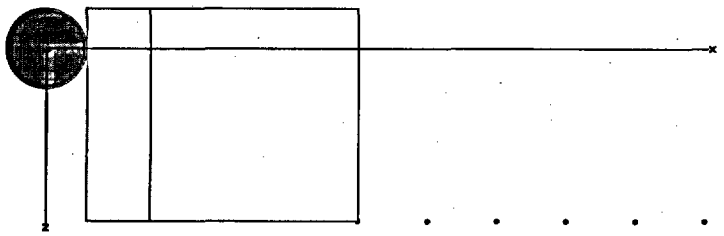
Case Title: LGS CS Pipe
Description: Case D, with 110 isotopes, 1 ft. from Cabinet West Wall
Geometry: 7 - Cylinder Volume - Side Shields

Source Dimensions

Height	426.72 cm	14 ft 0.0 in
Radius	16.828 cm	6.6 in

Dose Points

	X	Y	Z
# 1	137.16 cm 4 ft 6.0 in	182.88 cm 6 ft	76.2 cm 2 ft 6.0 in
# 2	167.64 cm 5 ft 6.0 in	182.88 cm 6 ft	76.2 cm 2 ft 6.0 in
# 3	198.12 cm 6 ft 6.0 in	182.88 cm 6 ft	76.2 cm 2 ft 6.0 in
# 4	228.6 cm 7 ft 6.0 in	182.88 cm 6 ft	76.2 cm 2 ft 6.0 in
# 5	259.08 cm 8 ft 6.0 in	182.88 cm 6 ft	76.2 cm 2 ft 6.0 in
# 6	289.56 cm 9 ft 6.0 in	182.88 cm 6 ft	76.2 cm 2 ft 6.0 in



Shields

Shield Name	Dimension	Material	Density
Source	13.406 ft³	Water	1
Transition		Air	0.00122
Shield 2	.917 ft	Air	0.00122
Shield 3	3.0 ft	Concrete	2.35
Air Gap		Air	0.00122
Wall Clad	.031 ft	Iron	7.86

Source Input
Grouping Method : Linear Energy
Number of Groups : 25
Lower Energy Cutoff : 0.015
Photons < 0.015 : Excluded
Library : Grove

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Am-241	2.4333e-001	9.0031e+009	6.4100e-001	2.3717e+004
Ba-137m	1.2421e+005	4.5957e+015	3.2720e+005	1.2106e+010
Ba-139	4.9197e+002	1.8203e+013	1.2960e+003	4.7952e+007
Ba-140	5.9256e+004	2.1925e+015	1.5610e+005	5.7757e+009
Ba-141	1.3810e+001	5.1097e+011	3.6380e+001	1.3461e+006
Ba-142	1.7769e+000	6.5746e+010	4.6810e+000	1.7320e+005
Br-82	6.8595e+002	2.5380e+013	1.8070e+003	6.6859e+007
Br-83	1.0826e+003	4.0057e+013	2.8520e+003	1.0552e+008
Br-84	1.8434e+002	6.8204e+012	4.8560e+002	1.7967e+007
Br-85	1.3039e+000	4.8246e+010	3.4350e+000	1.2709e+005
Ce-141	1.9876e+003	7.3542e+013	5.2360e+003	1.9373e+008
Ce-143	2.6925e+002	9.9624e+012	7.0930e+002	2.6244e+007
Ce-144	2.0153e+003	7.4567e+013	5.3090e+003	1.9643e+008
Cm-242	5.2386e+001	1.9383e+012	1.3800e+002	5.1060e+006
Cm-244	6.0357e+000	2.2332e+011	1.5900e+001	5.8830e+005
Co-58	3.9099e+001	1.4467e+012	1.0300e+002	3.8110e+006
Co-60	5.2765e+001	1.9523e+012	1.3900e+002	5.1430e+006
Cs-132	7.4554e+001	2.7585e+012	1.9640e+002	7.2668e+006
Cs-134	2.0837e+005	7.7095e+015	5.4890e+005	2.0309e+010
Cs-134m	4.9349e+002	1.8259e+013	1.3000e+003	4.8100e+007
Cs-135	7.4554e-001	2.7585e+010	1.9640e+000	7.2668e+004
Cs-136	3.2183e+004	1.1908e+015	8.4780e+004	3.1369e+009
Cs-137	1.3138e+005	4.8611e+015	3.4610e+005	1.2806e+010
Cs-138	2.0704e+003	7.6604e+013	5.4540e+003	2.0180e+008
Cs-139	1.0367e+002	3.8358e+012	2.7310e+002	1.0105e+007
Eu-154	1.0481e+001	3.8779e+011	2.7610e+001	1.0216e+006
Eu-155	7.4365e+000	2.7515e+011	1.9590e+001	7.2483e+005
Eu-156	6.8481e+001	2.5338e+012	1.8040e+002	6.6748e+006
I-128	6.8860e+000	2.5478e+011	1.8140e+001	6.7118e+005
I-130	1.7124e+003	6.3359e+013	4.5110e+003	1.6691e+008
I-131	3.9896e+005	1.4762e+016	1.0510e+006	3.8887e+010
I-132	3.0084e+005	1.1131e+016	7.9250e+005	2.9322e+010
I-133	1.5116e+005	5.5929e+015	3.9820e+005	1.4733e+010
I-134	8.5829e+003	3.1757e+014	2.2610e+004	8.3657e+008
I-135	4.9273e+004	1.8231e+015	1.2980e+005	4.8026e+009
I-136	6.8177e-001	2.5226e+010	1.7960e+000	6.6452e+004
La-140	5.3524e+004	1.9804e+015	1.4100e+005	5.2170e+009
La-141	1.7177e+001	6.3555e+011	4.5250e+001	1.6743e+006

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
La-142	5.1247e+000	1.8961e+011	1.3500e+001	4.9950e+005
Mo-99	2.8315e+003	1.0476e+014	7.4590e+003	2.7598e+008
Mo-101	8.3513e-001	3.0900e+010	2.2000e+000	8.1400e+004
Nb-95	1.0189e+003	3.7698e+013	2.6840e+003	9.9308e+007
Nb-95m	6.6469e+000	2.4593e+011	1.7510e+001	6.4787e+005
Nb-97	7.1366e+001	2.6405e+012	1.8800e+002	6.9560e+006
Nb-97m	6.3888e+001	2.3638e+012	1.6830e+002	6.2271e+006
Nd-147	2.0939e+002	7.7474e+012	5.5160e+002	2.0409e+007
Nd-149	1.3328e+000	4.9313e+010	3.5110e+000	1.2991e+005
Np-239	5.0867e+003	1.8821e+014	1.3400e+004	4.9580e+008
Pd-109	1.4516e+002	5.3710e+012	3.8240e+002	1.4149e+007
Pm-147	1.1005e+002	4.0718e+012	2.8990e+002	1.0726e+007
Pm-148	5.5764e+001	2.0633e+012	1.4690e+002	5.4353e+006
Pm-148m	2.1691e+001	8.0255e+011	5.7140e+001	2.1142e+006
Pm-149	5.9256e+001	2.1925e+012	1.5610e+002	5.7757e+006
Pm-151	1.2569e+001	4.6504e+011	3.3110e+001	1.2251e+006
Pr-142	3.6909e+000	1.3656e+011	9.7230e+000	3.5975e+005
Pr-143	5.6789e+002	2.1012e+013	1.4960e+003	5.5352e+007
Pr-144	8.0628e+002	2.9832e+013	2.1240e+003	7.8588e+007
Pr-144m	9.6723e+000	3.5788e+011	2.5480e+001	9.4276e+005
Pu-238	1.0439e+001	3.8625e+011	2.7500e+001	1.0175e+006
Pu-239	7.0607e-001	2.6124e+010	1.8600e+000	6.8820e+004
Pu-240	7.4782e-001	2.7669e+010	1.9700e+000	7.2890e+004
Pu-241	3.5873e+002	1.3273e+013	9.4500e+002	3.4965e+007
Rb-86	1.2079e+003	4.4692e+013	3.1820e+003	1.1773e+008
Rb-88	6.6203e+003	2.4495e+014	1.7440e+004	6.4528e+008
Rb-89	1.7192e+002	6.3612e+012	4.5290e+002	1.6757e+007
Rb-90	3.7311e+000	1.3805e+011	9.8290e+000	3.6367e+005
Rb-90m	2.3372e+000	8.6477e+010	6.1570e+000	2.2781e+005
Rh-103m	8.7347e+003	3.2318e+014	2.3010e+004	8.5137e+008
Rh-105	1.0682e+003	3.9524e+013	2.8140e+003	1.0412e+008
Rh-105m	4.3123e+001	1.5956e+012	1.1360e+002	4.2032e+006
Rh-106	4.8855e+003	1.8076e+014	1.2870e+004	4.7619e+008
Ru-103	9.6799e+003	3.5816e+014	2.5500e+004	9.4350e+008
Ru-105	1.5359e+002	5.6828e+012	4.0460e+002	1.4970e+007
Ru-106	4.8855e+003	1.8076e+014	1.2870e+004	4.7619e+008
Sb-122	7.4706e+001	2.7641e+012	1.9680e+002	7.2816e+006
Sb-124	2.1011e+002	7.7741e+012	5.5350e+002	2.0479e+007
Sb-125	2.9427e+003	1.0888e+014	7.7520e+003	2.8682e+008
Sb-126	9.3725e+001	3.4678e+012	2.4690e+002	9.1353e+006
Sb-126m	2.0499e-001	7.5845e+009	5.4000e-001	1.9980e+004
Sb-127	4.2402e+003	1.5689e+014	1.1170e+004	4.1329e+008
Sb-129	8.6892e+002	3.2150e+013	2.2890e+003	8.4693e+007
Sm-151	4.9197e-001	1.8203e+010	1.2960e+000	4.7952e+004
Sm-153	4.4224e+001	1.6363e+012	1.1650e+002	4.3105e+006
Sr-89	4.8703e+004	1.8020e+015	1.2830e+005	4.7471e+009
Sr-90	7.3567e+003	2.7220e+014	1.9380e+004	7.1706e+008
Sr-91	2.8398e+003	1.0507e+014	7.4810e+003	2.7680e+008
Sr-92	7.8161e+002	2.8919e+013	2.0590e+003	7.6183e+007
Sr-93	2.8801e-001	1.0656e+010	7.5870e-001	2.8072e+004
Tc-99	1.6562e-001	6.1280e+009	4.3630e-001	1.6143e+004
Tc-99m	2.6963e+003	9.9764e+013	7.1030e+003	2.6281e+008
Tc-101	3.6575e+000	1.3533e+011	9.6350e+000	3.5649e+005
Te-123m	3.5895e+000	1.3281e+011	9.4560e+000	3.4987e+005
Te-125m	6.5178e+002	2.4116e+013	1.7170e+003	6.3529e+007
Te-127	6.0509e+003	2.2388e+014	1.5940e+004	5.8978e+008
Te-127m	2.1076e+003	7.7980e+013	5.5520e+003	2.0542e+008
Te-129	4.6729e+003	1.7290e+014	1.2310e+004	4.5547e+008
Te-129m	5.6637e+003	2.0956e+014	1.4920e+004	5.5204e+008
Te-131	6.6773e+002	2.4706e+013	1.7590e+003	6.5083e+007
Te-131m	2.3368e+003	8.6463e+013	6.1560e+003	2.2777e+008
Te-132	4.8551e+004	1.7964e+015	1.2790e+005	4.7323e+009
Te-133	4.4186e+001	1.6349e+012	1.1640e+002	4.3068e+006
Te-133m	2.2511e+002	8.3289e+012	5.9300e+002	2.1941e+007
Te-134	2.9723e+002	1.0998e+013	7.8300e+002	2.8971e+007
Y-90	7.3567e+003	2.7220e+014	1.9380e+004	7.1706e+008
Y-91	2.8398e+003	1.0507e+014	7.4810e+003	2.7680e+008
Y-91m	1.6186e+003	5.9890e+013	4.2640e+003	1.5777e+008
Y-92	7.8161e+002	2.8919e+013	2.0590e+003	7.6183e+007
Y-93	3.8454e+001	1.4228e+012	1.0130e+002	3.7481e+006
Zr-95	9.0080e+002	3.3330e+013	2.3730e+003	8.7801e+007
Zr-97	7.4023e+001	2.7389e+012	1.9500e+002	7.2150e+006

Buildup

The material reference is : Shield 3

Integration Parameters

Radial	10
Circumferential	10
Y Direction (axial)	20

Results - Dose Point # 1 - (4.5,6,2.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	5.113e-12	1.437e-09	7.826e-15	2.200e-12
0.3656	1.658e+16	1.345e-02	4.219e+00	2.605e-05	8.169e-03
0.6172	3.926e+16	9.816e+00	1.138e+03	1.913e-02	2.217e+00
0.8096	2.283e+16	8.921e+01	6.081e+03	1.695e-01	1.155e+01
1.0825	3.228e+15	2.025e+02	7.961e+03	3.680e-01	1.446e+01
1.3401	3.232e+15	1.373e+03	3.705e+04	2.378e+00	6.419e+01
1.6044	2.234e+15	4.270e+03	8.654e+04	7.052e+00	1.429e+02
1.8388	4.112e+14	2.283e+03	3.795e+04	3.623e+00	6.022e+01
2.0402	1.931e+14	2.315e+03	3.331e+04	3.557e+00	5.119e+01
2.3212	9.035e+13	2.677e+03	3.242e+04	3.948e+00	4.780e+01
2.5398	8.358e+13	4.502e+03	4.859e+04	6.447e+00	6.957e+01
2.7426	6.219e+11	5.460e+01	5.362e+02	7.625e-02	7.488e-01
3.0171	8.007e+11	1.255e+02	1.102e+03	1.700e-01	1.492e+00
3.2809	1.203e+12	3.063e+02	2.446e+03	4.039e-01	3.226e+00
3.4931	4.130e+11	1.489e+02	1.111e+03	1.926e-01	1.436e+00
3.7009	7.277e+09	3.577e+00	2.507e+01	4.540e-03	3.182e-02
3.9384	5.005e+11	3.393e+02	2.226e+03	4.219e-01	2.769e+00
4.3428	1.578e+10	1.731e+01	1.026e+02	2.082e-02	1.234e-01
4.48	1.312e+09	1.667e+00	9.578e+00	1.983e-03	1.139e-02
4.7418	3.548e+11	5.846e+02	3.177e+03	6.820e-01	3.707e+00
5.0016	6.040e+08	1.260e+00	6.515e+00	1.444e-03	7.467e-03
5.2304	2.795e+09	7.053e+00	3.506e+01	7.972e-03	3.963e-02
5.608	3.851e+07	1.293e-01	6.058e-01	1.431e-04	6.706e-04
5.8005	3.326e+07	1.275e-01	5.810e-01	1.398e-04	6.370e-04
6.1042	3.501e+07	1.630e-01	7.121e-01	1.762e-04	7.695e-04
TOTALS:	9.494e+16	1.931e+04	3.018e+05	2.955e+01	4.777e+02

Results - Dose Point # 2 - (5.5,6,2.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	1.861e-11	4.969e-09	2.849e-14	7.607e-12
0.3656	1.658e+16	2.751e-02	8.079e+00	5.326e-05	1.564e-02
0.6172	3.926e+16	1.719e+01	1.886e+03	3.350e-02	3.675e+00
0.8096	2.283e+16	1.450e+02	9.401e+03	2.754e-01	1.786e+01
1.0825	3.228e+15	3.051e+02	1.147e+04	5.544e-01	2.083e+01
1.3401	3.232e+15	1.962e+03	5.080e+04	3.399e+00	8.801e+01
1.6044	2.234e+15	5.857e+03	1.141e+05	9.672e+00	1.884e+02
1.8388	4.112e+14	3.041e+03	4.866e+04	4.826e+00	7.722e+01
2.0402	1.931e+14	3.019e+03	4.187e+04	4.639e+00	6.434e+01
2.3212	9.035e+13	3.406e+03	3.981e+04	5.021e+00	5.870e+01
2.5398	8.358e+13	5.634e+03	5.877e+04	8.067e+00	8.415e+01
2.7426	6.219e+11	6.742e+01	6.405e+02	9.415e-02	8.944e-01
3.0171	8.007e+11	1.526e+02	1.297e+03	2.066e-01	1.756e+00
3.2809	1.203e+12	3.674e+02	2.844e+03	4.846e-01	3.750e+00
3.4931	4.130e+11	1.770e+02	1.280e+03	2.288e-01	1.655e+00
3.7009	7.277e+09	4.215e+00	2.865e+01	5.350e-03	3.637e-02
3.9384	5.005e+11	3.964e+02	2.524e+03	4.930e-01	3.139e+00
4.3428	1.578e+10	1.997e+01	1.150e+02	2.401e-02	1.383e-01
4.48	1.312e+09	1.915e+00	1.069e+01	2.279e-03	1.272e-02
4.7418	3.548e+11	6.671e+02	3.524e+03	7.783e-01	4.112e+00
5.0016	6.040e+08	1.429e+00	7.184e+00	1.638e-03	8.235e-03
5.2304	2.795e+09	7.960e+00	3.848e+01	8.997e-03	4.350e-02
5.608	3.851e+07	1.448e-01	6.602e-01	1.603e-04	7.309e-04
5.8005	3.326e+07	1.424e-01	6.311e-01	1.561e-04	6.919e-04
6.1042	3.501e+07	1.811e-01	7.700e-01	1.958e-04	8.321e-04
TOTALS:	9.494e+16	2.525e+04	3.891e+05	3.882e+01	6.188e+02

Results - Dose Point # 3 - (6.5,6,2.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	3.956e-11	1.022e-08	6.055e-14	1.564e-11
0.3656	1.658e+16	4.102e-02	1.154e+01	7.942e-05	2.235e-02
0.6172	3.926e+16	2.324e+01	2.459e+03	4.528e-02	4.791e+00
0.8096	2.283e+16	1.869e+02	1.173e+04	3.550e-01	2.228e+01
1.0825	3.228e+15	3.749e+02	1.368e+04	6.810e-01	2.486e+01
1.3401	3.232e+15	2.332e+03	5.876e+04	4.040e+00	1.018e+02
1.6044	2.234e+15	6.780e+03	1.288e+05	1.120e+01	2.126e+02
1.8388	4.112e+14	3.456e+03	5.395e+04	5.484e+00	8.562e+01
2.0402	1.931e+14	3.385e+03	4.584e+04	5.201e+00	7.044e+01
2.3212	9.035e+13	3.759e+03	4.295e+04	5.542e+00	6.332e+01
2.5398	8.358e+13	6.154e+03	6.278e+04	8.812e+00	8.989e+01

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
2.7426	6.219e+11	7.302e+01	6.788e+02	1.020e-01	9.480e-01
3.0171	8.007e+11	1.636e+02	1.362e+03	2.215e-01	1.844e+00
3.2809	1.203e+12	3.906e+02	2.961e+03	5.152e-01	3.906e+00
3.4931	4.130e+11	1.870e+02	1.325e+03	2.418e-01	1.713e+00
3.7009	7.277e+09	4.431e+00	2.952e+01	5.624e-03	3.747e-02
3.9384	5.005e+11	4.144e+02	2.587e+03	5.153e-01	3.217e+00
4.3428	1.578e+10	2.070e+01	1.169e+02	2.489e-02	1.406e-01
4.48	1.312e+09	1.981e+00	1.085e+01	2.356e-03	1.290e-02
4.7418	3.548e+11	6.868e+02	3.560e+03	8.012e-01	4.153e+00
5.0016	6.040e+08	1.465e+00	7.229e+00	1.679e-03	8.286e-03
5.2304	2.795e+09	8.135e+00	3.860e+01	9.195e-03	4.363e-02
5.608	3.851e+07	1.473e-01	6.591e-01	1.631e-04	7.297e-04
5.8005	3.326e+07	1.445e-01	6.288e-01	1.584e-04	6.894e-04
6.1042	3.501e+07	1.832e-01	7.648e-01	1.980e-04	8.265e-04
TOTALS:	9.494e+16	2.840e+04	4.336e+05	4.380e+01	6.917e+02

Results - Dose Point # 4 - (7.5,6,2.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	6.267e-11	1.583e-08	9.593e-14	2.423e-11
0.3656	1.658e+16	5.152e-02	1.408e+01	9.975e-05	2.727e-02
0.6172	3.926e+16	2.733e+01	2.822e+03	5.325e-02	5.499e+00
0.8096	2.283e+16	2.130e+02	1.307e+04	4.045e-01	2.483e+01
1.0825	3.228e+15	4.136e+02	1.480e+04	7.514e-01	2.689e+01
1.3401	3.232e+15	2.516e+03	6.224e+04	4.359e+00	1.078e+02
1.6044	2.234e+15	7.186e+03	1.341e+05	1.187e+01	2.214e+02
1.8388	4.112e+14	3.617e+03	5.551e+04	5.739e+00	8.809e+01
2.0402	1.931e+14	3.510e+03	4.674e+04	5.394e+00	7.184e+01
2.3212	9.035e+13	3.856e+03	4.335e+04	5.685e+00	6.392e+01
2.5398	8.358e+13	6.268e+03	6.294e+04	8.974e+00	9.012e+01
2.7426	6.219e+11	7.393e+01	6.768e+02	1.032e-01	9.451e-01
3.0171	8.007e+11	1.645e+02	1.348e+03	2.227e-01	1.826e+00
3.2809	1.203e+12	3.904e+02	2.916e+03	5.148e-01	3.846e+00
3.4931	4.130e+11	1.861e+02	1.299e+03	2.407e-01	1.680e+00
3.7009	7.277e+09	4.392e+00	2.884e+01	5.575e-03	3.660e-02
3.9384	5.005e+11	4.092e+02	2.518e+03	5.088e-01	3.131e+00
4.3428	1.578e+10	2.032e+01	1.132e+02	2.443e-02	1.361e-01
4.48	1.312e+09	1.941e+00	1.048e+01	2.309e-03	1.247e-02
4.7418	3.548e+11	6.708e+02	3.430e+03	7.826e-01	4.001e+00
5.0016	6.040e+08	1.427e+00	6.944e+00	1.635e-03	7.960e-03
5.2304	2.795e+09	7.905e+00	3.700e+01	8.934e-03	4.182e-02
5.608	3.851e+07	1.426e-01	6.297e-01	1.579e-04	6.971e-04
5.8005	3.326e+07	1.397e-01	5.997e-01	1.531e-04	6.575e-04
6.1042	3.501e+07	1.767e-01	7.278e-01	1.910e-04	7.865e-04
TOTALS:	9.494e+16	2.954e+04	4.480e+05	4.564e+01	7.161e+02

Results - Dose Point # 5 - (8.5,6,2.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	8.366e-11	2.080e-08	1.281e-13	3.184e-11
0.3656	1.658e+16	5.862e-02	1.570e+01	1.135e-04	3.040e-02
0.6172	3.926e+16	2.970e+01	3.014e+03	5.787e-02	5.873e+00
0.8096	2.283e+16	2.263e+02	1.367e+04	4.299e-01	2.597e+01
1.0825	3.228e+15	4.295e+02	1.515e+04	7.803e-01	2.752e+01
1.3401	3.232e+15	2.571e+03	6.273e+04	4.454e+00	1.087e+02
1.6044	2.234e+15	7.249e+03	1.335e+05	1.197e+01	2.205e+02
1.8388	4.112e+14	3.614e+03	5.477e+04	5.736e+00	8.692e+01
2.0402	1.931e+14	3.484e+03	4.582e+04	5.354e+00	7.042e+01
2.3212	9.035e+13	3.797e+03	4.217e+04	5.598e+00	6.218e+01
2.5398	8.358e+13	6.138e+03	6.092e+04	8.789e+00	8.722e+01
2.7426	6.219e+11	7.208e+01	6.522e+02	1.007e-01	9.108e-01
3.0171	8.007e+11	1.595e+02	1.293e+03	2.160e-01	1.751e+00
3.2809	1.203e+12	3.769e+02	2.783e+03	4.971e-01	3.671e+00
3.4931	4.130e+11	1.791e+02	1.236e+03	2.316e-01	1.599e+00
3.7009	7.277e+09	4.215e+00	2.737e+01	5.350e-03	3.474e-02
3.9384	5.005e+11	3.915e+02	2.383e+03	4.869e-01	2.963e+00
4.3428	1.578e+10	1.935e+01	1.066e+02	2.327e-02	1.282e-01
4.48	1.312e+09	1.846e+00	9.862e+00	2.196e-03	1.173e-02
4.7418	3.548e+11	6.365e+02	3.220e+03	7.426e-01	3.756e+00
5.0016	6.040e+08	1.351e+00	6.505e+00	1.548e-03	7.457e-03
5.2304	2.795e+09	7.471e+00	3.460e+01	8.444e-03	3.911e-02
5.608	3.851e+07	1.344e-01	5.873e-01	1.488e-04	6.502e-04

DOS File: LGSCS-AD.MS5
Run Date: June 8, 2006
Run Time: 4:58:13 PM
Duration: 00:00:11

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
5.8005	3.326e+07	1.315e-01	5.587e-01	1.442e-04	6.126e-04
6.1042	3.501e+07	1.661e-01	6.769e-01	1.795e-04	7.315e-04
TOTALS:	9.494e+16	2.939e+04	4.435e+05	4.549e+01	7.101e+02

Results - Dose Point # 6 - (9.5,6,2.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	1.005e-10	2.471e-08	1.539e-13	3.783e-11
0.3656	1.658e+16	6.282e-02	1.657e+01	1.216e-04	3.209e-02
0.6172	3.926e+16	3.077e+01	3.082e+03	5.995e-02	6.005e+00
0.8096	2.283e+16	2.306e+02	1.376e+04	4.380e-01	2.614e+01
1.0825	3.228e+15	4.301e+02	1.500e+04	7.814e-01	2.725e+01
1.3401	3.232e+15	2.543e+03	6.140e+04	4.405e+00	1.064e+02
1.6044	2.234e+15	7.099e+03	1.294e+05	1.172e+01	2.137e+02
1.8388	4.112e+14	3.514e+03	5.272e+04	5.576e+00	8.366e+01
2.0402	1.931e+14	3.369e+03	4.388e+04	5.178e+00	6.743e+01
2.3212	9.035e+13	3.649e+03	4.013e+04	5.380e+00	5.918e+01
2.5398	8.358e+13	5.874e+03	5.774e+04	8.410e+00	8.267e+01
2.7426	6.219e+11	6.873e+01	6.161e+02	9.598e-02	8.604e-01
3.0171	8.007e+11	1.515e+02	1.216e+03	2.051e-01	1.647e+00
3.2809	1.203e+12	3.566e+02	2.610e+03	4.704e-01	3.442e+00
3.4931	4.130e+11	1.691e+02	1.156e+03	2.186e-01	1.495e+00
3.7009	7.277e+09	3.969e+00	2.554e+01	5.038e-03	3.242e-02
3.9384	5.005e+11	3.677e+02	2.218e+03	4.573e-01	2.759e+00
4.3428	1.578e+10	1.811e+01	9.894e+01	2.178e-02	1.190e-01
4.48	1.312e+09	1.726e+00	9.141e+00	2.053e-03	1.087e-02
4.7418	3.548e+11	5.939e+02	2.978e+03	6.929e-01	3.475e+00
5.0016	6.040e+08	1.258e+00	6.008e+00	1.442e-03	6.887e-03
5.2304	2.795e+09	6.949e+00	3.191e+01	7.854e-03	3.607e-02
5.608	3.851e+07	1.248e-01	5.405e-01	1.382e-04	5.984e-04
5.8005	3.326e+07	1.219e-01	5.137e-01	1.337e-04	5.632e-04
6.1042	3.501e+07	1.538e-01	6.215e-01	1.662e-04	6.717e-04
TOTALS:	9.494e+16	2.848e+04	4.281e+05	4.413e+01	6.863e+02

Page : 1
DOS File: LGSCS-AX.MS5
Run Date: June 8, 2006
Run Time: 4:51:44 PM
Duration: 00:00:11

File Ref: _____
Date: _____
By: _____
Checked: _____

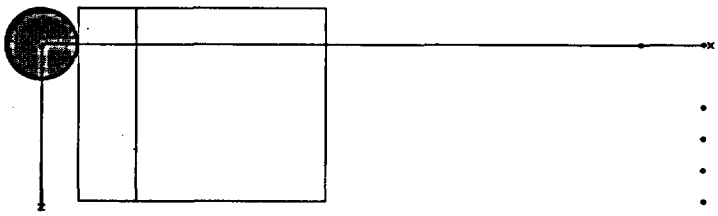
Case Title: LGS CS Pipe
Description: Case X, with 110 isotopes, Misc near Cabinet North Wall
Geometry: 7 - Cylinder Volume - Side Shields

Source Dimensions

Height	426.72 cm	14 ft 0.0 in
Radius	16.828 cm	6.6 in

Dose Points

	X	Y	Z
# 1	289.56 cm	182.88 cm	0 cm
	9 ft 6.0 in	6 ft	0.0 in
# 2	320.04 cm	182.88 cm	0 cm
	10 ft 6.0 in	6 ft	0.0 in
# 3	320.04 cm	182.88 cm	30.48 cm
	10 ft 6.0 in	6 ft	1 ft
# 4	320.04 cm	182.88 cm	45.72 cm
	10 ft 6.0 in	6 ft	1 ft 6.0 in
# 5	320.04 cm	182.88 cm	60.96 cm
	10 ft 6.0 in	6 ft	2 ft
# 6	320.04 cm	182.88 cm	76.2 cm
	10 ft 6.0 in	6 ft	2 ft 6.0 in



Shields

Shield Name	Dimension	Material	Density
Source	13.406 ft³	Water	1
Transition		Air	0.00122
Shield 2	.917 ft	Air	0.00122
Shield 3	3.0 ft	Concrete	2.35
Air Gap		Air	0.00122
Wall Clad	.031 ft	Iron	7.86

Source Input
Grouping Method : Linear Energy
Number of Groups : 25
Lower Energy Cutoff : 0.015
Photons < 0.015 : Excluded
Library : Grove

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Am-241	2.4333e-001	9.0031e+009	6.4100e-001	2.3717e+004
Ba-137m	1.2421e+005	4.5957e+015	3.2720e+005	1.2106e+010
Ba-139	4.9197e+002	1.8203e+013	1.2960e+003	4.7952e+007
Ba-140	5.9256e+004	2.1925e+015	1.5610e+005	5.7757e+009
Ba-141	1.3810e+001	5.1097e+011	3.6380e+001	1.3461e+006
Ba-142	1.7769e+000	6.5746e+010	4.6810e+000	1.7320e+005
Br-82	6.8595e+002	2.5380e+013	1.8070e+003	6.6859e+007
Br-83	1.0826e+003	4.0057e+013	2.8520e+003	1.0552e+008
Br-84	1.8434e+002	6.8204e+012	4.8560e+002	1.7967e+007
Br-85	1.3039e+000	4.8246e+010	3.4350e+000	1.2709e+005
Ce-141	1.9876e+003	7.3542e+013	5.2360e+003	1.9373e+008
Ce-143	2.6925e+002	9.9624e+012	7.0930e+002	2.6244e+007
Ce-144	2.0153e+003	7.4567e+013	5.3090e+003	1.9643e+008
Cm-242	5.2386e+001	1.9383e+012	1.3800e+002	5.1060e+006
Cm-244	6.0357e+000	2.2332e+011	1.5900e+001	5.8830e+005
Co-58	3.9099e+001	1.4467e+012	1.0300e+002	3.8110e+006
Co-60	5.2765e+001	1.9523e+012	1.3900e+002	5.1430e+006
Cs-132	7.4554e+001	2.7585e+012	1.9640e+002	7.2668e+006
Cs-134	2.0837e+005	7.7095e+015	5.4890e+005	2.0309e+010
Cs-134m	4.9349e+002	1.8259e+013	1.3000e+003	4.8100e+007
Cs-135	7.4554e-001	2.7585e+010	1.9640e+000	7.2668e+004
Cs-136	3.2183e+004	1.1908e+015	8.4780e+004	3.1369e+009
Cs-137	1.3138e+005	4.8611e+015	3.4610e+005	1.2806e+010
Cs-138	2.0704e+003	7.6604e+013	5.4540e+003	2.0180e+008
Cs-139	1.0367e+002	3.8358e+012	2.7310e+002	1.0105e+007
Eu-154	1.0481e+001	3.8779e+011	2.7610e+001	1.0216e+006
Eu-155	7.4365e+000	2.7515e+011	1.9590e+001	7.2483e+005
Eu-156	6.8481e+001	2.5338e+012	1.8040e+002	6.6748e+006
I-128	6.8860e+000	2.5478e+011	1.8140e+001	6.7118e+005
I-130	1.7124e+003	6.3359e+013	4.5110e+003	1.6691e+008
I-131	3.9896e+005	1.4762e+016	1.0510e+006	3.8887e+010
I-132	3.0084e+005	1.1131e+016	7.9250e+005	2.9322e+010
I-133	1.5116e+005	5.5929e+015	3.9820e+005	1.4733e+010
I-134	8.5829e+003	3.1757e+014	2.2610e+004	8.3657e+008
I-135	4.9273e+004	1.8231e+015	1.2980e+005	4.8026e+009
I-136	6.8177e-001	2.5226e+010	1.7960e+000	6.6452e+004
La-140	5.3524e+004	1.9804e+015	1.4100e+005	5.2170e+009
La-141	1.7177e+001	6.3555e+011	4.5250e+001	1.6743e+006

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
La-142	5.1247e+000	1.8961e+011	1.3500e+001	4.9950e+005
Mo-99	2.8315e+003	1.0476e+014	7.4590e+003	2.7598e+008
Mo-101	8.3513e-001	3.0900e+010	2.2000e+000	8.1400e+004
Nb-95	1.0189e+003	3.7698e+013	2.6840e+003	9.9308e+007
Nb-95m	6.6469e+000	2.4593e+011	1.7510e+001	6.4787e+005
Nb-97	7.1366e+001	2.6405e+012	1.8800e+002	6.9560e+006
Nb-97m	6.3888e+001	2.3638e+012	1.6830e+002	6.2271e+006
Nd-147	2.0939e+002	7.7474e+012	5.5160e+002	2.0409e+007
Nd-149	1.3328e+000	4.9313e+010	3.5110e+000	1.2991e+005
Np-239	5.0867e+003	1.8821e+014	1.3400e+004	4.9580e+008
Pd-109	1.4516e+002	5.3710e+012	3.8240e+002	1.4149e+007
Pm-147	1.1005e+002	4.0718e+012	2.8990e+002	1.0726e+007
Pm-148	5.5764e+001	2.0633e+012	1.4690e+002	5.4353e+006
Pm-148m	2.1691e+001	8.0255e+011	5.7140e+001	2.1142e+006
Pm-149	5.9256e+001	2.1925e+012	1.5610e+002	5.7757e+006
Pm-151	1.2569e+001	4.6504e+011	3.3110e+001	1.2251e+006
Pr-142	3.6909e+000	1.3656e+011	9.7230e+000	3.5975e+005
Pr-143	5.6789e+002	2.1012e+013	1.4960e+003	5.5352e+007
Pr-144	8.0628e+002	2.9832e+013	2.1240e+003	7.8588e+007
Pr-144m	9.6723e+000	3.5788e+011	2.5480e+001	9.4276e+005
Pu-238	1.0439e+001	3.8625e+011	2.7500e+001	1.0175e+006
Pu-239	7.0607e-001	2.6124e+010	1.8600e+000	6.8820e+004
Pu-240	7.4782e-001	2.7669e+010	1.9700e+000	7.2890e+004
Pu-241	3.5873e+002	1.3273e+013	9.4500e+002	3.4965e+007
Rb-86	1.2079e+003	4.4692e+013	3.1820e+003	1.1773e+008
Rb-88	6.6203e+003	2.4495e+014	1.7440e+004	6.4528e+008
Rb-89	1.7192e+002	6.3612e+012	4.5290e+002	1.6757e+007
Rb-90	3.7311e+000	1.3805e+011	9.8290e+000	3.6367e+005
Rb-90m	2.3372e+000	8.6477e+010	6.1570e+000	2.2781e+005
Rh-103m	8.7347e+003	3.2318e+014	2.3010e+004	8.5137e+008
Rh-105	1.0682e+003	3.9524e+013	2.8140e+003	1.0412e+008
Rh-105m	4.3123e+001	1.5956e+012	1.1360e+002	4.2032e+006
Rh-106	4.8855e+003	1.8076e+014	1.2870e+004	4.7619e+008
Ru-103	9.6799e+003	3.5816e+014	2.5500e+004	9.4350e+008
Ru-105	1.5359e+002	5.6828e+012	4.0460e+002	1.4970e+007
Ru-106	4.8855e+003	1.8076e+014	1.2870e+004	4.7619e+008
Sb-122	7.4706e+001	2.7641e+012	1.9680e+002	7.2816e+006
Sb-124	2.1011e+002	7.7741e+012	5.5350e+002	2.0479e+007
Sb-125	2.9427e+003	1.0888e+014	7.7520e+003	2.8682e+008
Sb-126	9.3725e+001	3.4678e+012	2.4690e+002	9.1353e+006
Sb-126m	2.0499e-001	7.5845e+009	5.4000e-001	1.9980e+004
Sb-127	4.2402e+003	1.5689e+014	1.1170e+004	4.1329e+008
Sb-129	8.6892e+002	3.2150e+013	2.2890e+003	8.4693e+007
Sm-151	4.9197e-001	1.8203e+010	1.2960e+000	4.7952e+004
Sm-153	4.4224e+001	1.6363e+012	1.1650e+002	4.3105e+006
Sr-89	4.8703e+004	1.8020e+015	1.2830e+005	4.7471e+009
Sr-90	7.3567e+003	2.7220e+014	1.9380e+004	7.1706e+008
Sr-91	2.8398e+003	1.0507e+014	7.4810e+003	2.7680e+008
Sr-92	7.8161e+002	2.8919e+013	2.0590e+003	7.6183e+007
Sr-93	2.8801e-001	1.0656e+010	7.5870e-001	2.8072e+004
Tc-99	1.6562e-001	6.1280e+009	4.3630e-001	1.6143e+004
Tc-99m	2.6963e+003	9.9764e+013	7.1030e+003	2.6281e+008
Tc-101	3.6575e+000	1.3533e+011	9.6350e+000	3.5649e+005
Te-123m	3.5895e+000	1.3281e+011	9.4560e+000	3.4987e+005
Te-125m	6.5178e+002	2.4116e+013	1.7170e+003	6.3529e+007
Te-127	6.0509e+003	2.2388e+014	1.5940e+004	5.8978e+008
Te-127m	2.1076e+003	7.7980e+013	5.5520e+003	2.0542e+008
Te-129	4.6729e+003	1.7290e+014	1.2310e+004	4.5547e+008
Te-129m	5.6637e+003	2.0956e+014	1.4920e+004	5.5204e+008
Te-131	6.6773e+002	2.4706e+013	1.7590e+003	6.5083e+007
Te-131m	2.3368e+003	8.6463e+013	6.1560e+003	2.2777e+008
Te-132	4.8551e+004	1.7964e+015	1.2790e+005	4.7323e+009
Te-133	4.4186e+001	1.6349e+012	1.1640e+002	4.3068e+006
Te-133m	2.2511e+002	8.3289e+012	5.9300e+002	2.1941e+007
Te-134	2.9723e+002	1.0998e+013	7.8300e+002	2.8971e+007
Y-90	7.3567e+003	2.7220e+014	1.9380e+004	7.1706e+008
Y-91	2.8398e+003	1.0507e+014	7.4810e+003	2.7680e+008
Y-91m	1.6186e+003	5.9890e+013	4.2640e+003	1.5777e+008
Y-92	7.8161e+002	2.8919e+013	2.0590e+003	7.6183e+007
Y-93	3.8454e+001	1.4228e+012	1.0130e+002	3.7481e+006
Zr-95	9.0080e+002	3.3330e+013	2.3730e+003	8.7801e+007
Zr-97	7.4023e+001	2.7389e+012	1.9500e+002	7.2150e+006

Buildup

The material reference is : Shield 3

Integration Parameters

Radial	10
Circumferential	10
Y Direction (axial)	20

Results - Dose Point # 1 - (9.5,6,0) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	3.520e-10	8.224e-08	5.389e-13	1.259e-10
0.3656	1.658e+16	1.357e-01	3.358e+01	2.628e-04	6.502e-02
0.6172	3.926e+16	5.781e+01	5.489e+03	1.126e-01	1.070e+01
0.8096	2.283e+16	4.053e+02	2.306e+04	7.699e-01	4.381e+01
1.0825	3.228e+15	7.074e+02	2.366e+04	1.285e+00	4.298e+01
1.3401	3.232e+15	3.997e+03	9.287e+04	6.924e+00	1.609e+02
1.6044	2.234e+15	1.077e+04	1.894e+05	1.779e+01	3.129e+02
1.8388	4.112e+14	5.203e+03	7.544e+04	8.257e+00	1.197e+02
2.0402	1.931e+14	4.902e+03	6.178e+04	7.533e+00	9.495e+01
2.3212	9.035e+13	5.201e+03	5.547e+04	7.669e+00	8.179e+01
2.5398	8.358e+13	8.262e+03	7.885e+04	1.183e+01	1.129e+02
2.7426	6.219e+11	9.565e+01	8.331e+02	1.336e-01	1.163e+00
3.0171	8.007e+11	2.081e+02	1.626e+03	2.818e-01	2.201e+00
3.2809	1.203e+12	4.850e+02	3.455e+03	6.396e-01	4.556e+00
3.4931	4.130e+11	2.282e+02	1.520e+03	2.951e-01	1.966e+00
3.7009	7.277e+09	5.323e+00	3.338e+01	6.756e-03	4.237e-02
3.9384	5.005e+11	4.899e+02	2.882e+03	6.092e-01	3.584e+00
4.3428	1.578e+10	2.389e+01	1.274e+02	2.873e-02	1.532e-01
4.48	1.312e+09	2.270e+00	1.174e+01	2.700e-03	1.396e-02
4.7418	3.548e+11	7.770e+02	3.807e+03	9.065e-01	4.441e+00
5.0016	6.040e+08	1.638e+00	7.645e+00	1.878e-03	8.763e-03
5.2304	2.795e+09	9.014e+00	4.046e+01	1.019e-02	4.574e-02
5.608	3.851e+07	1.610e-01	6.819e-01	1.782e-04	7.549e-04
5.8005	3.326e+07	1.569e-01	6.467e-01	1.720e-04	7.090e-04
6.1042	3.501e+07	1.972e-01	7.799e-01	2.131e-04	8.428e-04
TOTALS:	9.494e+16	4.183e+04	6.204e+05	6.509e+01	9.988e+02

Results - Dose Point # 2 - (10.5,6,0) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	3.173e-10	7.413e-08	4.857e-13	1.135e-10
0.3656	1.658e+16	1.223e-01	3.025e+01	2.368e-04	5.856e-02
0.6172	3.926e+16	5.201e+01	4.934e+03	1.013e-01	9.614e+00
0.8096	2.283e+16	3.642e+02	2.070e+04	6.918e-01	3.931e+01
1.0825	3.228e+15	6.343e+02	2.118e+04	1.152e+00	3.848e+01
1.3401	3.232e+15	3.577e+03	8.297e+04	6.198e+00	1.437e+02
1.6044	2.234e+15	9.625e+03	1.689e+05	1.590e+01	2.789e+02
1.8388	4.112e+14	4.642e+03	6.715e+04	7.366e+00	1.066e+02
2.0402	1.931e+14	4.368e+03	5.492e+04	6.713e+00	8.440e+01
2.3212	9.035e+13	4.627e+03	4.923e+04	6.823e+00	7.258e+01
2.5398	8.358e+13	7.343e+03	6.989e+04	1.051e+01	1.001e+02
2.7426	6.219e+11	8.492e+01	7.377e+02	1.186e-01	1.030e+00
3.0171	8.007e+11	1.846e+02	1.438e+03	2.499e-01	1.947e+00
3.2809	1.203e+12	4.296e+02	3.052e+03	5.666e-01	4.025e+00
3.4931	4.130e+11	2.020e+02	1.342e+03	2.612e-01	1.735e+00
3.7009	7.277e+09	4.708e+00	2.944e+01	5.976e-03	3.737e-02
3.9384	5.005e+11	4.330e+02	2.540e+03	5.385e-01	3.158e+00
4.3428	1.578e+10	2.109e+01	1.121e+02	2.537e-02	1.348e-01
4.48	1.312e+09	2.003e+00	1.033e+01	2.383e-03	1.229e-02
4.7418	3.548e+11	6.852e+02	3.347e+03	7.994e-01	3.905e+00
5.0016	6.040e+08	1.444e+00	6.717e+00	1.655e-03	7.700e-03
5.2304	2.795e+09	7.941e+00	3.554e+01	8.976e-03	4.017e-02
5.608	3.851e+07	1.417e-01	5.984e-01	1.569e-04	6.625e-04
5.8005	3.326e+07	1.381e-01	5.673e-01	1.514e-04	6.219e-04
6.1042	3.501e+07	1.734e-01	6.838e-01	1.874e-04	7.389e-04
TOTALS:	9.494e+16	3.729e+04	5.526e+05	5.803e+01	8.898e+02

Results - Dose Point # 3 - (10.5,6,1) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	2.685e-10	6.317e-08	4.110e-13	9.669e-11
0.3656	1.658e+16	1.103e-01	2.752e+01	2.136e-04	5.328e-02
0.6172	3.926e+16	4.780e+01	4.567e+03	9.314e-02	8.899e+00
0.8096	2.283e+16	3.377e+02	1.932e+04	6.414e-01	3.669e+01
1.0825	3.228e+15	5.934e+02	1.993e+04	1.078e+00	3.620e+01
1.3401	3.232e+15	3.367e+03	7.850e+04	5.833e+00	1.360e+02
1.6044	2.234e+15	9.102e+03	1.605e+05	1.503e+01	2.650e+02
1.8388	4.112e+14	4.404e+03	6.400e+04	6.988e+00	1.016e+02
2.0402	1.931e+14	4.154e+03	5.246e+04	6.383e+00	8.061e+01
2.3212	9.035e+13	4.412e+03	4.714e+04	6.506e+00	6.950e+01
2.5398	8.358e+13	7.014e+03	6.703e+04	1.004e+01	9.597e+01

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
2.7426	6.219e+11	8.124e+01	7.084e+02	1.134e-01	9.893e-01
3.0171	8.007e+11	1.769e+02	1.383e+03	2.395e-01	1.872e+00
3.2809	1.203e+12	4.123e+02	2.939e+03	5.437e-01	3.876e+00
3.4931	4.130e+11	1.940e+02	1.293e+03	2.509e-01	1.672e+00
3.7009	7.277e+09	4.526e+00	2.840e+01	5.745e-03	3.605e-02
3.9384	5.005e+11	4.166e+02	2.452e+03	5.181e-01	3.049e+00
4.3428	1.578e+10	2.032e+01	1.084e+02	2.444e-02	1.303e-01
4.48	1.312e+09	1.931e+00	9.987e+00	2.297e-03	1.188e-02
4.7418	3.548e+11	6.609e+02	3.238e+03	7.711e-01	3.778e+00
5.0016	6.040e+08	1.394e+00	6.503e+00	1.597e-03	7.455e-03
5.2304	2.795e+09	7.668e+00	3.442e+01	8.667e-03	3.890e-02
5.608	3.851e+07	1.369e-01	5.800e-01	1.516e-04	6.421e-04
5.8005	3.326e+07	1.335e-01	5.500e-01	1.463e-04	6.030e-04
6.1042	3.501e+07	1.677e-01	6.632e-01	1.812e-04	7.167e-04
TOTALS:	9.494e+16	3.541e+04	5.257e+05	5.508e+01	8.460e+02

Results - Dose Point # 4 - (10.5,6,1.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	2.181e-10	5.176e-08	3.339e-13	7.923e-11
0.3656	1.658e+16	9.705e-02	2.447e+01	1.879e-04	4.738e-02
0.6172	3.926e+16	4.304e+01	4.149e+03	8.386e-02	8.085e+00
0.8096	2.283e+16	3.075e+02	1.773e+04	5.840e-01	3.367e+01
1.0825	3.228e+15	5.463e+02	1.847e+04	9.925e-01	3.356e+01
1.3401	3.232e+15	3.123e+03	7.328e+04	5.410e+00	1.270e+02
1.6044	2.234e+15	8.491e+03	1.506e+05	1.402e+01	2.488e+02
1.8388	4.112e+14	4.125e+03	6.029e+04	6.546e+00	9.568e+01
2.0402	1.931e+14	3.902e+03	4.955e+04	5.997e+00	7.615e+01
2.3212	9.035e+13	4.159e+03	4.466e+04	6.133e+00	6.585e+01
2.5398	8.358e+13	6.627e+03	6.364e+04	9.488e+00	9.112e+01
2.7426	6.219e+11	7.689e+01	6.737e+02	1.074e-01	9.408e-01
3.0171	8.007e+11	1.677e+02	1.317e+03	2.271e-01	1.784e+00
3.2809	1.203e+12	3.917e+02	2.805e+03	5.165e-01	3.699e+00
3.4931	4.130e+11	1.846e+02	1.236e+03	2.386e-01	1.598e+00
3.7009	7.277e+09	4.310e+00	2.716e+01	5.471e-03	3.447e-02
3.9384	5.005e+11	3.972e+02	2.347e+03	4.939e-01	2.919e+00
4.3428	1.578e+10	1.941e+01	1.039e+02	2.334e-02	1.250e-01
4.48	1.312e+09	1.844e+00	9.579e+00	2.194e-03	1.140e-02
4.7418	3.548e+11	6.320e+02	3.109e+03	7.373e-01	3.627e+00
5.0016	6.040e+08	1.333e+00	6.247e+00	1.529e-03	7.161e-03
5.2304	2.795e+09	7.342e+00	3.308e+01	8.299e-03	3.739e-02
5.608	3.851e+07	1.312e-01	5.579e-01	1.453e-04	6.177e-04
5.8005	3.326e+07	1.280e-01	5.292e-01	1.403e-04	5.802e-04
6.1042	3.501e+07	1.609e-01	6.385e-01	1.739e-04	6.900e-04
TOTALS:	9.494e+16	3.321e+04	4.941e+05	5.162e+01	7.947e+02

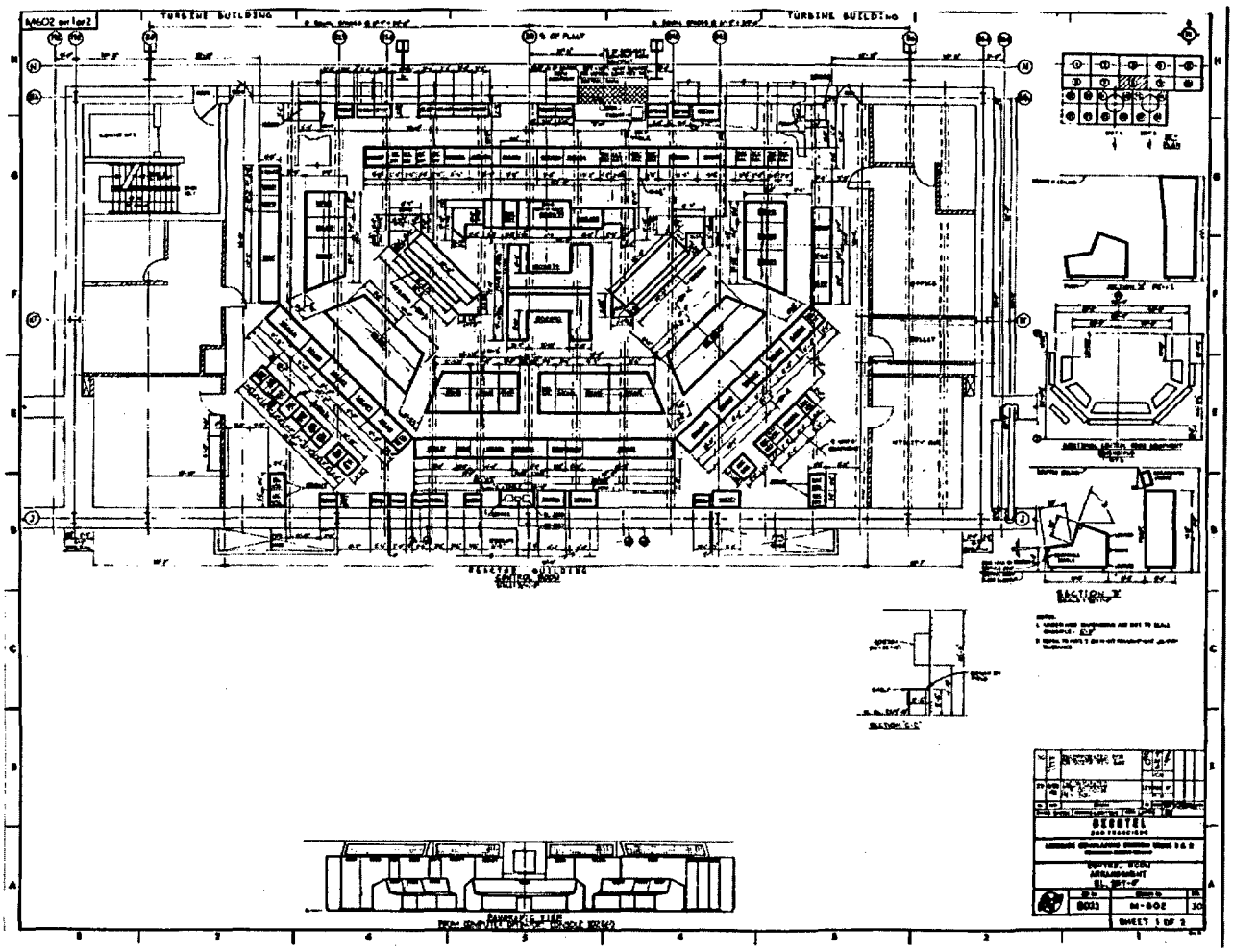
Results - Dose Point # 5 - (10.5,6,2) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	1.633e-10	3.922e-08	2.500e-13	6.004e-11
0.3656	1.658e+16	8.124e-02	2.079e+01	1.573e-04	4.026e-02
0.6172	3.926e+16	3.721e+01	3.632e+03	7.251e-02	7.077e+00
0.8096	2.283e+16	2.699e+02	1.574e+04	5.127e-01	2.989e+01
1.0825	3.228e+15	4.870e+02	1.663e+04	8.848e-01	3.021e+01
1.3401	3.232e+15	2.813e+03	6.660e+04	4.874e+00	1.154e+02
1.6044	2.234e+15	7.712e+03	1.379e+05	1.274e+01	2.278e+02
1.8388	4.112e+14	3.768e+03	5.551e+04	5.979e+00	8.808e+01
2.0402	1.931e+14	3.579e+03	4.579e+04	5.500e+00	7.036e+01
2.3212	9.035e+13	3.832e+03	4.145e+04	5.651e+00	6.111e+01
2.5398	8.358e+13	6.124e+03	5.922e+04	8.769e+00	8.479e+01
2.7426	6.219e+11	7.123e+01	6.283e+02	9.948e-02	8.774e-01
3.0171	8.007e+11	1.559e+02	1.232e+03	2.111e-01	1.668e+00
3.2809	1.203e+12	3.648e+02	2.629e+03	4.811e-01	3.467e+00
3.4931	4.130e+11	1.722e+02	1.160e+03	2.226e-01	1.500e+00
3.7009	7.277e+09	4.027e+00	2.553e+01	5.112e-03	3.240e-02
3.9384	5.005e+11	3.717e+02	2.209e+03	4.622e-01	2.748e+00
4.3428	1.578e+10	1.820e+01	9.801e+01	2.189e-02	1.179e-01
4.48	1.312e+09	1.731e+00	9.040e+00	2.059e-03	1.075e-02
4.7418	3.548e+11	5.939e+02	2.937e+03	6.929e-01	3.427e+00
5.0016	6.040e+08	1.254e+00	5.908e+00	1.438e-03	6.773e-03
5.2304	2.795e+09	6.913e+00	3.131e+01	7.814e-03	3.539e-02
5.608	3.851e+07	1.237e-01	5.287e-01	1.370e-04	5.853e-04

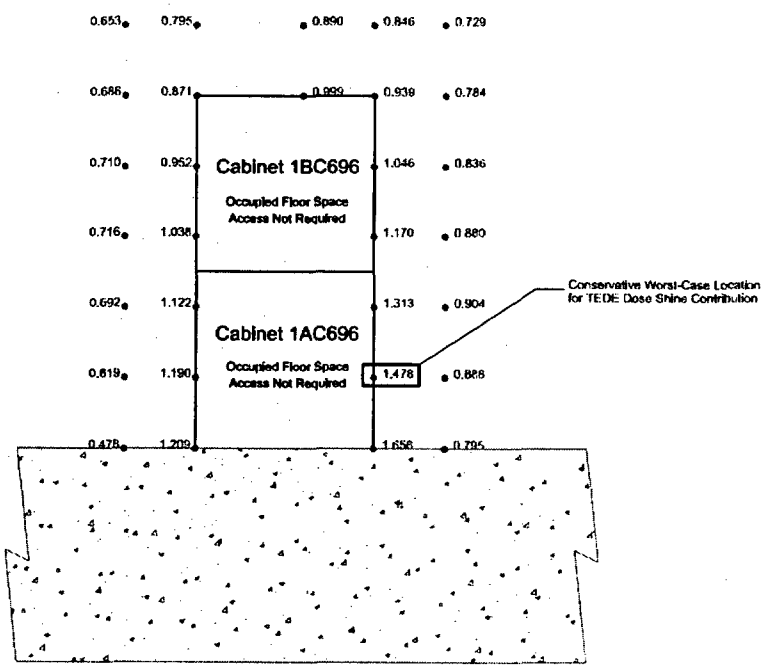
Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
5.8005	3.326e+07	1.207e-01	5.018e-01	1.323e-04	5.501e-04
6.1042	3.501e+07	1.519e-01	6.059e-01	1.642e-04	6.547e-04
TOTALS:	9.494e+16	3.038e+04	4.535e+05	4.719e+01	7.286e+02

Results - Dose Point # 6 - (10.5,6,2.5) ft

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.797e+15	1.130e-10	2.753e-08	1.729e-13	4.214e-11
0.3656	1.658e+16	6.480e-02	1.690e+01	1.255e-04	3.272e-02
0.6172	3.926e+16	3.093e+01	3.066e+03	6.026e-02	5.975e+00
0.8096	2.283e+16	2.288e+02	1.352e+04	4.345e-01	2.569e+01
1.0825	3.228e+15	4.209e+02	1.455e+04	7.647e-01	2.643e+01
1.3401	3.232e+15	2.464e+03	5.899e+04	4.269e+00	1.022e+02
1.6044	2.234e+15	6.824e+03	1.233e+05	1.127e+01	2.037e+02
1.8388	4.112e+14	3.358e+03	4.996e+04	5.329e+00	7.929e+01
2.0402	1.931e+14	3.206e+03	4.141e+04	4.927e+00	6.364e+01
2.3212	9.035e+13	3.454e+03	3.769e+04	5.092e+00	5.557e+01
2.5398	8.358e+13	5.541e+03	5.404e+04	7.934e+00	7.738e+01
2.7426	6.219e+11	6.465e+01	5.751e+02	9.028e-02	8.031e-01
3.0171	8.007e+11	1.420e+02	1.131e+03	1.923e-01	1.532e+00
3.2809	1.203e+12	3.333e+02	2.421e+03	4.396e-01	3.193e+00
3.4931	4.130e+11	1.577e+02	1.070e+03	2.039e-01	1.384e+00
3.7009	7.277e+09	3.695e+00	2.360e+01	4.690e-03	2.995e-02
3.9384	5.005e+11	3.417e+02	2.046e+03	4.249e-01	2.544e+00
4.3428	1.578e+10	1.678e+01	9.100e+01	2.018e-02	1.094e-01
4.48	1.312e+09	1.597e+00	8.400e+00	1.900e-03	9.992e-03
4.7418	3.548e+11	5.488e+02	2.733e+03	6.403e-01	3.188e+00
5.0016	6.040e+08	1.161e+00	5.504e+00	1.331e-03	6.310e-03
5.2304	2.795e+09	6.405e+00	2.920e+01	7.239e-03	3.301e-02
5.608	3.851e+07	1.148e-01	4.938e-01	1.271e-04	5.467e-04
5.8005	3.326e+07	1.121e-01	4.690e-01	1.229e-04	5.141e-04
6.1042	3.501e+07	1.412e-01	5.668e-01	1.526e-04	6.125e-04
TOTALS:	9.494e+16	2.715e+04	4.067e+05	4.211e+01	6.527e+02



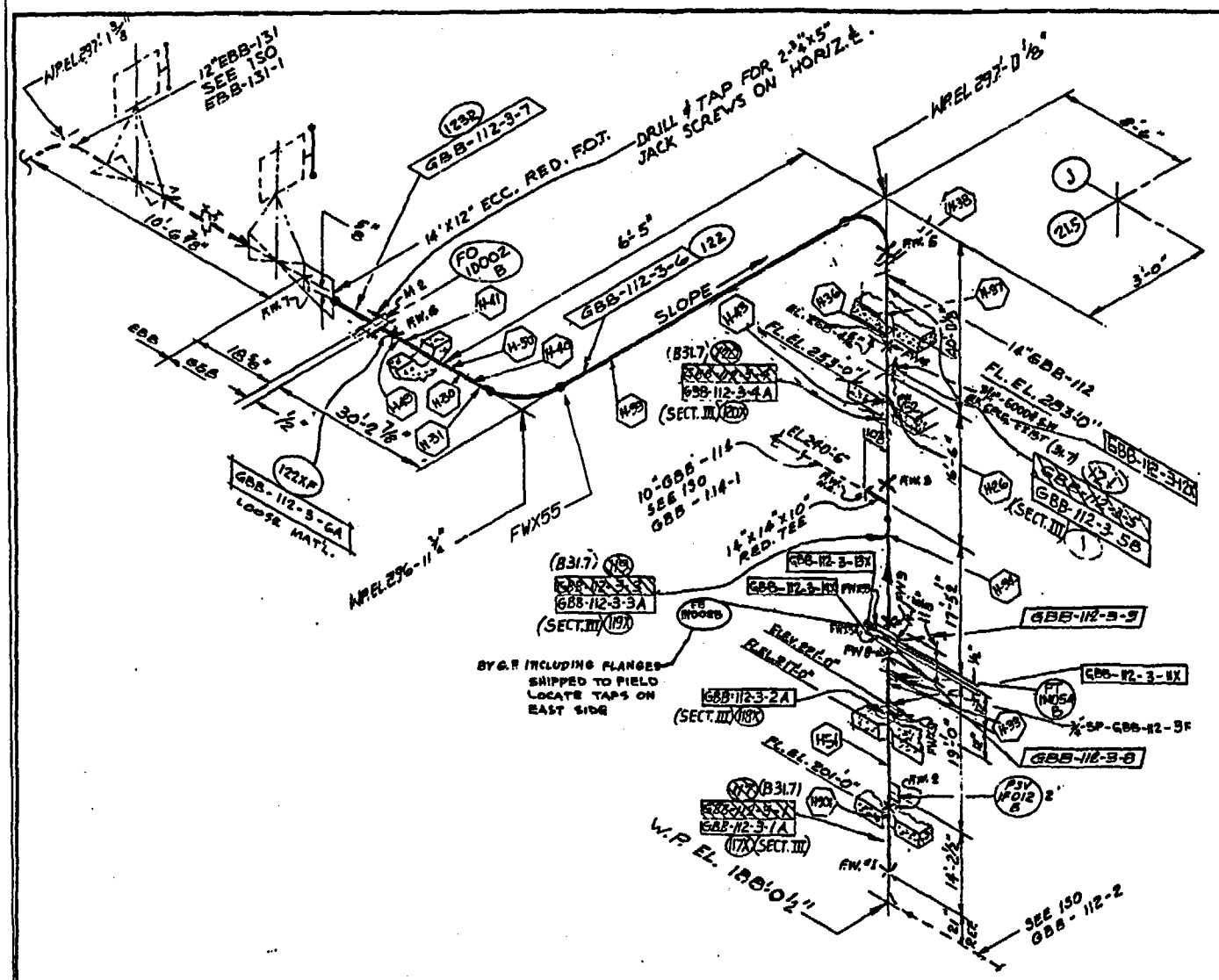
Integrated LOCA Dose (rem) from Bounding Unit 1 Core Spray Pipe Determined with MicroShield



Relative Positions of the CS Pipe, Shield Wall, and Cabinets are per Dwg. M-602, Sh.1, R30, and the CS Pipe Isometric GBB-112-3.

Core Spray Pipe

DRAWING TO SCALE
Cabinets 30" x 30"

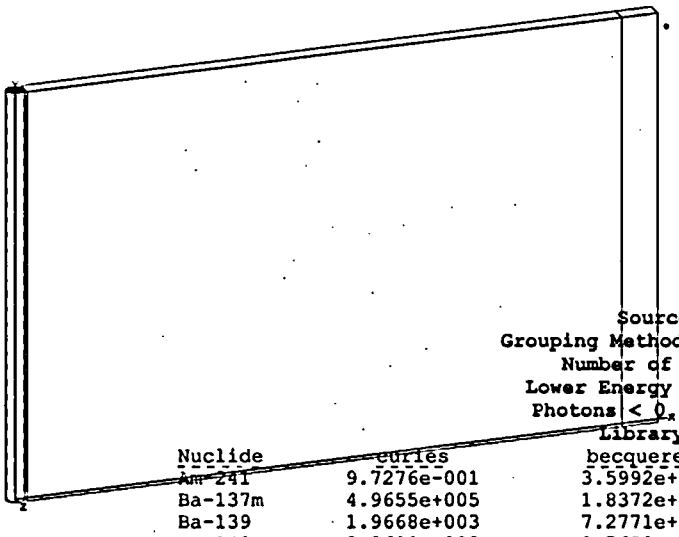

CCN REV 0
CALC. NO PI-20-53
146 L.F.
N
REV. 16 NOTE:
DELETED HGRS H-27, H-28 & H-35
ADDED HGR H-43 PER HGR. GRP.
REV. 17 NOTE:
REV. ELEV. & DIM. TO AGREE W/ CONT 190 FBB-131-1, 297'-1 1/16" WAS 297'-2 3/8" & 10'-6 1/8" WAS 10'-8" REF. FME 3136.
REV. 18 NOTE:
INC. FSK SHT 1 REV. 1 AND ADDED CONN FOR PT 1N054 B PER PGID M-57 REV. 4
REV. 22 NOTE:
ADDED H49 PER HANGER MAP-UP.
REV. 25 NOTE:
ADDED H-30, H-31 & H-50.
INCORP FSK SHT 1 REV. 2 PER NCR # 6643, 1 FSK SHT. 2 REV 2
REFERENCED FCR M15131F
REV. 27 NOTE:
REVISED SPOOLS 13X & 14X LOCATION PER AS BUILT CONDITION. INCORP FSK SHT 2 REV 3
REV. 28 NOTE:
INCORP. FSK SHT. 2 REV. 4 & FCR # M18,166F
REFERENCE DRAWINGS
M-52 P. & I. D.
M-218 PIPING PLAN - AREA 12
M-219 " " " 12
M-220 " " " 12
M-221 " " " 12
M-222 " " " 12
SK-M-1568 & B STRESS 130
V 14271F
FCR M15131F
ADD HGR. H51
SEE REV. 28 NOTE
ADDED REF. FCR
INCORPORATED FSK GBB-112-3 SHT. 1 REV. 3
SEE REV 25 NOTE
SEE REV. 27 NOTE
REV. PER FCR M-1436F
ISSUED FOR FAB
NONE
JAVORSKY
BECHTEL
SAN FRANCISCO
LIMERICK GENERATING STATION
UNITS 1 & 2
PHILADELPHIA ELECTRIC COMPANY
ISOMETRIC - REACTOR BLDG.
CORE SPRAY COOLING - UNIT-1
8031
GBB-112-3
30
PIPING INSTALLED
FOR REFERENCED CHANGE DOCUMENTS SEE THE CHANGE DOCUMENT REGISTER.
FABRICATED BY: SOUTHWEST FABRICATING & WELDING CO.
TABLE OF ADDITIONS & CHANGES
USE ONLY PRINTS SHOWING LATEST DATE
DESCRIPTION
INCORPORATED FSK GBB-112-03-01 REV. 005 & FSK GBB-112-03-02 REV. 004
CATARACT
SPOOL: SH 117X, 118X, 119X, 120X, 121X, 122, 122XP, 123, 155F
RECEIVED - TAPE - SCOPE - S.O.
JUL 1 1971 HCN
SOUTHWEST FABRICATING & WELDING CO.
ENGINEERING DEPT.

MicroShield v5.05 (5.05-00210)
Raytheon Engineers & Constructors

Page : 1
DOS File: LGS2REH.MS5
Run Date: June 8, 2006
Run Time: 6:42:05 PM
Duration: 00:00:03

File Ref: _____
Date: _____
By: _____
Checked: _____

Case Title: LGS RHR Pipe
Description: Unit 1 ECCS Source Horizontal Pipe
Geometry: 7 - Cylinder Volume - Side Shields



Source Dimensions

Height	1.0e+3 cm	34 ft
Radius	21.59 cm	8.5 in

Dose Points

	X	Y	Z
# 1	1661.16 cm	990.6 cm	0 cm
	54 ft 6.0 in	32 ft 6.0 in	0.0 in

Shields

Shield Name	Dimension	Material	Density
Source	53.593 ft³	Water	1
Transition		Air	0.00122
Shield 2	49.75 ft	Air	0.00122
Shield 3	3.0 ft	Concrete	2.35
Air Gap		Air	0.00122
Wall Clad	.042 ft	Iron	7.86

Source Input
Grouping Method : Linear Energy
Number of Groups : 25
Lower Energy Cutoff : 0.015
Photons < 0.015 : Excluded
Library : Grove

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Am-241	9.7276e-001	3.5992e+010	6.4100e-001	2.3717e+004
Ba-137m	4.9655e+005	1.8372e+016	3.2720e+005	1.2106e+010
Ba-139	1.9668e+003	7.2771e+013	1.2960e+003	4.7952e+007
Ba-140	2.3689e+005	8.7650e+015	1.5610e+005	5.7757e+009
Ba-141	5.5209e+001	2.0427e+012	3.6380e+001	1.3461e+006
Ba-142	7.1038e+000	2.6284e+011	4.6810e+000	1.7320e+005
Br-82	2.7423e+003	1.0146e+014	1.8070e+003	6.6859e+007
Br-83	4.3281e+003	1.6014e+014	2.8520e+003	1.0552e+008
Br-84	7.3693e+002	2.7267e+013	4.8560e+002	1.7967e+007
Br-85	5.2129e+000	1.9288e+011	3.4350e+000	1.2709e+005
Ce-141	7.9460e+003	2.9400e+014	5.2360e+003	1.9373e+008
Ce-143	1.0764e+003	3.9827e+013	7.0930e+002	2.6244e+007
Ce-144	8.0568e+003	2.9810e+014	5.3090e+003	1.9643e+008
Cm-242	2.0942e+002	7.7487e+012	1.3800e+002	5.1060e+006
Cm-244	2.4129e+001	8.9279e+011	1.5900e+001	5.8830e+005
Co-58	1.5631e+002	5.7835e+012	1.0300e+002	3.8110e+006
Co-60	2.1094e+002	7.8049e+012	1.3900e+002	5.1430e+006
Cs-132	2.9805e+002	1.1028e+013	1.9640e+002	7.2668e+006
Cs-134	8.3299e+005	3.0821e+016	5.4890e+005	2.0309e+010
Cs-134m	1.9728e+003	7.2995e+013	1.3000e+003	4.8100e+007
Cs-135	2.9805e+000	1.1028e+011	1.9640e+000	7.2668e+004
Cs-136	1.2866e+005	4.7604e+015	8.4780e+004	3.1369e+009
Cs-137	5.2523e+005	1.9434e+016	3.4610e+005	1.2806e+010
Cs-138	8.2768e+003	3.0624e+014	5.4540e+003	2.0180e+008
Cs-139	4.1445e+002	1.5335e+013	2.7310e+002	1.0105e+007
Eu-154	4.1900e+001	1.5503e+012	2.7610e+001	1.0216e+006
Eu-155	2.9729e+001	1.1000e+012	1.9590e+001	7.2483e+005
Eu-156	2.7377e+002	1.0129e+013	1.8040e+002	6.6748e+006
I-128	2.7529e+001	1.0186e+012	1.8140e+001	6.7118e+005
I-130	6.8458e+003	2.5329e+014	4.5110e+003	1.6691e+008
I-131	1.5950e+006	5.9014e+016	1.0510e+006	3.8887e+010
I-132	1.2027e+006	4.4499e+016	7.9250e+005	2.9322e+010
I-133	6.0430e+005	2.2359e+016	3.9820e+005	1.4733e+010
I-134	3.4312e+004	1.2696e+015	2.2610e+004	8.3657e+008
I-135	1.9698e+005	7.2883e+015	1.2980e+005	4.8026e+009
I-136	2.7256e+000	1.0085e+011	1.7960e+000	6.6452e+004
La-140	2.1398e+005	7.9172e+015	1.4100e+005	5.2170e+009
La-141	6.8670e+001	2.5408e+012	4.5250e+001	1.6743e+006
La-142	2.0487e+001	7.5803e+011	1.3500e+001	4.9950e+005
Mo-99	1.1320e+004	4.1882e+014	7.4590e+003	2.7598e+008
Mo-101	3.3387e+000	1.2353e+011	2.2000e+000	8.1400e+004
Nb-95	4.0732e+003	1.5071e+014	2.6840e+003	9.9308e+007
Nb-95m	2.6573e+001	9.8319e+011	1.7510e+001	6.4787e+005
Nb-97	2.8530e+002	1.0556e+013	1.8800e+002	6.9560e+006
Nb-97m	2.5541e+002	9.4501e+012	1.6830e+002	6.2271e+006
Nd-147	8.3709e+002	3.0972e+013	5.5160e+002	2.0409e+007
Nd-149	5.3282e+000	1.9714e+011	3.5110e+000	1.2991e+005
Np-239	2.0335e+004	7.5241e+014	1.3400e+004	4.9580e+008

DOS File: LGS2REH.MS5
Run Date: June 8, 2006
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Duration: 00:00:03

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Pd-109	5.8032e+002	2.1472e+013	3.8240e+002	1.4149e+007
Pm-147	4.3994e+002	1.6278e+013	2.8990e+002	1.0726e+007
Pm-148	2.2293e+002	8.2485e+012	1.4690e+002	5.4353e+006
Pm-148m	8.6714e+001	3.2084e+012	5.7140e+001	2.1142e+006
Pm-149	2.3689e+002	8.7650e+012	1.5610e+002	5.7757e+006
Pm-151	5.0247e+001	1.8591e+012	3.3110e+001	1.2251e+006
Pr-142	1.4755e+001	5.4595e+011	9.7230e+000	3.5975e+005
Pr-143	2.2703e+003	8.4001e+013	1.4960e+003	5.5352e+007
Pr-144	3.2233e+003	1.1926e+014	2.1240e+003	7.8588e+007
Pr-144m	3.8668e+001	1.4307e+012	2.5480e+001	9.4276e+005
Pu-238	4.1733e+001	1.5441e+012	2.7500e+001	1.0175e+006
Pu-239	2.8227e+000	1.0444e+011	1.8600e+000	6.8820e+004
Pu-240	2.9896e+000	1.1062e+011	1.9700e+000	7.2890e+004
Pu-241	1.4341e+003	5.3062e+013	9.4500e+002	3.4965e+007
Rb-86	4.8289e+003	1.7867e+014	3.1820e+003	1.1773e+008
Rb-88	2.6466e+004	9.7926e+014	1.7440e+004	6.4528e+008
Rb-89	6.8731e+002	2.5430e+013	4.5290e+002	1.6757e+007
Rb-90	1.4916e+001	5.5190e+011	9.8290e+000	3.6367e+005
Rb-90m	9.3437e+000	3.4572e+011	6.1570e+000	2.2781e+005
Rh-103m	3.4919e+004	1.2920e+015	2.3010e+004	8.5137e+008
Rh-105	4.2704e+003	1.5801e+014	2.8140e+003	1.0412e+008
Rh-105m	1.7240e+002	6.3787e+012	1.1360e+002	4.2032e+006
Rh-106	1.9531e+004	7.2265e+014	1.2870e+004	4.7619e+008
Ru-103	3.8698e+004	1.4318e+015	2.5500e+004	9.4350e+008
Ru-105	6.1401e+002	2.2718e+013	4.0460e+002	1.4970e+007
Ru-106	1.9531e+004	7.2265e+014	1.2870e+004	4.7619e+008
Sb-122	2.9866e+002	1.1050e+013	1.9680e+002	7.2816e+006
Sb-124	8.3998e+002	3.1079e+013	5.5350e+002	2.0479e+007
Sb-125	1.1764e+004	4.3528e+014	7.7520e+003	2.8682e+008
Sb-126	3.7469e+002	1.3863e+013	2.4690e+002	9.1353e+006
Sb-126m	8.1949e-001	3.0321e+010	5.4000e-001	1.9980e+004
Sb-127	1.6951e+004	6.2720e+014	1.1170e+004	4.1329e+008
Sb-129	3.4737e+003	1.2853e+014	2.2890e+003	8.4693e+007
Sm-151	1.9668e+000	7.2771e+010	1.2960e+000	4.7952e+004
Sm-153	1.7680e+002	6.5415e+012	1.1650e+002	4.3105e+006
Sr-89	1.9470e+005	7.2041e+015	1.2830e+005	4.7471e+009
Sr-90	2.9411e+004	1.0882e+015	1.9380e+004	7.1706e+008
Sr-91	1.1353e+004	4.2006e+014	7.4810e+003	2.7680e+008
Sr-92	3.1247e+003	1.1561e+014	2.0590e+003	7.6183e+007
Sr-93	1.1514e+000	4.2601e+010	7.5870e-001	2.8072e+004
Tc-99	6.6212e-001	2.4498e+010	4.3630e-001	1.6143e+004
Tc-99m	1.0779e+004	3.9883e+014	7.1030e+003	2.6281e+008
Tc-101	1.4622e+001	5.4101e+011	9.6350e+000	3.5650e+005
Te-123m	1.4350e+001	5.3096e+011	9.4560e+000	3.4987e+005
Te-125m	2.6057e+003	9.6410e+013	1.7170e+003	6.3529e+007
Te-127	2.4190e+004	8.9503e+014	1.5940e+004	5.8978e+008
Te-127m	8.4256e+003	3.1175e+014	5.5520e+003	2.0542e+008
Te-129	1.8681e+004	6.9121e+014	1.2310e+004	4.5547e+008
Te-129m	2.2642e+004	8.3776e+014	1.4920e+004	5.5204e+008
Te-131	2.6694e+003	9.8768e+013	1.7590e+003	6.5083e+007
Te-131m	9.3422e+003	3.4566e+014	6.1560e+003	2.2777e+008
Te-132	1.9410e+005	7.1816e+015	1.2790e+005	4.7323e+009
Te-133	1.7665e+002	6.5359e+012	1.1640e+002	4.3068e+006
Te-133m	8.9992e+002	3.3297e+013	5.9300e+002	2.1941e+007
Te-134	1.1883e+003	4.3966e+013	7.8300e+002	2.8971e+007
Y-90	2.9411e+004	1.0882e+015	1.9380e+004	7.1706e+008
Y-91	1.1353e+004	4.2006e+014	7.4810e+003	2.7680e+008
Y-91m	6.4709e+003	2.3942e+014	4.2640e+003	1.5777e+008
Y-92	3.1247e+003	1.1561e+014	2.0590e+003	7.6183e+007
Y-93	1.5373e+002	5.6880e+012	1.0130e+002	3.7481e+006
Zr-95	3.6012e+003	1.3324e+014	2.3730e+003	8.7801e+007
Zr-97	2.9593e+002	1.0949e+013	1.9500e+002	7.2150e+006

Buildup

The material reference is : Shield 3

Integration Parameters

Radial	10
Circumferential	10
Y Direction (axial)	20

Results

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	2.717e+16	1.402e-11	3.429e-09	2.146e-14	5.250e-12
0.3656	6.627e+16	1.099e-02	2.832e+00	2.128e-05	5.484e-03
0.6172	1.569e+17	5.149e+00	5.062e+02	1.003e-02	9.864e-01

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Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.8096	9.126e+16	3.774e+01	2.216e+03	7.168e-02	4.210e+00
1.0825	1.291e+16	6.887e+01	2.370e+03	1.251e-01	4.305e+00
1.3401	1.292e+16	4.012e+02	9.571e+03	6.951e-01	1.658e+01
1.6044	8.931e+15	1.107e+03	1.996e+04	1.829e+00	3.296e+01
1.8388	1.644e+15	5.436e+02	8.069e+03	8.626e-01	1.281e+01
2.0402	7.718e+14	5.181e+02	6.680e+03	7.962e-01	1.027e+01
2.3212	3.612e+14	5.571e+02	6.071e+03	8.214e-01	8.951e+00
2.5398	3.341e+14	8.928e+02	8.697e+03	1.278e+00	1.245e+01
2.7426	2.486e+12	1.041e+01	9.248e+01	1.453e-02	1.291e-01
3.0171	3.201e+12	2.283e+01	1.818e+02	3.092e-02	2.462e-01
3.2809	4.808e+12	5.355e+01	3.887e+02	7.063e-02	5.127e-01
3.4931	1.651e+12	2.532e+01	1.718e+02	3.273e-02	2.221e-01
3.7009	2.909e+10	5.929e-01	3.786e+00	7.525e-04	4.805e-03
3.9384	2.001e+12	5.479e+01	3.281e+02	6.814e-02	4.080e-01
4.3428	6.310e+10	2.689e+00	1.458e+01	3.233e-03	1.753e-02
4.48	5.247e+09	2.559e-01	1.346e+00	3.044e-04	1.601e-03
4.7418	1.418e+12	8.786e+01	4.376e+02	1.025e-01	5.106e-01
5.0016	2.415e+09	1.858e-01	8.812e-01	2.129e-04	1.010e-03
5.2304	1.117e+10	1.025e+00	4.673e+00	1.158e-03	5.282e-03
5.608	1.540e+08	1.836e-02	7.899e-02	2.032e-05	8.745e-05
5.8005	1.330e+08	1.792e-02	7.500e-02	1.964e-05	8.223e-05
6.1042	1.400e+08	2.256e-02	9.062e-02	2.438e-05	9.793e-05
TOTALS:	3.795e+17	4.391e+03	6.577e+04	6.814e+00	1.056e+02

MicroShield v5.05 (5.05-00210)
Raytheon Engineers & Constructors

Page : 1
DOS File: LGS2REV1.MS5
Run Date: June 8, 2006
Run Time: 6:42:56 PM
Duration: 00:00:02

File Ref: _____
Date: _____
By: _____
Checked: _____

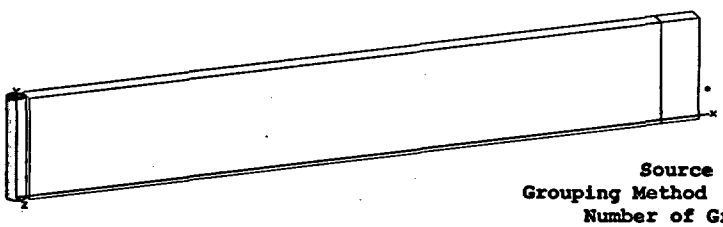
Case Title: LGS RHR Pipe
Description: Unit 1 ECCS Source 8 ft Vertical Pipe
Geometry: 7 - Cylinder Volume - Side Shields

Source Dimensions

Height	243.84 cm	8 ft
Radius	21.59 cm	8.5 in

Dose Points

	X	Y	Z
# 1	1661.16 cm	60.96 cm	0 cm
	54 ft 6.0 in	2 ft	0.0 in



Shields

Shield Name	Dimension	Material	Density
Source	12.61 ft³	Water	1
Transition		Air	0.00122
Shield 2	49.75 ft	Air	0.00122
Shield 3	3.0 ft	Concrete	2.35
Air Gap		Air	0.00122
Wall Clad	.042 ft	Iron	7.86

Source Input
Grouping Method : Linear Energy
Number of Groups : 25
Lower Energy Cutoff : 0.015
Photons < 0.015 : Excluded
Library : Grove

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Am-241	2.2889e-001	8.4688e+009	6.4100e-001	2.3717e+004
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Ba-139	4.6277e+002	1.7122e+013	1.2960e+003	4.7952e+007
Ba-140	5.5739e+004	2.0624e+015	1.5610e+005	5.7757e+009
Ba-141	1.2990e+001	4.8065e+011	3.6380e+001	1.3461e+006
Ba-142	1.6715e+000	6.1844e+010	4.6810e+000	1.7320e+005
Br-82	6.4524e+002	2.3874e+013	1.8070e+003	6.6859e+007
Br-83	1.0184e+003	3.7680e+013	2.8520e+003	1.0552e+008
Br-84	1.7340e+002	6.4156e+012	4.8560e+002	1.7967e+007
Br-85	1.2266e+000	4.5383e+010	3.4350e+000	1.2709e+005
Ce-141	1.8696e+003	6.9177e+013	5.2360e+003	1.9373e+008
Ce-143	2.5327e+002	9.3711e+012	7.0930e+002	2.6244e+007
Ce-144	1.8957e+003	7.0141e+013	5.3090e+003	1.9643e+008
Cm-242	4.9276e+001	1.8232e+012	1.3800e+002	5.1060e+006
Cm-244	5.6775e+000	2.1007e+011	1.5900e+001	5.8830e+005
Co-58	3.6779e+001	1.3608e+012	1.0300e+002	3.8110e+006
Co-60	4.9634e+001	1.8364e+012	1.3900e+002	5.1430e+006
Cs-132	7.0130e+001	2.5948e+012	1.9640e+002	7.2668e+006
Cs-134	1.9600e+005	7.2520e+015	5.4890e+005	2.0309e+010
Cs-134m	4.6420e+002	1.7175e+013	1.3000e+003	4.8100e+007
Cs-135	7.0130e-001	2.5948e+010	1.9640e+000	7.2668e+004
Cs-136	3.0273e+004	1.1201e+015	8.4780e+004	3.1369e+009
Cs-137	1.2358e+005	4.5726e+015	3.4610e+005	1.2806e+010
Cs-138	1.9475e+003	7.2057e+013	5.4540e+003	2.0180e+008
Cs-139	9.7517e+001	3.6081e+012	2.7310e+002	1.0105e+007
Eu-154	9.8589e+000	3.6478e+011	2.7610e+001	1.0216e+006
Eu-155	6.9951e+000	2.5882e+011	1.9590e+001	7.2483e+005
Eu-156	6.4416e+001	2.3834e+012	1.8040e+002	6.6748e+006
I-128	6.4774e+000	2.3966e+011	1.8140e+001	6.7118e+005
I-130	1.6108e+003	5.9598e+013	4.5110e+003	1.6691e+008
I-131	3.7529e+005	1.3886e+016	1.0510e+006	3.8887e+010
I-132	2.8298e+005	1.0470e+016	7.9250e+005	2.9322e+010
I-133	1.4219e+005	5.2609e+015	3.9820e+005	1.4733e+010
I-134	8.0735e+003	2.9872e+014	2.2610e+004	8.3657e+008
I-135	4.6348e+004	1.7149e+015	1.2980e+005	4.8026e+009
I-136	6.4131e-001	2.3728e+010	1.7960e+000	6.6452e+004
La-140	5.0348e+004	1.8629e+015	1.4100e+005	5.2170e+009
La-141	1.6158e+001	5.9783e+011	4.5250e+001	1.6742e+006
La-142	4.8205e+000	1.7836e+011	1.3500e+001	4.9950e+005
Mo-99	2.6634e+003	9.8547e+013	7.4590e+003	2.7598e+008
Mo-101	7.8557e-001	2.9066e+010	2.2000e+000	8.1400e+004
Nb-95	9.5839e+002	3.5460e+013	2.6840e+003	9.9308e+007
Nb-95m	6.2524e+000	2.3134e+011	1.7510e+001	6.4787e+005
Nb-97	6.7130e+001	2.4838e+012	1.8800e+002	6.9560e+006
Nb-97m	6.0096e+001	2.2235e+012	1.6830e+002	6.2271e+006
Nd-147	1.9696e+002	7.2876e+012	5.5160e+002	2.0409e+007
Nd-149	1.2537e+000	4.6387e+010	3.5110e+000	1.2991e+005
Np-239	4.7848e+003	1.7704e+014	1.3400e+004	4.9580e+008

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Pd-109	1.3655e+002	5.0522e+012	3.8240e+002	1.4149e+007
Pm-147	1.0352e+002	3.8301e+012	2.8990e+002	1.0726e+007
Pm-148	5.2454e+001	1.9408e+012	1.4690e+002	5.4353e+006
Pm-148m	2.0403e+001	7.5492e+011	5.7140e+001	2.1142e+006
Pm-149	5.5739e+001	2.0624e+012	1.5610e+002	5.7757e+006
Pm-151	1.1823e+001	4.3744e+011	3.3110e+001	1.2251e+006
Pr-142	3.4718e+000	1.2846e+011	9.7230e+000	3.5975e+005
Pr-143	5.3419e+002	1.9765e+013	1.4960e+003	5.5352e+007
Pr-144	7.5843e+002	2.8062e+013	2.1240e+003	7.8588e+007
Pr-144m	9.0983e+000	3.3664e+011	2.5480e+001	9.4276e+005
Pu-238	9.8196e+000	3.6332e+011	2.7500e+001	1.0175e+006
Pu-239	6.6416e-001	2.4574e+010	1.8600e+000	6.8820e+004
Pu-240	7.0344e-001	2.6027e+010	1.9700e+000	7.2890e+004
Pu-241	3.3744e+002	1.2485e+013	9.4500e+002	3.4965e+007
Rb-86	1.1362e+003	4.2040e+013	3.1820e+003	1.1773e+008
Rb-88	6.2274e+003	2.3041e+014	1.7440e+004	6.4528e+008
Rb-89	1.6172e+002	5.9836e+012	4.5290e+002	1.6757e+007
Rb-90	3.5097e+000	1.2986e+011	9.8290e+000	3.6367e+005
Rb-90m	2.1985e+000	8.1345e+010	6.1570e+000	2.2781e+005
Rh-103m	8.2163e+003	3.0400e+014	2.3010e+004	8.5137e+008
Rh-105	1.0048e+003	3.7178e+013	2.8140e+003	1.0412e+008
Rh-105m	4.0564e+001	1.5009e+012	1.1360e+002	4.2032e+006
Rh-106	4.5956e+003	1.7004e+014	1.2870e+004	4.7619e+008
Ru-103	9.1054e+003	3.3690e+014	2.5500e+004	9.4350e+008
Ru-105	1.4447e+002	5.3455e+012	4.0460e+002	1.4970e+007
Ru-106	4.5956e+003	1.7004e+014	1.2870e+004	4.7619e+008
Sb-122	7.0272e+001	2.6001e+012	1.9680e+002	7.2816e+006
Sb-124	1.9764e+002	7.3127e+012	5.5350e+002	2.0479e+007
Sb-125	2.7680e+003	1.0242e+014	7.7520e+003	2.8682e+008
Sb-126	8.8162e+001	3.2620e+012	2.4690e+002	9.1353e+006
Sb-126m	1.9282e-001	7.1344e+009	5.4000e-001	1.9980e+004
Sb-127	3.9885e+003	1.4758e+014	1.1170e+004	4.1329e+008
Sb-129	8.1735e+002	3.0242e+013	2.2890e+003	8.4693e+007
Sm-151	4.6277e-001	1.7122e+010	1.2960e+000	4.7952e+004
Sm-153	4.1599e+001	1.5392e+012	1.1650e+002	4.3105e+006
Sr-89	4.5813e+004	1.6951e+015	1.2830e+005	4.7471e+009
Sr-90	6.9201e+003	2.5604e+014	1.9380e+004	7.1706e+008
Sr-91	2.6713e+003	9.8837e+013	7.4810e+003	2.7680e+008
Sr-92	7.3522e+002	2.7203e+013	2.0590e+003	7.6183e+007
Sr-93	2.7091e-001	1.0024e+010	7.5870e-001	2.8072e+004
Tc-99	1.5579e-001	5.7643e+009	4.3630e-001	1.6143e+004
Tc-99m	2.5363e+003	9.3843e+013	7.1030e+003	2.6281e+008
Tc-101	3.4404e+000	1.2730e+011	9.6350e+000	3.5649e+005
Te-123m	3.3765e+000	1.2493e+011	9.4560e+000	3.4987e+005
Te-125m	6.1310e+002	2.2685e+013	1.7170e+003	6.3529e+007
Te-127	5.6918e+003	2.1060e+014	1.5940e+004	5.8978e+008
Te-127m	1.9825e+003	7.3352e+013	5.5520e+003	2.0542e+008
Te-129	4.3956e+003	1.6264e+014	1.2310e+004	4.5547e+008
Te-129m	5.3276e+003	1.9712e+014	1.4920e+004	5.5204e+008
Te-131	6.2810e+002	2.3240e+013	1.7590e+003	6.5083e+007
Te-131m	2.1982e+003	8.1332e+013	6.1560e+003	2.2777e+008
Te-132	4.5670e+004	1.6898e+015	1.2790e+005	4.7323e+009
Te-133	4.1564e+001	1.5379e+012	1.1640e+002	4.3068e+006
Te-133m	2.1175e+002	7.8346e+012	5.9300e+002	2.1941e+007
Te-134	2.7959e+002	1.0345e+013	7.8300e+002	2.8971e+007
Y-90	6.9201e+003	2.5604e+014	1.9380e+004	7.1706e+008
Y-91	2.6713e+003	9.8837e+013	7.4810e+003	2.7680e+008
Y-91m	1.5226e+003	5.6335e+013	4.2640e+003	1.5777e+008
Y-92	7.3522e+002	2.7203e+013	2.0590e+003	7.6183e+007
Y-93	3.6172e+001	1.3384e+012	1.0130e+002	3.7481e+006
Zr-95	8.4734e+002	3.1352e+013	2.3730e+003	8.7801e+007
Zr-97	6.9630e+001	2.5763e+012	1.9500e+002	7.2150e+006

Buildup

The material reference is : Shield 3

Integration Parameters

Radial	10
Circumferential	10
Y Direction (axial)	20

Results

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	6.394e+15	8.823e-12	2.126e-09	1.351e-14	3.254e-12
0.3656	1.559e+16	5.605e-03	1.396e+00	1.085e-05	2.702e-03
0.6172	3.693e+16	2.423e+00	2.301e+02	4.721e-03	4.484e-01

DOS File: LGS2REV1.MS5
Run Date: June 8, 2006
Run Time: 6:42:56 PM
Duration: 00:00:02

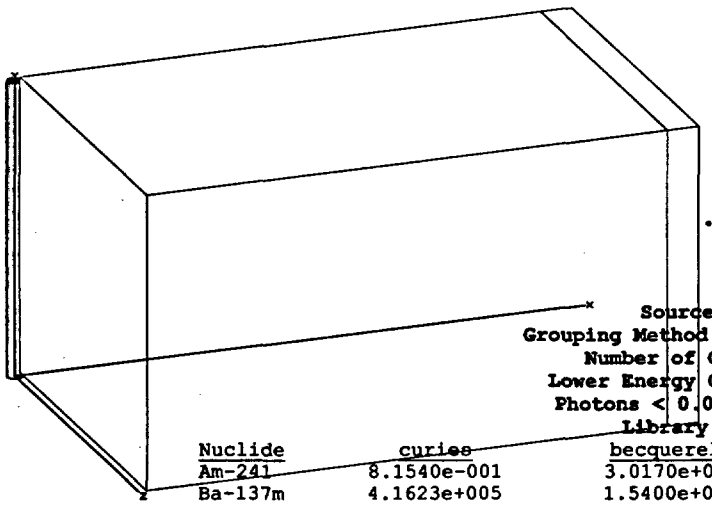
Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.8096	2.147e+16	1.699e+01	9.649e+02	3.228e-02	1.833e+00
1.0825	3.037e+15	2.955e+01	9.838e+02	5.368e-02	1.787e+00
1.3401	3.040e+15	1.660e+02	3.836e+03	2.877e-01	6.645e+00
1.6044	2.101e+15	4.448e+02	7.767e+03	7.346e-01	1.283e+01
1.8388	3.868e+14	2.137e+02	3.074e+03	3.391e-01	4.878e+00
2.0402	1.816e+14	2.004e+02	2.505e+03	3.079e-01	3.849e+00
2.3212	8.499e+13	2.114e+02	2.234e+03	3.116e-01	3.295e+00
2.5398	7.862e+13	3.343e+02	3.162e+03	4.787e-01	4.527e+00
2.7426	5.850e+11	3.856e+00	3.328e+01	5.385e-03	4.647e-02
3.0171	7.532e+11	8.351e+00	6.460e+01	1.131e-02	8.749e-02
3.2809	1.131e+12	1.938e+01	1.367e+02	2.556e-02	1.803e-01
3.4931	3.885e+11	9.089e+00	5.996e+01	1.175e-02	7.753e-02
3.7009	6.845e+09	2.114e-01	1.313e+00	2.683e-04	1.666e-03
3.9384	4.708e+11	1.940e+01	1.130e+02	2.412e-02	1.405e-01
4.3428	1.485e+10	9.416e-01	4.970e+00	1.132e-03	5.977e-03
4.48	1.234e+09	8.931e-02	4.573e-01	1.062e-04	5.440e-04
4.7418	3.337e+11	3.049e+01	1.479e+02	3.557e-02	1.725e-01
5.0016	5.682e+08	6.413e-02	2.962e-01	7.351e-05	3.396e-04
5.2304	2.629e+09	3.522e-01	1.565e+00	3.980e-04	1.769e-03
5.608	3.623e+07	6.270e-03	2.629e-02	6.942e-06	2.910e-05
5.8005	3.129e+07	6.102e-03	2.489e-02	6.691e-06	2.729e-05
6.1042	3.293e+07	7.652e-03	2.996e-02	8.269e-06	3.237e-05
TOTALS:	8.930e+16	1.712e+03	2.532e+04	2.666e+00	4.081e+01

MicroShield v5.05 (5.05-00210)
Raytheon Engineers & Constructors

Page : 1
DOS File: LGS2REV2.MS5
Run Date: June 8, 2006
Run Time: 6:44:14 PM
Duration: 00:00:02

File Ref: _____
Date: _____
By: _____
Checked: _____

Case Title: LGS RHR Pipe
Description: Unit 1 ECCS Source 28.5 ft Vertical Pipe
Geometry: 7 - Cylinder Volume - Side Shields



Source Dimensions

Height	868.68 cm	28 ft 6.0 in
Radius	21.59 cm	8.5 in

Dose Points

	X	Y	Z
# 1	1661.16 cm	579.12 cm	993.648 cm
	54 ft 6.0 in	19 ft	32 ft 7.2 in

Shields

Shield Name	Dimension	Material	Density
Source	44.923 ft³	Water	1
Transition		Air	0.00122
Shield 2	49.75 ft	Air	0.00122
Shield 3	3.0 ft	Concrete	2.35
Air Gap		Air	0.00122
Wall Clad	.042 ft	Iron	7.86

Source Input
Grouping Method : Linear Energy
Number of Groups : 25
Lower Energy Cutoff : 0.015
Photons < 0.015 : Excluded
Library : Grove

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Am-241	8.1540e-001	3.0170e+010	6.4100e-001	2.3717e+004
Ba-137m	4.1623e+005	1.5400e+016	3.2720e+005	1.2106e+010
Ba-139	1.6486e+003	6.0999e+013	1.2960e+003	4.7952e+007
Ba-140	1.9857e+005	7.3472e+015	1.5610e+005	5.7757e+009
Ba-141	4.6278e+001	1.7123e+012	3.6380e+001	1.3461e+006
Ba-142	5.9546e+000	2.2032e+011	4.6810e+000	1.7320e+005
Br-82	2.2987e+003	8.5050e+013	1.8070e+003	6.6859e+007
Br-83	3.6280e+003	1.3424e+014	2.8520e+003	1.0552e+008
Br-84	6.1772e+002	2.2856e+013	4.8560e+002	1.7967e+007
Br-85	4.3696e+000	1.6168e+011	3.4350e+000	1.2709e+005
Ce-141	6.6606e+003	2.4644e+014	5.2360e+003	1.9373e+008
Ce-143	9.0229e+002	3.3385e+013	7.0930e+002	2.6244e+007
Ce-144	6.7535e+003	2.4988e+014	5.3090e+003	1.9643e+008
Cm-242	1.7555e+002	6.4952e+012	1.3800e+002	5.1060e+006
Cm-244	2.0226e+001	7.4837e+011	1.5900e+001	5.8830e+005
Co-58	1.3102e+002	4.8479e+012	1.0300e+002	3.8110e+006
Co-60	1.7682e+002	6.5423e+012	1.3900e+002	5.1430e+006
Cs-132	2.4984e+002	9.2440e+012	1.9640e+002	7.2668e+006
Cs-134	6.9825e+005	2.5835e+016	5.4890e+005	2.0309e+010
Cs-134m	1.6537e+003	6.1187e+013	1.3000e+003	4.8100e+007
Cs-135	2.4984e+000	9.2440e+010	1.9640e+000	7.2668e+004
Cs-136	1.0785e+005	3.9903e+015	8.4780e+004	3.1369e+009
Cs-137	4.4027e+005	1.6290e+016	3.4610e+005	1.2806e+010
Cs-138	6.9379e+003	2.5670e+014	5.4540e+003	2.0180e+008
Cs-139	3.4741e+002	1.2854e+013	2.7310e+002	1.0105e+007
Eu-154	3.5122e+001	1.2995e+012	2.7610e+001	1.0216e+006
Eu-155	2.4920e+001	9.2204e+011	1.9590e+001	7.2483e+005
Eu-156	2.2948e+002	8.4909e+012	1.8040e+002	6.6748e+006
I-128	2.3076e+001	8.5380e+011	1.8140e+001	6.7118e+005
I-130	5.7384e+003	2.1232e+014	4.5110e+003	1.6691e+008
I-131	1.3370e+006	4.9467e+016	1.0510e+006	3.8887e+010
I-132	1.0081e+006	3.7301e+016	7.9250e+005	2.9323e+010
I-133	5.0654e+005	1.8742e+016	3.9820e+005	1.4733e+010
I-134	2.8762e+004	1.0642e+015	2.2610e+004	8.3657e+008
I-135	1.6512e+005	6.1093e+015	1.2980e+005	4.8026e+009
I-136	2.2847e+000	8.4532e+010	1.7960e+000	6.6452e+004
La-140	1.7936e+005	6.6364e+015	1.4100e+005	5.2170e+009
La-141	5.7562e+001	2.1298e+012	4.5250e+001	1.6743e+006
La-142	1.7173e+001	6.3540e+011	1.3500e+001	4.9950e+005
Mo-99	9.4885e+003	3.5107e+014	7.4590e+003	2.7598e+008
Mo-101	2.7986e+000	1.0355e+011	2.2000e+000	8.1400e+004
Nb-95	3.4143e+003	1.2633e+014	2.6840e+003	9.9308e+007
Nb-95m	2.2274e+001	8.2414e+011	1.7510e+001	6.4787e+005
Nb-97	2.3915e+002	8.8486e+012	1.8800e+002	6.9560e+006
Nb-97m	2.1409e+002	7.9214e+012	1.6830e+002	6.2271e+006
Nd-147	7.0168e+002	2.5962e+013	5.5160e+002	2.0409e+007
Nd-149	4.4663e+000	1.6525e+011	3.5110e+000	1.2991e+005
Np-239	1.7046e+004	6.3070e+014	1.3400e+004	4.9580e+008

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Pd-109	4.8644e+002	1.7998e+013	3.8240e+002	1.4149e+007
Pm-147	3.6878e+002	1.3645e+013	2.8990e+002	1.0726e+007
Pm-148	1.8687e+002	6.9141e+012	1.4690e+002	5.4353e+006
Pm-148m	7.2687e+001	2.6894e+012	5.7140e+001	2.1142e+006
Pm-149	1.9857e+002	7.3472e+012	1.5610e+002	5.7757e+006
Pm-151	4.2119e+001	1.5584e+012	3.3110e+001	1.2251e+006
Pr-142	1.2368e+001	4.5763e+011	9.7230e+000	3.5975e+005
Pr-143	1.9030e+003	7.0412e+013	1.4960e+003	5.5352e+007
Pr-144	2.7019e+003	9.9970e+013	2.1240e+003	7.8588e+007
Pr-144m	3.2413e+001	1.1993e+012	2.5480e+001	9.4276e+005
Pu-238	3.4982e+001	1.2943e+012	2.7500e+001	1.0175e+006
Pu-239	2.3661e+000	8.7545e+010	1.8600e+000	6.8820e+004
Pu-240	2.5060e+000	9.2722e+010	1.9700e+000	7.2890e+004
Pu-241	1.2021e+003	4.4478e+013	9.4500e+002	3.4965e+007
Rb-86	4.0478e+003	1.4977e+014	3.1820e+003	1.1773e+008
Rb-88	2.2185e+004	8.2085e+014	1.7440e+004	6.4528e+008
Rb-89	5.7613e+002	2.1317e+013	4.5290e+002	1.6757e+007
Rb-90	1.2503e+001	4.6262e+011	9.8290e+000	3.6367e+005
Rb-90m	7.8322e+000	2.8979e+011	6.1570e+000	2.2781e+005
Rh-103m	2.9271e+004	1.0830e+015	2.3010e+004	8.5137e+008
Rh-105	3.5796e+003	1.3245e+014	2.8140e+003	1.0412e+008
Rh-105m	1.4451e+002	5.3468e+012	1.1360e+002	4.2032e+006
Rh-106	1.6372e+004	6.0575e+014	1.2870e+004	4.7619e+008
Ru-103	3.2438e+004	1.2002e+015	2.5500e+004	9.4350e+008
Ru-105	5.1468e+002	1.9043e+013	4.0460e+002	1.4970e+007
Ru-106	1.6372e+004	6.0575e+014	1.2870e+004	4.7619e+008
Sb-122	2.5035e+002	9.2628e+012	1.9680e+002	7.2816e+006
Sb-124	7.0410e+002	2.6052e+013	5.5350e+002	2.0479e+007
Sb-125	9.8612e+003	3.6486e+014	7.7520e+003	2.8682e+008
Sb-126	3.1408e+002	1.1621e+013	2.4690e+002	9.1353e+006
Sb-126m	6.8692e-001	2.5416e+010	5.4000e-001	1.9980e+004
Sb-127	1.4209e+004	5.2574e+014	1.1170e+004	4.1329e+008
Sb-129	2.9118e+003	1.0774e+014	2.2890e+003	8.4693e+007
Sm-151	1.6486e+000	6.0999e+010	1.2960e+000	4.7952e+004
Sm-153	1.4820e+002	5.4833e+012	1.1650e+002	4.3105e+006
Sr-89	1.6321e+005	6.0387e+015	1.2830e+005	4.7471e+009
Sr-90	2.4653e+004	9.1216e+014	1.9380e+004	7.1706e+008
Sr-91	9.5164e+003	3.5211e+014	7.4810e+003	2.7680e+008
Sr-92	2.6192e+003	9.6911e+013	2.0590e+003	7.6183e+007
Sr-93	9.6513e-001	3.5710e+010	7.5870e-001	2.8072e+004
Tc-99	5.5501e-001	2.0535e+010	4.3630e-001	1.6143e+004
Tc-99m	9.0356e+003	3.3432e+014	7.1030e+003	2.6281e+008
Tc-101	1.2257e+001	4.5349e+011	9.6350e+000	3.5649e+005
Te-123m	1.2029e+001	4.4507e+011	9.4560e+000	3.4987e+005
Te-125m	2.1842e+003	8.0814e+013	1.7170e+003	6.3529e+007
Te-127	2.0277e+004	7.5025e+014	1.5940e+004	5.8978e+008
Te-127m	7.0626e+003	2.6132e+014	5.5520e+003	2.0542e+008
Te-129	1.5659e+004	5.7940e+014	1.2310e+004	4.5547e+008
Te-129m	1.8979e+004	7.0224e+014	1.4920e+004	5.5204e+008
Te-131	2.2376e+003	8.2791e+013	1.7590e+003	6.5083e+007
Te-131m	7.8309e+003	2.8974e+014	6.1560e+003	2.2777e+008
Te-132	1.6270e+005	6.0199e+015	1.2790e+005	4.7323e+009
Te-133	1.4807e+002	5.4786e+012	1.1640e+002	4.3068e+006
Te-133m	7.5434e+002	2.7911e+013	5.9300e+002	2.1941e+007
Te-134	9.9604e+002	3.6853e+013	7.8300e+002	2.8971e+007
Y-90	2.4653e+004	9.1216e+014	1.9380e+004	7.1706e+008
Y-91	9.5164e+003	3.5211e+014	7.4810e+003	2.7680e+008
Y-91m	5.4242e+003	2.0069e+014	4.2640e+003	1.5777e+008
Y-92	2.6192e+003	9.6911e+013	2.0590e+003	7.6183e+007
Y-93	1.2886e+002	4.7679e+012	1.0130e+002	3.7481e+006
Zr-95	3.0186e+003	1.1169e+014	2.3730e+003	8.7801e+007
Zr-97	2.4806e+002	9.1781e+012	1.9500e+002	7.2150e+006

Buildup

The material reference is : Shield 3

Integration Parameters

Radial	10
Circumferential	10
Y Direction (axial)	20

Results

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	2.278e+16	3.966e-14	1.218e-11	6.072e-17	1.865e-14
0.3656	5.555e+16	3.321e-04	1.139e-01	6.430e-07	2.205e-04
0.6172	1.316e+17	2.995e-01	3.709e+01	5.836e-04	7.226e-02

Page : 3
DOS File: LGS2REV2.MS5
Run Date: June 8, 2006
Run Time: 6:44:14 PM
Duration: 00:00:02

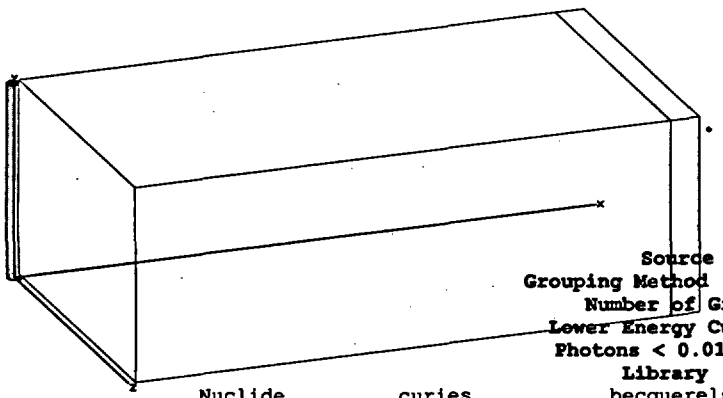
Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.8096	7.650e+16	2.980e+00	2.146e+02	5.659e-03	4.075e-01
1.0825	1.082e+16	7.345e+00	3.016e+02	1.334e-02	5.479e-01
1.3401	1.083e+16	5.235e+01	1.465e+03	9.070e-02	2.538e+00
1.6044	7.486e+15	1.687e+02	3.525e+03	2.786e-01	5.821e+00
1.8388	1.378e+15	9.222e+01	1.574e+03	1.463e-01	2.498e+00
2.0402	6.470e+14	9.487e+01	1.398e+03	1.458e-01	2.148e+00
2.3212	3.028e+14	1.114e+02	1.377e+03	1.643e-01	2.030e+00
2.5398	2.801e+14	1.890e+02	2.077e+03	2.707e-01	2.974e+00
2.7426	2.084e+12	2.308e+00	2.303e+01	3.223e-03	3.216e-02
3.0171	2.683e+12	5.343e+00	4.755e+01	7.235e-03	6.439e-02
3.2809	4.031e+12	1.310e+01	1.059e+02	1.728e-02	1.397e-01
3.4931	1.384e+12	6.391e+00	4.818e+01	8.264e-03	6.230e-02
3.7009	2.439e+10	1.539e-01	1.089e+00	1.953e-04	1.382e-03
3.9384	1.677e+12	1.463e+01	9.681e+01	1.819e-02	1.204e-01
4.3428	5.289e+10	7.485e-01	4.467e+00	9.001e-04	5.372e-03
4.48	4.398e+09	7.213e-02	4.169e-01	8.580e-05	4.960e-04
4.7418	1.189e+12	2.532e+01	1.383e+02	2.954e-02	1.614e-01
5.0016	2.024e+09	5.460e-02	2.836e-01	6.258e-05	3.251e-04
5.2304	9.366e+09	3.059e-01	1.526e+00	3.457e-04	1.725e-03
5.608	1.291e+08	5.608e-03	2.635e-02	6.209e-06	2.918e-05
5.8005	1.115e+08	5.532e-03	2.527e-02	6.066e-06	2.770e-05
6.1042	1.173e+08	7.075e-03	3.095e-02	7.645e-06	3.345e-05
TOTALS:	3.181e+17	7.876e+02	1.244e+04	1.201e+00	1.963e+01

MicroShield v5.05 (5.05-00210)
Raytheon Engineers & Constructors

Page : 1
DOS File: LGS2REV3.MS5
Run Date: June 8, 2006
Run Time: 6:45:25 PM
Duration: 00:00:03

File Ref: _____
Date: _____
By: _____
Checked: _____

Case Title: LGS RHR Pipe
Description: Unit 1 ECCS Source 20.5 ft Vertical Back Pipe (GBB-119)
Geometry: 7 - Cylinder Volume - Side Shields



Source Dimensions

Height	624.84 cm	20 ft 6.0 in
Radius	21.59 cm	8.5 in

Dose Points

	X	Y	Z
# 1	1851.66 cm	579.12 cm	993.648 cm
	60 ft 9.0 in	19 ft	32 ft 7.2 in

Shields

Shield Name	Dimension	Material	Density
Source	32.313 ft³	Water	1
Transition		Air	0.00122
Shield 2	56.0 ft	Air	0.00122
Shield 3	3.0 ft	Concrete	2.35
Air Gap		Air	0.00122
Wall Clad	.042 ft	Iron	7.86

Source Input
Grouping Method : Linear Energy
Number of Groups : 25
Lower Energy Cutoff : 0.015
Photons < 0.015 : Excluded
Library : Grove

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Am-241	5.8652e-001	2.1701e+010	6.4100e-001	2.3717e+004
Ba-137m	2.9939e+005	1.1077e+016	3.2720e+005	1.2106e+010
Ba-139	1.1858e+003	4.3876e+013	1.2960e+003	4.7952e+007
Ba-140	1.4283e+005	5.2848e+015	1.5610e+005	5.7757e+009
Ba-141	3.3288e+001	1.2317e+012	3.6380e+001	1.3461e+006
Ba-142	4.2831e+000	1.5848e+011	4.6810e+000	1.7320e+005
Br-82	1.6534e+003	6.1176e+013	1.8070e+003	6.6859e+007
Br-83	2.6096e+003	9.6555e+013	2.8520e+003	1.0552e+008
Br-84	4.4433e+002	1.6440e+013	4.8560e+002	1.7967e+007
Br-85	3.1430e+000	1.1629e+011	3.4350e+000	1.2710e+005
Ce-141	4.7910e+003	1.7727e+014	5.2360e+003	1.9373e+008
Ce-143	6.4901e+002	2.4014e+013	7.0930e+002	2.6244e+007
Ce-144	4.8578e+003	1.7974e+014	5.3090e+003	1.9643e+008
Cm-242	1.2627e+002	4.6720e+012	1.3800e+002	5.1060e+006
Cm-244	1.4549e+001	5.3830e+011	1.5900e+001	5.8830e+005
Co-58	9.4246e+001	3.4871e+012	1.0300e+002	3.8110e+006
Co-60	1.2719e+002	4.7059e+012	1.3900e+002	5.1430e+006
Cs-132	1.7971e+002	6.6492e+012	1.9640e+002	7.2668e+006
Cs-134	5.0225e+005	1.8583e+016	5.4890e+005	2.0309e+010
Cs-134m	1.1895e+003	4.4012e+013	1.3000e+003	4.8100e+007
Cs-135	1.7971e+000	6.6492e+010	1.9640e+000	7.2668e+004
Cs-136	7.7574e+004	2.8702e+015	8.4780e+004	3.1369e+009
Cs-137	3.1668e+005	1.1717e+016	3.4610e+005	1.2806e+010
Cs-138	4.9904e+003	1.8465e+014	5.4540e+003	2.0180e+008
Cs-139	2.4989e+002	9.2459e+012	2.7310e+002	1.0105e+007
Eu-154	2.5263e+001	9.3474e+011	2.7610e+001	1.0216e+006
Eu-155	1.7925e+001	6.6322e+011	1.9590e+001	7.2483e+005
Eu-156	1.6507e+002	6.1075e+012	1.8040e+002	6.6748e+006
I-128	1.6598e+001	6.1413e+011	1.8140e+001	6.7118e+005
I-130	4.1276e+003	1.5272e+014	4.5110e+003	1.6691e+008
I-131	9.6167e+005	3.5582e+016	1.0510e+006	3.8887e+010
I-132	7.2514e+005	2.6830e+016	7.9250e+005	2.9323e+010
I-133	3.6436e+005	1.3481e+016	3.9820e+005	1.4733e+010
I-134	2.0688e+004	7.6547e+014	2.2610e+004	8.3657e+008
I-135	1.1877e+005	4.3944e+015	1.2980e+005	4.8026e+009
I-136	1.6434e+000	6.0804e+010	1.7960e+000	6.6452e+004
La-140	1.2902e+005	4.7736e+015	1.4100e+005	5.2170e+009
La-141	4.1404e+001	1.5319e+012	4.5250e+001	1.6743e+006
La-142	1.2353e+001	4.5705e+011	1.3500e+001	4.9950e+005
Mo-99	6.8250e+003	2.5253e+014	7.4590e+003	2.7598e+008
Mo-101	2.0130e+000	7.4481e+010	2.2000e+000	8.1400e+004
Nb-95	2.4559e+003	9.0867e+013	2.6840e+003	9.9308e+007
Nb-95m	1.6022e+001	5.9280e+011	1.7510e+001	6.4787e+005
Nb-97	1.7202e+002	6.3648e+012	1.8800e+002	6.9560e+006
Nb-97m	1.5400e+002	5.6978e+012	1.6830e+002	6.2271e+006
Nd-147	5.0472e+002	1.8675e+013	5.5160e+002	2.0409e+007
Nd-149	3.2126e+000	1.1887e+011	3.5110e+000	1.2991e+005
Np-239	1.2261e+004	4.5366e+014	1.3400e+004	4.9580e+008

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
Pd-109	3.4990e+002	1.2946e+013	3.8240e+002	1.4149e+007
Pm-147	2.6526e+002	9.8146e+012	2.8990e+002	1.0726e+007
Pm-148	1.3441e+002	4.9733e+012	1.4690e+002	5.4353e+006
Pm-148m	5.2283e+001	1.9345e+012	5.7140e+001	2.1142e+006
Pm-149	1.4283e+002	5.2848e+012	1.5610e+002	5.7757e+006
Pm-151	3.0296e+001	1.1209e+012	3.3110e+001	1.2251e+006
Pr-142	8.8966e+000	3.2917e+011	9.7230e+000	3.5975e+005
Pr-143	1.3688e+003	5.0647e+013	1.4960e+003	5.5352e+007
Pr-144	1.9435e+003	7.1908e+013	2.1240e+003	7.8588e+007
Pr-144m	2.3314e+001	8.6263e+011	2.5480e+001	9.4276e+005
Pu-238	2.5163e+001	9.3102e+011	2.7500e+001	1.0175e+006
Pu-239	1.7019e+000	6.2971e+010	1.8600e+000	6.8820e+004
Pu-240	1.8026e+000	6.6695e+010	1.9700e+000	7.2890e+004
Pu-241	8.6468e+002	3.1993e+013	9.4500e+002	3.4965e+007
Rb-86	2.9115e+003	1.0773e+014	3.1820e+003	1.1773e+008
Rb-88	1.5958e+004	5.9044e+014	1.7440e+004	6.4528e+008
Rb-89	4.1441e+002	1.5333e+013	4.5290e+002	1.6757e+007
Rb-90	8.9936e+000	3.3276e+011	9.8290e+000	3.6367e+005
Rb-90m	5.6337e+000	2.0845e+011	6.1570e+000	2.2781e+005
Rh-103m	2.1054e+004	7.7901e+014	2.3010e+004	8.5137e+008
Rh-105	2.5748e+003	9.5269e+013	2.8140e+003	1.0412e+008
Rh-105m	1.0394e+002	3.8460e+012	1.1360e+002	4.2032e+006
Rh-106	1.1776e+004	4.3572e+014	1.2870e+004	4.7619e+008
Ru-103	2.3333e+004	8.6331e+014	2.5500e+004	9.4350e+008
Ru-105	3.7021e+002	1.3698e+013	4.0460e+002	1.4970e+007
Ru-106	1.1776e+004	4.3572e+014	1.2870e+004	4.7619e+008
Sb-122	1.8007e+002	6.6627e+012	1.9680e+002	7.2816e+006
Sb-124	5.0646e+002	1.8739e+013	5.5350e+002	2.0480e+007
Sb-125	7.0931e+003	2.6245e+014	7.7520e+003	2.8682e+008
Sb-126	2.2592e+002	8.3589e+012	2.4690e+002	9.1353e+006
Sb-126m	4.9410e-001	1.8282e+010	5.4000e-001	1.9980e+004
Sb-127	1.0221e+004	3.7816e+014	1.1170e+004	4.1329e+008
Sb-129	2.0944e+003	7.7495e+013	2.2890e+003	8.4693e+007
Sm-151	1.1858e+000	4.3876e+010	1.2960e+000	4.7952e+004
Sm-153	1.0660e+002	3.9441e+012	1.1650e+002	4.3105e+006
Sr-89	1.1740e+005	4.3436e+015	1.2830e+005	4.7471e+009
Sr-90	1.7733e+004	6.5611e+014	1.9380e+004	7.1706e+008
Sr-91	6.8452e+003	2.5327e+014	7.4810e+003	2.7680e+008
Sr-92	1.8840e+003	6.9708e+013	2.0590e+003	7.6183e+007
Sr-93	6.9422e-001	2.5686e+010	7.5870e-001	2.8072e+004
Tc-99	3.9922e-001	1.4771e+010	4.3630e-001	1.6143e+004
Tc-99m	6.4993e+003	2.4047e+014	7.1030e+003	2.6281e+008
Tc-101	8.8161e+000	3.2620e+011	9.6350e+000	3.5649e+005
Te-123m	8.6523e+000	3.2014e+011	9.4560e+000	3.4987e+005
Te-125m	1.5711e+003	5.8129e+013	1.7170e+003	6.3529e+007
Te-127	1.4585e+004	5.3965e+014	1.5940e+004	5.8978e+008
Te-127m	5.0801e+003	1.8796e+014	5.5520e+003	2.0542e+008
Te-129	1.1264e+004	4.1676e+014	1.2310e+004	4.5547e+008
Te-129m	1.3652e+004	5.0512e+014	1.4920e+004	5.5204e+008
Te-131	1.6095e+003	5.9551e+013	1.7590e+003	6.5083e+007
Te-131m	5.6328e+003	2.0841e+014	6.1560e+003	2.2777e+008
Te-132	1.1703e+005	4.3301e+015	1.2790e+005	4.7323e+009
Te-133	1.0651e+002	3.9407e+012	1.1640e+002	4.3068e+006
Te-133m	5.4260e+002	2.0076e+013	5.9300e+002	2.1941e+007
Te-134	7.1645e+002	2.6509e+013	7.8300e+002	2.8971e+007
Y-90	1.7733e+004	6.5611e+014	1.9380e+004	7.1706e+008
Y-91	6.8452e+003	2.5327e+014	7.4810e+003	2.7680e+008
Y-91m	3.9016e+003	1.4436e+014	4.2640e+003	1.5777e+008
Y-92	1.8840e+003	6.9708e+013	2.0590e+003	7.6183e+007
Y-93	9.2690e+001	3.4295e+012	1.0130e+002	3.7481e+006
Zr-95	2.1713e+003	8.0338e+013	2.3730e+003	8.7801e+007
Zr-97	1.7843e+002	6.6018e+012	1.9500e+002	7.2150e+006

Buildup

The material reference is : Shield 3

Integration Parameters

Radial	10
Circumferential	10
Y Direction (axial)	20

Results

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.1016	1.638e+16	6.852e-14	2.028e-11	1.049e-16	3.104e-14
0.3656	3.996e+16	3.726e-04	1.216e-01	7.214e-07	2.355e-04
0.6172	9.463e+16	2.981e-01	3.545e+01	5.809e-04	6.907e-02

Page : 3
DOS File: LGS2REV3.MS5
Run Date: June 8, 2006
Run Time: 6:45:25 PM
Duration: 00:00:03

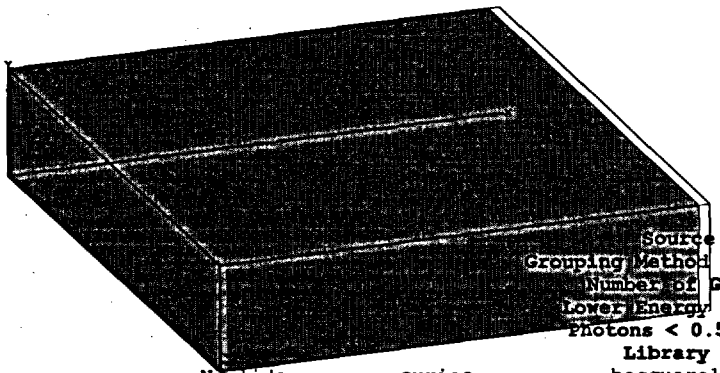
Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.8096	5.502e+16	2.802e+00	1.946e+02	5.323e-03	3.696e-01
1.0825	7.781e+15	6.528e+00	2.596e+02	1.186e-02	4.716e-01
1.3401	7.790e+15	4.478e+01	1.217e+03	7.758e-02	2.108e+00
1.6044	5.385e+15	1.400e+02	2.847e+03	2.313e-01	4.702e+00
1.8388	9.913e+14	7.498e+01	1.247e+03	1.190e-01	1.979e+00
2.0402	4.654e+14	7.599e+01	1.092e+03	1.168e-01	1.678e+00
2.3212	2.178e+14	8.771e+01	1.058e+03	1.293e-01	1.560e+00
2.5398	2.015e+14	1.472e+02	1.580e+03	2.107e-01	2.262e+00
2.7426	1.499e+12	1.780e+00	1.737e+01	2.486e-03	2.426e-02
3.0171	1.930e+12	4.077e+00	3.552e+01	5.522e-03	4.810e-02
3.2809	2.899e+12	9.910e+00	7.846e+01	1.307e-02	1.035e-01
3.4931	9.956e+11	4.804e+00	3.548e+01	6.212e-03	4.588e-02
3.7009	1.754e+10	1.150e-01	7.977e-01	1.460e-04	1.012e-03
3.9384	1.206e+12	1.087e+01	7.055e+01	1.352e-02	8.773e-02
4.3428	3.805e+10	5.516e-01	3.230e+00	6.633e-04	3.884e-03
4.48	3.163e+09	5.302e-02	3.008e-01	6.307e-05	3.578e-04
4.7418	8.551e+11	1.853e+01	9.938e+01	2.162e-02	1.159e-01
5.0016	1.456e+09	3.980e-02	2.030e-01	4.562e-05	2.327e-04
5.2304	6.737e+09	2.222e-01	1.089e+00	2.512e-04	1.231e-03
5.608	9.284e+07	4.056e-03	1.873e-02	4.490e-06	2.073e-05
5.8005	8.018e+07	3.992e-03	1.792e-02	4.377e-06	1.964e-05
6.1042	8.440e+07	5.089e-03	2.188e-02	5.499e-06	2.365e-05
TOTALS:	2.288e+17	6.313e+02	9.874e+03	9.661e-01	1.563e+01

MicroShield v5.05 (5.05-00210)
Raytheon Engineers & Constructors

Page : 1
DOS File: RELOADF.MS5
Run Date: June 13, 2006
Run Time: 3:02:42 PM
Duration: 00:00:30

File Ref: _____
Date: _____
By: _____
Checked: _____

Case Title: LGS RE Cloud Source
Description: Open Volume between 253'&283'
Geometry: 13 - Rectangular Volume



Source Dimensions

Length	4.1e+3 cm	134 ft 0.0 in
Width	4.9e+3 cm	162 ft 0.0 in
Height	914.4 cm	30 ft

Dose Points

	X	Y	Z
# 1	4206.24 cm	457.2 cm	2468.88 cm
	138 ft	15 ft	81 ft 0.0 in

Shields

Shield Name	Dimension	Material	Density
Source	6.51e+05 ft³	Air	0.00122
Shield 1	3.0 ft	Concrete	2.35
Air Gap		Air	0.00122

Source Input
Grouping Method : Linear Energy
Number of Groups : 25
Lower Energy Cutoff : 0.5
Photons < 0.5 : Excluded
Library : Grove

Nuclide	curies	becquerels	µCi/cm³	Bq/cm³
I-131	4.0091e+004	1.4834e+015	2.1740e+000	8.0438e+004
I-132	6.8846e+003	2.5473e+014	3.7333e-001	1.3813e+004
I-133	2.8637e+004	1.0596e+015	1.5529e+000	5.7457e+004
I-134	1.2334e+003	4.5636e+013	6.6884e-002	2.4747e+003
I-135	1.3072e+004	4.8368e+014	7.0887e-001	2.6228e+004
Kr-85	1.9610e+005	7.2558e+015	1.0634e+001	3.9346e+005
Kr-85m	4.8188e+004	1.7830e+015	2.6131e+000	9.6685e+004
Kr-87	6.7858e+003	2.5107e+014	3.6797e-001	1.3615e+004
Kr-88	5.7193e+004	2.1161e+015	3.1014e+000	1.1475e+005
Xe-133	8.8299e+006	3.2671e+017	4.7882e+002	1.7716e+007
Xe-135	5.1012e+005	1.8874e+016	2.7662e+001	1.0235e+006
Xe-138	1.0751e+002	3.9778e+012	5.8298e-003	2.1570e+002

Buildup
The material reference is : Shield 1

Integration Parameters

X Direction	40
Y Direction	40
Z Direction	20

Results

Energy MeV	Activity photons/sec	Fluence Rate MeV/cm²/sec No Buildup	Fluence Rate MeV/cm²/sec With Buildup	Exposure Rate mR/hr No Buildup	Exposure Rate mR/hr With Buildup
0.5283	1.026e+15	1.968e-02	2.254e+00	3.861e-05	4.421e-03
0.6099	7.753e+14	5.481e-02	4.799e+00	1.069e-04	9.357e-03
0.7121	6.223e+14	1.725e-01	1.133e+01	3.323e-04	2.182e-02
0.8444	5.156e+14	6.135e-01	2.944e+01	1.159e-03	5.564e-02
0.9957	2.092e+14	9.705e-01	3.460e+01	1.790e-03	6.383e-02
1.1368	2.402e+14	3.209e+00	9.081e+01	5.772e-03	1.634e-01
1.2613	2.319e+14	6.911e+00	1.643e+02	1.215e-02	2.888e-01
1.3809	8.088e+13	4.747e+00	9.753e+01	8.163e-03	1.677e-01
1.519	3.348e+14	3.915e+01	6.951e+02	6.564e-02	1.166e+00
1.6748	9.389e+13	2.167e+01	3.342e+02	3.534e-02	5.452e-01
1.7875	5.144e+13	1.839e+01	2.593e+02	2.943e-02	4.150e-01
1.9107	9.600e+12	5.307e+00	6.841e+01	8.323e-03	1.073e-01
2.0315	1.906e+14	1.555e+02	1.850e+03	2.393e-01	2.847e+00
2.2028	3.577e+14	4.801e+02	5.150e+03	7.200e-01	7.724e+00
2.336	1.863e+13	3.546e+01	3.536e+02	5.217e-02	5.203e-01
2.3923	7.400e+14	1.618e+03	1.567e+04	2.362e+00	2.288e+01
2.5537	4.636e+13	1.471e+02	1.318e+03	2.102e-01	1.884e+00
2.771	3.148e+12	1.565e+01	1.276e+02	2.178e-02	1.775e-01
2.8114	7.954e+11	4.273e+00	3.426e+01	5.919e-03	4.746e-02
3.3085	1.131e+12	1.399e+01	9.394e+01	1.840e-02	1.236e-01
TOTALS:	5.549e+15	2.571e+03	2.639e+04	3.798e+00	3.921e+01

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 10:43:15
#######################################################################

#######################################################################
                        File information
#######################################################################

 Plant file           = P:\Users\Nuc\Exelon EOC\Discipline Files\Process\AST\Limerick
AST\LGS LOCA\RADTRAD\Rev 2 Final DBA Runs\LGS LOCA PC Leak - New Design Basis - RE
Loading (Full RE Volume).psf
 Inventory file       = c:\program files\radtrad3-03\defaults\pb-lgs ast source
terms.nif
 Release file         = c:\program files\radtrad3-03\defaults\bwr_dba.rft
 Dose Conversion file = c:\program files\radtrad3-03\defaults\fgr11&12.inp



    #####    ####   #####    #  #     #  #####   #    #  #####
    #    #  #       #        #  ##    #  #    #  #    #    #
    #    #  #       #        #  # #   #  #    #  #    #    #
    #####    ####   ####     #  #  #  #  #####   #    #    #
    #            #  #        #  #   # #  #       #    #    #
    #            #  #        #  #    ##  #       #    #    #
    #        ####   #        #  #     #  #        ####     #


 Radtrad 3.03 4/15/2001
 LGS PC Leak;  RE Loading Full RE Mixing
 Nuclide Inventory File:
 c:\program files\radtrad3-03\defaults\pb-lgs ast source terms.nif
 Plant Power Level:
  3.5270E+03
 Compartments:
   4
 Compartment 1:
 Primary Containment
   3
  3.7907E+05
   0
   0
   0
   1
   0
 Compartment 2:
 Reactor Enclosure
   3
  1.8000E+06
   0
   0
   1
   0
   0
 Compartment 3:
 Environment
   2
  0.0000E+00
   0
   0
   0
   0
   0
 Compartment 4:
 SGTS Node
   3
  1.0000E+00
   0
   0
   0
   0
   0
```

```
Pathways:
  3
Pathway 1:
Primary Containment to Reactor Enclosure
  1
  2
  4
Pathway 2:
Reactor Enclosure to SGTS Node
  2
  4
  2
Pathway 3:
SGTS Node to  Environment
  4
  3
  2
End of Plant Model File
Scenario Description Name:

Plant Model Filename:

Source Term:
  1
  1   1.0000E+00
c:\program files\radtrad3-03\defaults\fgr11&12.inp
c:\program files\radtrad3-03\defaults\bwr_dba.rft
  0.0000E+00
  1
  9.5000E-01   4.8500E-02   1.5000E-03   1.0000E+00
Overlying Pool:
  0
  0.0000E+00
  0
  0
  0
  0
Compartments:
  4
Compartment 1:
  0
  1
  0
  0
  0
  0
  0
  3
  1
  1.0000E+01
  1
  1
  0.0000E+00   0.0000E+00
Compartment 2:
  1
  1
  0
  0
  0
  0
  1
  5.1000E+04
  4
  0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   9.9000E+01   9.5000E+01   9.5000E+01
  2.5830E-01   9.9000E+01   9.5000E+01   9.5000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
Compartment 3:
  0
  1
  0
  0
```

```
  0
  0
  0
  0
  0
Compartment 4:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Pathways:
  3
Pathway 1:
  0
  0
  0
  0
  0
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   5.0000E-01
  2.4000E+01   2.5000E-01
  7.2000E+02   0.0000E+00
  0
Pathway 2:
  0
  0
  0
  0
  0
  1
  4
  0.0000E+00   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   3.0000E+03   9.9000E+01   9.5000E+01   9.5000E+01
  2.5830E-01   2.5000E+03   9.9000E+01   9.5000E+01   9.5000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 3:
  0
  0
  0
  0
  0
  1
  4
  0.0000E+00   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  2.5830E-01   2.5000E+03   9.9000E+01   9.9000E+01   9.9000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Dose Locations:
  2
Location 1:
EAB
```

```
  3
  1
  2
  0.0000E+00   0.0000E+00
  8.0000E+00   0.0000E+00
  1
  2
  0.0000E+00   3.5000E-04
  8.0000E+00   0.0000E+00
  0
Location 2:
LPZ
  3
  1
  5
  0.0000E+00   0.0000E+00
  8.0000E+00   0.0000E+00
  2.4000E+01   0.0000E+00
  9.6000E+01   0.0000E+00
  7.2000E+02   0.0000E+00
  1
  4
  0.0000E+00   3.5000E-04
  8.0000E+00   1.8000E-04
  2.4000E+01   2.3000E-04
  7.2000E+02   0.0000E+00
  0
Effective Volume Location:
  0
Simulation Parameters:
  9
  0.0000E+00   1.6670E-03
  1.6700E-02   2.5000E-02
  2.5830E-01   1.4830E-01
  2.0000E+00   1.0000E+00
  8.0000E+00   2.0000E+00
  2.4000E+01   8.0000E+00
  9.6000E+01   2.4000E+01
  2.4000E+02   4.8000E+01
  7.2000E+02   0.0000E+00
Output Filename:
P:\Users\Nuc\Exelon EOC\Discipline Files\Process\AST\Limerick AST\LGS
LOCA\RADTRAD\Rev 2 Final DBA Runs\LGS LOCA PC Leak - New Design Basis - RE Loading
(Full RE Volume).o0
  1
  1
  1
  1
  1
End of Scenario File
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 10:43:15
#######################################################################

#######################################################################
                        Plant Description
#######################################################################

Number of Nuclides =  60

Inventory Power =   1.0000E+00 MWth
Plant Power Level =   3.5270E+03 MWth

Number of compartments    =   4

Compartment information

Compartment number  1  (Source term fraction =   1.0000E+00
)
Name: Primary Containment
Compartment volume =   3.7907E+05 (Cubic feet)
Compartment type is Normal
Removal devices within compartment:
     Deposition
Pathways into and out of compartment  1
   Exit Pathway Number    1: Primary Containment to Reactor Enclosure

Compartment number  2
Name: Reactor Enclosure
Compartment volume =   1.8000E+06 (Cubic feet)
Compartment type is Normal
Removal devices within compartment:
     Filter(s)
Pathways into and out of compartment  2
   Inlet Pathway Number   1: Primary Containment to Reactor Enclosure
   Exit Pathway Number    2: Reactor Enclosure to SGTS Node

Compartment number  3
Name: Environment
Compartment type is Environment
Pathways into and out of compartment  3
   Inlet Pathway Number   3: SGTS Node to  Environment

Compartment number  4
Name: SGTS Node
Compartment volume =   1.0000E+00 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  4
   Inlet Pathway Number   2: Reactor Enclosure to SGTS Node
   Exit Pathway Number    3: SGTS Node to  Environment

Total number of pathways =   3
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 10:43:15
#######################################################################

#######################################################################
                        Scenario Description
#######################################################################
```

Radioactive Decay is enabled
Calculation of Daughters is enabled

Release Fractions and Timings

	GAP	EARLY IN-VESSEL	LATE RELEASE	RELEASE MASS
	0.500000 hr	1.5000 hrs	0.0000 hrs	(gm)
NOBLES	5.0000E-02	9.5000E-01	0.0000E+00	4.625E+03
IODINE	5.0000E-02	2.5000E-01	0.0000E+00	3.033E+02
CESIUM	5.0000E-02	2.0000E-01	0.0000E+00	5.099E+04
TELLURIUM	0.0000E+00	5.0000E-02	0.0000E+00	4.012E+01
STRONTIUM	0.0000E+00	2.0000E-02	0.0000E+00	1.712E+03
BARIUM	0.0000E+00	2.0000E-02	0.0000E+00	4.739E+01
RUTHENIUM	0.0000E+00	2.5000E-03	0.0000E+00	5.988E+01
CERIUM	0.0000E+00	5.0000E-04	0.0000E+00	5.914E+02
LANTHANUM	0.0000E+00	2.0000E-04	0.0000E+00	8.731E+00

Inventory Power = 3527. MWt

Nuclide Name	Group	Specific Inventory (Ci/MWt)	half life (s)	Whole Body DCF (Sv-m3/Bq-s)	Inhaled Thyroid (Sv/Bq)	Inhaled Effective (Sv/Bq)
Co-58	7	1.529E+02	6.117E+06	4.760E-14	8.720E-10	2.940E-09
Co-60	7	1.830E+02	1.663E+08	1.260E-13	1.620E-08	5.910E-08
Kr-85	1	3.946E+02	3.383E+08	1.190E-16	0.000E+00	0.000E+00
Kr-85m	1	8.313E+03	1.613E+04	7.480E-15	0.000E+00	0.000E+00
Kr-87	1	1.633E+04	4.578E+03	4.120E-14	0.000E+00	0.000E+00
Kr-88	1	2.303E+04	1.022E+04	1.020E-13	0.000E+00	0.000E+00
Rb-86	3	6.518E+01	1.612E+06	4.810E-15	1.330E-09	1.790E-09
Sr-89	5	2.798E+04	4.363E+06	7.730E-17	7.960E-12	1.120E-08
Sr-90	5	3.178E+03	9.190E+08	7.530E-18	2.690E-10	3.510E-07
Sr-91	5	3.801E+04	3.420E+04	4.924E-14	9.930E-12	4.547E-10
Sr-92	5	4.017E+04	9.756E+03	6.790E-14	3.920E-12	2.180E-10
Y-90	9	3.272E+03	2.304E+05	1.900E-16	5.170E-13	2.280E-09
Y-91	9	3.448E+04	5.055E+06	2.600E-16	8.500E-12	1.320E-08
Y-92	9	4.029E+04	1.274E+04	1.300E-14	1.050E-12	2.110E-10
Y-93	9	4.526E+04	3.636E+04	4.800E-15	9.260E-13	5.820E-10
Zr-95	9	4.489E+04	5.528E+06	3.600E-14	1.440E-09	6.390E-09
Zr-97	9	4.657E+04	6.084E+04	4.432E-14	2.315E-11	1.171E-09
Nb-95	9	4.512E+04	3.037E+06	3.740E-14	3.580E-10	1.570E-09
Mo-99	7	5.078E+04	2.376E+05	7.280E-15	1.520E-11	1.070E-09
Tc-99m	7	4.447E+04	2.167E+04	5.890E-15	5.010E-11	8.800E-12
Ru-103	7	4.202E+04	3.394E+06	2.251E-14	2.570E-10	2.421E-09
Ru-105	7	2.908E+04	1.598E+04	3.810E-14	4.150E-12	1.230E-10
Ru-106	7	1.730E+04	3.181E+07	1.040E-14	1.720E-09	1.290E-07
Rh-105	7	2.752E+04	1.273E+05	3.720E-15	2.880E-12	2.580E-10
Sb-127	4	2.896E+03	3.326E+05	3.330E-14	6.150E-11	1.630E-09
Sb-129	4	8.638E+03	1.555E+04	7.140E-14	9.720E-12	1.740E-10
Te-127	4	2.873E+03	3.366E+04	2.420E-16	1.840E-12	8.600E-11
Te-127m	4	3.855E+02	9.418E+06	1.470E-16	9.660E-11	5.810E-09
Te-129	4	8.501E+03	4.176E+03	2.750E-15	5.090E-13	2.090E-11
Te-129m	4	1.267E+03	2.903E+06	3.337E-15	1.563E-10	6.484E-09
Te-131m	4	3.869E+03	1.080E+05	7.463E-14	3.669E-08	1.758E-09
Te-132	4	3.821E+04	2.815E+05	1.030E-14	6.280E-08	2.550E-09
I-131	2	2.687E+04	6.947E+05	1.820E-14	2.920E-07	8.890E-09
I-132	2	3.881E+04	8.280E+03	1.120E-13	1.740E-09	1.030E-10
I-133	2	5.556E+04	7.488E+04	2.940E-14	4.860E-08	1.580E-09
I-134	2	6.165E+04	3.156E+03	1.300E-13	2.880E-10	3.550E-11
I-135	2	5.192E+04	2.380E+04	8.294E-14	8.460E-09	3.320E-10
Xe-133	1	5.491E+04	4.532E+05	1.560E-15	0.000E+00	0.000E+00
Xe-135	1	2.228E+04	3.272E+04	1.190E-14	0.000E+00	0.000E+00
Cs-134	3	7.280E+03	6.507E+07	7.570E-14	1.110E-08	1.250E-08
Cs-136	3	2.027E+03	1.132E+06	1.060E-13	1.730E-09	1.980E-09
Cs-137	3	4.538E+03	9.467E+08	2.725E-14	7.930E-09	8.630E-09
Ba-139	6	5.084E+04	4.962E+03	2.170E-15	2.400E-12	4.640E-11
Ba-140	6	4.896E+04	1.101E+06	8.580E-15	2.560E-10	1.010E-09

La-140	9	5.019E+04	1.450E+05	1.170E-13	6.870E-11	1.310E-09
La-141	9	4.640E+04	1.415E+04	2.390E-15	9.400E-12	1.570E-10
La-142	9	4.532E+04	5.550E+03	1.440E-13	8.740E-12	6.840E-11
Ce-141	8	4.492E+04	2.808E+06	3.430E-15	2.550E-11	2.420E-09
Ce-143	8	4.427E+04	1.188E+05	1.290E-14	6.230E-12	9.160E-10
Ce-144	8	3.596E+04	2.456E+07	2.773E-15	2.920E-10	1.010E-07
Pr-143	9	4.293E+04	1.172E+06	2.100E-17	1.680E-18	2.190E-09
Nd-147	9	1.838E+04	9.487E+05	6.190E-15	1.820E-11	1.850E-09
Np-239	8	5.397E+05	2.035E+05	7.690E-15	7.620E-12	6.780E-10
Pu-238	8	1.796E+02	2.769E+09	4.880E-18	3.860E-10	7.790E-05
Pu-239	8	1.200E+01	7.594E+11	4.240E-18	3.750E-10	8.330E-05
Pu-240	8	1.288E+01	2.063E+11	4.750E-18	3.760E-10	8.330E-05
Pu-241	8	6.182E+03	4.544E+08	7.250E-20	9.150E-12	1.340E-06
Am-241	9	9.528E+00	1.364E+10	8.180E-16	1.600E-09	1.200E-04
Cm-242	9	2.388E+03	1.407E+07	5.690E-18	9.410E-10	4.670E-06
Cm-244	9	2.602E+02	5.715E+08	4.910E-18	1.010E-09	6.700E-05

Nuclide	Daughter	Fraction	Daughter	Fraction	Daughter	Fraction
Kr-85m	Kr-85	0.21	none	0.00	none	0.00
Kr-87	Rb-87	1.00	none	0.00	none	0.00
Kr-88	Rb-88	1.00	none	0.00	none	0.00
Sr-90	Y-90	1.00	none	0.00	none	0.00
Sr-91	Y-91m	0.58	Y-91	0.42	none	0.00
Sr-92	Y-92	1.00	none	0.00	none	0.00
Y-93	Zr-93	1.00	none	0.00	none	0.00
Zr-95	Nb-95m	0.01	Nb-95	0.99	none	0.00
Zr-97	Nb-97m	0.95	Nb-97	0.05	none	0.00
Mo-99	Tc-99m	0.88	Tc-99	0.12	none	0.00
Tc-99m	Tc-99	1.00	none	0.00	none	0.00
Ru-103	Rh-103m	1.00	none	0.00	none	0.00
Ru-105	Rh-105	1.00	none	0.00	none	0.00
Ru-106	Rh-106	1.00	none	0.00	none	0.00
Sb-127	Te-127m	0.18	Te-127	0.82	none	0.00
Sb-129	Te-129m	0.22	Te-129	0.77	none	0.00
Te-127m	Te-127	0.98	none	0.00	none	0.00
Te-129	I-129	1.00	none	0.00	none	0.00
Te-129m	Te-129	0.65	I-129	0.35	none	0.00
Te-131m	Te-131	0.22	I-131	0.78	none	0.00
Te-132	I-132	1.00	none	0.00	none	0.00
I-131	Xe-131m	0.01	none	0.00	none	0.00
I-133	Xe-133m	0.03	Xe-133	0.97	none	0.00
I-135	Xe-135m	0.15	Xe-135	0.85	none	0.00
Xe-135	Cs-135	1.00	none	0.00	none	0.00
Cs-137	Ba-137m	0.95	none	0.00	none	0.00
Ba-140	La-140	1.00	none	0.00	none	0.00
La-141	Ce-141	1.00	none	0.00	none	0.00
Ce-143	Pr-143	1.00	none	0.00	none	0.00
Ce-144	Pr-144m	0.02	Pr-144	0.98	none	0.00
Nd-147	Pm-147	1.00	none	0.00	none	0.00
Np-239	Pu-239	1.00	none	0.00	none	0.00
Pu-238	U-234	1.00	none	0.00	none	0.00
Pu-239	U-235	1.00	none	0.00	none	0.00
Pu-240	U-236	1.00	none	0.00	none	0.00
Pu-241	U-237	0.00	Am-241	1.00	none	0.00
Am-241	Np-237	1.00	none	0.00	none	0.00
Cm-242	Pu-238	1.00	none	0.00	none	0.00
Cm-244	Pu-240	1.00	none	0.00	none	0.00

Iodine fractions
Aerosol = 9.5000E-01
Elemental = 4.8500E-02
Organic = 1.5000E-03

COMPARTMENT DATA

Compartment number 1: Primary Containment
Natural Deposition (Powers' model): Aerosol data
Reactor type: 1
Percentile = 10 (%)

Natural Deposition: Elemental Removal Data

Time (hr)	Removal Coef. (hr^-1)
0.0000E+00	0.0000E+00

Compartment number 2: Reactor Enclosure

Compartment Filter Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	5.1000E+04	0.0000E+00	0.0000E+00	0.0000E+00
1.6700E-02	5.1000E+04	9.9000E+01	9.5000E+01	9.5000E+01
2.5830E-01	5.1000E+04	9.9000E+01	9.5000E+01	9.5000E+01
7.2000E+02	5.1000E+04	0.0000E+00	0.0000E+00	0.0000E+00

Compartment number 3: Environment

Compartment number 4: SGTS Node

PATHWAY DATA

Pathway number 1: Primary Containment to Reactor Enclosure

Convection Data

Time (hr)	Flow Rate (% / day)
0.0000E+00	5.0000E-01
2.4000E+01	2.5000E-01
7.2000E+02	0.0000E+00

Pathway number 2: Reactor Enclosure to SGTS Node

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	3.0000E+03	0.0000E+00	0.0000E+00	0.0000E+00
1.6700E-02	3.0000E+03	9.9000E+01	9.5000E+01	9.5000E+01
2.5830E-01	2.5000E+03	9.9000E+01	9.5000E+01	9.5000E+01
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 3: SGTS Node to Environment

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	3.0000E+03	0.0000E+00	0.0000E+00	0.0000E+00
1.6700E-02	3.0000E+03	0.0000E+00	0.0000E+00	0.0000E+00
2.5830E-01	2.5000E+03	9.9000E+01	9.9000E+01	9.9000E+01
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

LOCATION DATA

Location EAB is in compartment 3

Location X/Q Data

Time (hr)	X/Q (s * m^-3)
0.0000E+00	0.0000E+00
8.0000E+00	0.0000E+00

Location Breathing Rate Data

Time (hr)	Breathing Rate (m^3 * sec^-1)
0.0000E+00	3.5000E-04
8.0000E+00	0.0000E+00

Location LPZ is in compartment 3

Location X/Q Data

Time (hr)	X/Q (s * m^-3)
0.0000E+00	0.0000E+00
8.0000E+00	0.0000E+00
2.4000E+01	0.0000E+00
9.6000E+01	0.0000E+00
7.2000E+02	0.0000E+00

Location Breathing Rate Data

Time (hr)	Breathing Rate (m^3 * sec^-1)
0.0000E+00	3.5000E-04
8.0000E+00	1.8000E-04
2.4000E+01	2.3000E-04

```
      7.2000E+02                0.0000E+00

USER SPECIFIED TIME STEP DATA - SUPPLEMENTAL TIME STEPS
     Time              Time step
      0.0000E+00         1.6670E-03
      1.6700E-02         2.5000E-02
      2.5830E-01         1.4830E-01
      2.0000E+00         1.0000E+00
      8.0000E+00         2.0000E+00
      2.4000E+01         8.0000E+00
      9.6000E+01         2.4000E+01
      2.4000E+02         4.8000E+01
      7.2000E+02         0.0000E+00
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 10:43:15
#######################################################################
```

```
 ####   #    #  #####  #####   #    #  #####
#    # #    #    #    #    #  #    #    #
#    # #    #    #    #    #  #    #    #
#    # #    #    #    #####   #    #    #
#    # #    #    #    #       #    #    #
#    # #    #    #    #       #    #    #
 ####   ####     #    #        ####     #
```

```
#######################################################################
           Dose, Detailed model and Detailed Inventory Output
#######################################################################
```

Detailed model information at time (H) = 0.0017

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0000E+00

EAB Doses:

Time (h) = 0.0017	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0017	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0017	Ci	kg	Atoms	Decay
Kr-85	4.0285E-05	1.0268E-10	7.2747E+14	4.6384E+06
Kr-85m	8.4845E-04	1.0310E-13	7.3044E+11	9.7698E+07
Kr-87	1.6656E-03	5.8802E-14	4.0703E+11	1.9183E+08
Kr-88	2.3502E-03	1.8743E-13	1.2826E+12	2.7063E+08
Rb-86	6.6541E-06	8.1778E-14	5.7265E+11	7.6615E+05
I-131	2.7431E-03	2.2126E-11	1.0172E+14	3.1584E+08
I-132	3.9604E-03	3.8368E-13	1.7504E+12	4.5606E+08
I-133	5.6717E-03	5.0067E-12	2.2670E+13	6.5305E+08
I-134	6.2854E-03	2.3561E-13	1.0589E+12	7.2400E+08
I-135	5.2995E-03	1.5090E-12	6.7315E+12	6.1022E+08
Xe-133	5.6057E-03	2.9948E-11	1.3560E+14	6.4544E+08
Xe-135	2.2748E-03	8.9079E-13	3.9737E+12	2.6190E+08
Cs-134	7.4320E-04	5.7442E-10	2.5815E+15	8.5572E+07
Cs-136	2.0693E-04	2.8234E-12	1.2502E+13	2.3826E+07
Cs-137	4.6327E-04	5.3261E-09	2.3412E+16	5.3342E+07

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0017	Atmosphere	Sump	
Noble gases (atoms)	8.6946E+14	0.0000E+00	
Elemental I (atoms)	6.4955E+12	0.0000E+00	
Organic I (atoms)	2.0089E+11	0.0000E+00	
Aerosols (kg)	5.9312E-09	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.5935E-14
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.7116E-14
Total I (Ci)			2.3960E-02

Deposition Recirculating

Time (h) = 0.0017	Surfaces	Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.0017 Leakage Transport

Noble gases (atoms)	8.6951E+14
Elemental I (atoms)	6.4960E+12
Organic I (atoms)	2.0091E+11
Aerosols (kg)	5.9316E-09

Reactor Enclosure to SGTS Node Transport Group Inventory:

	Pathway Filtered	Transported
Time (h) = 0.0017		
Noble gases (atoms)	0.0000E+00	4.8314E+10
Elemental I (atoms)	0.0000E+00	3.6095E+08
Organic I (atoms)	0.0000E+00	1.1163E+07
Aerosols (kg)	0.0000E+00	3.2958E-13

Detailed model information at time (H) = 0.0033

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0000E+00

EAB Doses:

Time (h) = 0.0033	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0033	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0033	Ci	kg	Atoms	Decay
Kr-85	1.6113E-04	4.1069E-10	2.9097E+15	4.0416E+07
Kr-85m	3.3927E-03	4.1226E-13	2.9208E+12	8.5113E+08
Kr-87	6.6560E-03	2.3498E-13	1.6265E+12	1.6704E+09
Kr-88	9.3963E-03	7.4935E-13	5.1281E+12	2.3575E+09
Rb-86	2.6614E-05	3.2709E-13	2.2904E+12	6.6757E+06
I-131	1.0972E-02	8.8498E-11	4.0683E+14	2.7520E+09
I-132	1.5835E-02	1.5341E-12	6.9987E+12	3.9730E+09
I-133	2.2684E-02	2.0024E-11	9.0669E+13	5.6900E+09
I-134	2.5107E-02	9.4115E-13	4.2297E+12	6.3025E+09
I-135	2.1193E-02	6.0346E-12	2.6919E+13	5.3163E+09
Xe-133	2.2422E-02	1.1979E-10	5.4238E+14	5.6240E+09
Xe-135	9.1000E-03	3.5634E-12	1.5896E+13	2.2821E+09
Cs-134	2.9726E-03	2.2975E-09	1.0325E+16	7.4562E+08
Cs-136	8.2766E-04	1.1293E-11	5.0005E+13	2.0760E+08
Cs-137	1.8530E-03	2.1303E-08	9.3642E+16	4.6478E+08

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0033	Atmosphere	Sump	
Noble gases (atoms)	3.4777E+15	0.0000E+00	
Elemental I (atoms)	2.5980E+13	0.0000E+00	
Organic I (atoms)	8.0349E+11	0.0000E+00	
Aerosols (kg)	2.3723E-08	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.0371E-13
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.8841E-13
Total I (Ci)			9.5790E-02

Time (h) = 0.0033	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.0033 Leakage Transport

Noble gases (atoms)	3.4780E+15
Elemental I (atoms)	2.5984E+13
Organic I (atoms)	8.0362E+11
Aerosols (kg)	2.3726E-08

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0033	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.8649E+11
Elemental I (atoms)	0.0000E+00	2.8874E+09
Organic I (atoms)	0.0000E+00	8.9301E+07
Aerosols (kg)	0.0000E+00	2.6365E-12

Detailed model information at time (H) = 0.0050

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0001E+00

EAB Doses:

Time (h) = 0.0050	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0050	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0050	Ci	kg	Atoms	Decay
Kr-85	3.6252E-04	9.2401E-10	6.5465E+15	1.2091E+08
Kr-85m	7.6313E-03	9.2730E-13	6.5698E+12	2.5458E+09
Kr-87	1.4962E-02	5.2820E-13	3.6562E+12	4.9941E+09
Kr-88	2.1132E-02	1.6853E-12	1.1533E+13	7.0506E+09
Rb-86	5.9878E-05	7.3589E-13	5.1531E+12	1.9971E+07
I-131	2.4684E-02	1.9910E-10	9.1530E+14	8.2330E+09
I-132	3.5612E-02	3.4501E-12	1.5740E+13	1.1882E+10
I-133	5.1032E-02	4.5049E-11	2.0398E+14	1.7022E+10
I-134	5.6412E-02	2.1146E-12	9.5035E+12	1.8837E+10
I-135	4.7672E-02	1.3575E-11	6.0554E+13	1.5903E+10
Xe-133	5.0446E-02	2.6950E-10	1.2203E+15	1.6825E+10
Xe-135	2.0476E-02	8.0182E-12	3.5768E+13	6.8279E+09
Cs-134	6.6878E-03	5.1690E-09	2.3230E+16	2.2306E+09
Cs-136	1.8621E-03	2.5407E-11	1.1250E+14	6.2107E+08
Cs-137	4.1689E-03	4.7928E-08	2.1068E+17	1.3905E+09

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0050	Atmosphere	Sump	
Noble gases (atoms)	7.8243E+15	0.0000E+00	
Elemental I (atoms)	5.8449E+13	0.0000E+00	
Organic I (atoms)	1.8077E+12	0.0000E+00	
Aerosols (kg)	5.3373E-08	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.8327E-13
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.7379E-13
Total I (Ci)			2.1541E-01

Time (h) = 0.0050	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.0050 Leakage Transport

Noble gases (atoms)	7.8256E+15
Elemental I (atoms)	5.8462E+13
Organic I (atoms)	1.8081E+12
Aerosols (kg)	5.3382E-08

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0050	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.3044E+12
Elemental I (atoms)	0.0000E+00	9.7443E+09
Organic I (atoms)	0.0000E+00	3.0137E+08
Aerosols (kg)	0.0000E+00	8.8978E-12

Detailed model information at time (H) = 0.0067

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0001E+00

EAB Doses:

Time (h) = 0.0067	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0067	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0067	Ci	kg	Atoms	Decay
Kr-85	6.4444E-04	1.6426E-09	1.1638E+16	2.6401E+08
Kr-85m	1.3562E-02	1.6480E-12	1.1676E+13	5.5577E+09
Kr-87	2.6573E-02	9.3812E-13	6.4936E+12	1.0897E+10
Kr-88	3.7551E-02	2.9946E-12	2.0493E+13	1.5390E+10
Rb-86	1.0644E-04	1.3082E-12	9.1603E+12	4.3606E+07
I-131	4.3879E-02	3.5394E-10	1.6271E+15	1.7976E+10
I-132	6.3283E-02	6.1308E-12	2.7970E+13	2.5938E+10
I-133	9.0713E-02	8.0077E-11	3.6258E+14	3.7165E+10
I-134	1.0015E-01	3.7542E-12	1.6872E+13	4.1089E+10
I-135	8.4729E-02	2.4127E-11	1.0762E+14	3.4718E+10
Xe-133	8.9677E-02	4.7909E-10	2.1693E+15	3.6737E+10
Xe-135	3.6405E-02	1.4256E-11	6.3592E+13	1.4910E+10
Cs-134	1.1889E-02	9.1887E-09	4.1295E+16	4.8704E+09
Cs-136	3.3101E-03	4.5164E-11	1.9999E+14	1.3561E+09
Cs-137	7.4108E-03	8.5199E-08	3.7451E+17	3.0360E+09

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0067	Atmosphere	Sump	
Noble gases (atoms)	1.3909E+16	0.0000E+00	
Elemental I (atoms)	1.0390E+14	0.0000E+00	
Organic I (atoms)	3.2134E+12	0.0000E+00	
Aerosols (kg)	9.4879E-08	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.2146E-12
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.5532E-12

Total I (Ci) 3.8275E-01

Time (h) = 0.0067	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0067 Leakage Transport	
Noble gases (atoms)	1.3912E+16
Elemental I (atoms)	1.0393E+14
Organic I (atoms)	3.2143E+12
Aerosols (kg)	9.4900E-08

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0067	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.0917E+12
Elemental I (atoms)	0.0000E+00	2.3096E+10
Organic I (atoms)	0.0000E+00	7.1431E+08
Aerosols (kg)	0.0000E+00	2.1090E-11

Detailed model information at time (H) = 0.0083

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0001E+00

EAB Doses:

Time (h) = 0.0083	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0083	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0083	Ci	kg	Atoms	Decay
Kr-85	1.0069E-03	2.5664E-09	1.8183E+16	4.8758E+08
Kr-85m	2.1185E-02	2.5742E-12	1.8238E+13	1.0262E+10
Kr-87	4.1480E-02	1.4644E-12	1.0137E+13	2.0112E+10
Kr-88	5.8646E-02	4.6770E-12	3.2006E+13	2.8415E+10
Rb-86	1.6630E-04	2.0438E-12	1.4312E+13	8.0532E+07
I-131	6.8556E-02	5.5298E-10	2.5421E+15	3.3199E+10
I-132	9.8838E-02	9.5754E-12	4.3685E+13	4.7890E+10
I-133	1.4172E-01	1.2511E-10	5.6647E+14	6.8634E+10
I-134	1.5626E-01	5.8577E-12	2.6325E+13	7.5809E+10
I-135	1.3236E-01	3.7689E-11	1.6812E+14	6.4109E+10
Xe-133	1.4011E-01	7.4854E-10	3.3893E+15	6.7848E+10
Xe-135	5.6887E-02	2.2276E-11	9.9369E+13	2.7539E+10
Cs-134	1.8575E-02	1.4356E-08	6.4519E+16	8.9948E+09
Cs-136	5.1717E-03	7.0564E-11	3.1246E+14	2.5044E+09
Cs-137	1.1579E-02	1.3311E-07	5.8513E+17	5.6069E+09

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0083	Atmosphere	Sump
Noble gases (atoms)	2.1732E+16	0.0000E+00
Elemental I (atoms)	1.6233E+14	0.0000E+00
Organic I (atoms)	5.0204E+12	0.0000E+00
Aerosols (kg)	1.4824E-07	0.0000E+00

Dose Effective (Ci/cc) I-131 (Thyroid) 1.8976E-12

Dose Effective (Ci/cc) I-131 (ICRP2 Thyroid) 2.4265E-12
Total I (Ci) 5.9774E-01

Time (h) = 0.0083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.0083 Leakage Transport

Noble gases (atoms)	2.1738E+16
Elemental I (atoms)	1.6239E+14
Organic I (atoms)	5.0223E+12
Aerosols (kg)	1.4828E-07

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0083	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	6.0382E+12
Elemental I (atoms)	0.0000E+00	4.5106E+10
Organic I (atoms)	0.0000E+00	1.3950E+09
Aerosols (kg)	0.0000E+00	4.1189E-11

Detailed model information at time (H) = 0.0100

Natural deposition - Powers' Model, Compartment 1
Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0001E+00

EAB Doses:

Time (h) = 0.0100	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0100	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0100	Ci	kg	Atoms	Decay
Kr-85	1.4498E-03	3.6954E-09	2.6182E+16	8.0951E+08
Kr-85m	3.0496E-02	3.7057E-12	2.6255E+13	1.7035E+10
Kr-87	5.9673E-02	2.1067E-12	1.4583E+13	3.3368E+10
Kr-88	8.4411E-02	6.7317E-12	4.6067E+13	4.7161E+10
Rb-86	2.3946E-04	2.9429E-12	2.0608E+13	1.3370E+08
I-131	9.8713E-02	7.9624E-10	3.6603E+15	5.5117E+10
I-132	1.4227E-01	1.3783E-11	6.2880E+13	7.9487E+10
I-133	2.0405E-01	1.8013E-10	8.1561E+14	1.1394E+11
I-134	2.2471E-01	8.4234E-12	3.7856E+13	1.2574E+11
I-135	1.9055E-01	5.4258E-11	2.4204E+14	1.0642E+11
Xe-133	2.0175E-01	1.0778E-09	4.8803E+15	1.1265E+11
Xe-135	8.1922E-02	3.2080E-11	1.4310E+14	4.5726E+10
Cs-134	2.6746E-02	2.0672E-08	9.2901E+16	1.4933E+10
Cs-136	7.4467E-03	1.0160E-10	4.4991E+14	4.1579E+09
Cs-137	1.6672E-02	1.9167E-07	8.4253E+17	9.3088E+09

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0100	Atmosphere	Sump
Noble gases (atoms)	3.1292E+16	0.0000E+00
Elemental I (atoms)	2.3373E+14	0.0000E+00
Organic I (atoms)	7.2288E+12	0.0000E+00
Aerosols (kg)	2.1345E-07	0.0000E+00

Dose Effective (Ci/cc) I-131 (Thyroid)		2.7323E-12
Dose Effective (Ci/cc) I-131 (ICRP2 Thyroid)		3.4936E-12
Total I (Ci)		8.6029E-01

Time (h) = 0.0100	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.0100 Leakage Transport

Noble gases (atoms)	3.1302E+16
Elemental I (atoms)	2.3383E+14
Organic I (atoms)	7.2319E+12
Aerosols (kg)	2.1352E-07

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0100	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.0434E+13
Elemental I (atoms)	0.0000E+00	7.7938E+10
Organic I (atoms)	0.0000E+00	2.4105E+09
Aerosols (kg)	0.0000E+00	7.1171E-11

Detailed model information at time (H) = 0.0117

Natural deposition - Powers' Model, Compartment 1
Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0002E+00

EAB Doses:

Time (h) = 0.0117	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0117	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0117	Ci	kg	Atoms	Decay
Kr-85	1.9733E-03	5.0296E-09	3.5634E+16	1.2477E+09
Kr-85m	4.1496E-02	5.0423E-12	3.5724E+13	2.6250E+10
Kr-87	8.1144E-02	2.8647E-12	1.9829E+13	5.1394E+10
Kr-88	1.1484E-01	9.1584E-12	6.2674E+13	7.2666E+10
Rb-86	3.2590E-04	4.0053E-12	2.8047E+13	2.0607E+08
I-131	1.3435E-01	1.0837E-09	4.9817E+15	8.4949E+10
I-132	1.9356E-01	1.8752E-11	8.5551E+13	1.2248E+11
I-133	2.7770E-01	2.4514E-10	1.1100E+15	1.7561E+11
I-134	3.0543E-01	1.1449E-11	5.1455E+13	1.9360E+11
I-135	2.5929E-01	7.3833E-11	3.2936E+14	1.6400E+11
Xe-133	2.7459E-01	1.4670E-09	6.6423E+15	1.7362E+11
Xe-135	1.1151E-01	4.3667E-11	1.9479E+14	7.0482E+10
Cs-134	3.6401E-02	2.8134E-08	1.2644E+17	2.3016E+10
Cs-136	1.0135E-02	1.3828E-10	6.1233E+14	6.4084E+09
Cs-137	2.2691E-02	2.6087E-07	1.1467E+18	1.4347E+10

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0117	Atmosphere	Sump
Noble gases (atoms)	4.2589E+16	0.0000E+00
Elemental I (atoms)	3.1810E+14	0.0000E+00
Organic I (atoms)	9.8382E+12	0.0000E+00

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Aerosols (kg)           2.9050E-07  0.0000E+00
Dose Effective (Ci/cc) I-131 (Thyroid)          3.7186E-12
Dose Effective (Ci/cc) I-131 (ICRP2 Thyroid)    4.7545E-12
Total I (Ci)                                    1.1703E+00

                        Deposition Recirculating
Time (h) =   0.0117      Surfaces     Filter
Noble gases (atoms)     0.0000E+00  0.0000E+00
Elemental I (atoms)     0.0000E+00  0.0000E+00
Organic I (atoms)       0.0000E+00  0.0000E+00
Aerosols (kg)           0.0000E+00  0.0000E+00

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) =   0.0117  Leakage Transport

Noble gases (atoms)       4.2606E+16
Elemental I (atoms)       3.1826E+14
Organic I (atoms)         9.8432E+12
Aerosols (kg)             2.9062E-07

Reactor Enclosure to SGTS Node Transport Group Inventory:

                          Pathway
Time (h) =   0.0117      Filtered   Transported
Noble gases (atoms)     0.0000E+00  1.6567E+13
Elemental I (atoms)     0.0000E+00  1.2375E+11
Organic I (atoms)       0.0000E+00  3.8274E+09
Aerosols (kg)           0.0000E+00  1.1301E-10

Detailed model information at time (H) =    0.0133

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble       Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 2.9698E-02
Deposition Net DF
     Noble       Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.0002E+00

EAB Doses:

Time (h) =   0.0133     Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:

Time (h) =   0.0133     Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   0.0000E+00  0.0000E+00  0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) =   0.0133        Ci           kg          Atoms       Decay
Kr-85                   2.5772E-03  6.5689E-09  4.6540E+16  1.8199E+09
Kr-85m                  5.4182E-02  6.5838E-12  4.6646E+13  3.8282E+10
Kr-87                   1.0588E-01  3.7380E-12  2.5875E+13  7.4915E+10
Kr-88                   1.4992E-01  1.1956E-11  8.1822E+13  1.0596E+11
Rb-86                   4.2564E-04  5.2311E-12  3.6630E+13  3.0058E+08
I-131                   1.7546E-01  1.4153E-09  6.5063E+15  1.2391E+11
I-132                   2.5271E-01  2.4482E-11  1.1169E+14  1.7860E+11
I-133                   3.6267E-01  3.2015E-10  1.4496E+15  2.5614E+11
I-134                   3.9837E-01  1.4933E-11  6.7113E+13  2.8212E+11
I-135                   3.3858E-01  9.6411E-11  4.3008E+14  2.3919E+11
Xe-133                  3.5863E-01  1.9159E-09  8.6752E+15  2.5325E+11
Xe-135                  1.4566E-01  5.7038E-11  2.5444E+14  1.0282E+11
Cs-134                  4.7541E-02  3.6744E-08  1.6513E+17  3.3572E+10
Cs-136                  1.3237E-02  1.8060E-10  7.9972E+14  9.3475E+09
Cs-137                  2.9635E-02  3.4070E-07  1.4976E+18  2.0927E+10

Reactor Enclosure Transport Group Inventory:
Time (h) =   0.0133     Atmosphere     Sump
Noble gases (atoms)     5.5624E+16  0.0000E+00
Elemental I (atoms)     4.1544E+14  0.0000E+00
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Organic I (atoms)       1.2849E+13  0.0000E+00
Aerosols (kg)           3.7941E-07  0.0000E+00
Dose Effective (Ci/cc) I-131 (Thyroid)          4.8564E-12
Dose Effective (Ci/cc) I-131 (ICRP2 Thyroid)    6.2091E-12
Total I (Ci)                                    1.5278E+00

                        Deposition Recirculating
Time (h) =    0.0133     Surfaces     Filter
Noble gases (atoms)     0.0000E+00  0.0000E+00
Elemental I (atoms)     0.0000E+00  0.0000E+00
Organic I (atoms)       0.0000E+00  0.0000E+00
Aerosols (kg)           0.0000E+00  0.0000E+00

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) =    0.0133  Leakage Transport

Noble gases (atoms)       5.5649E+16
Elemental I (atoms)       4.1568E+14
Organic I (atoms)         1.2856E+13
Aerosols (kg)             3.7958E-07

Reactor Enclosure to SGTS Node Transport Group Inventory:

                          Pathway
Time (h) =    0.0133     Filtered   Transported
Noble gases (atoms)     0.0000E+00  2.4729E+13
Elemental I (atoms)     0.0000E+00  1.8472E+11
Organic I (atoms)       0.0000E+00  5.7129E+09
Aerosols (kg)           0.0000E+00  1.6868E-10

Detailed model information at time (H) =    0.0150

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble       Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 2.9698E-02
Deposition Net DF
     Noble       Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.0002E+00

EAB Doses:

Time (h) =    0.0150    Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:

Time (h) =    0.0150    Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   0.0000E+00  0.0000E+00  0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) =    0.0150        Ci          kg          Atoms       Decay
Kr-85                   3.2616E-03  8.3133E-09  5.8899E+16  2.5441E+09
Kr-85m                  6.8552E-02  8.3300E-12  5.9017E+13  5.3506E+10
Kr-87                   1.3388E-01  4.7264E-12  3.2716E+13  1.0465E+11
Kr-88                   1.8966E-01  1.5125E-11  1.0351E+14  1.4808E+11
Rb-86                   5.3866E-04  6.6201E-12  4.6357E+13  4.2018E+08
I-131                   2.2205E-01  1.7911E-09  8.2338E+15  1.7322E+11
I-132                   3.1970E-01  3.0973E-11  1.4130E+14  2.4961E+11
I-133                   4.5894E-01  4.0514E-10  1.8344E+15  3.5805E+11
I-134                   5.0349E-01  1.8874E-11  8.4822E+13  3.9399E+11
I-135                   4.2841E-01  1.2199E-10  5.4418E+14  3.3432E+11
Xe-133                  4.5386E-01  2.4247E-09  1.0979E+16  3.5402E+11
Xe-135                  1.8436E-01  7.2194E-11  3.2205E+14  1.4375E+11
Cs-134                  6.0164E-02  4.6501E-08  2.0898E+17  4.6931E+10
Cs-136                  1.6751E-02  2.2856E-10  1.0121E+15  1.3067E+10
Cs-137                  3.7504E-02  4.3117E-07  1.8953E+18  2.9255E+10

Reactor Enclosure Transport Group Inventory:
Time (h) =    0.0150    Atmosphere     Sump
Noble gases (atoms)     7.0395E+16  0.0000E+00
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Elemental I (atoms)	5.2574E+14	0.0000E+00	
Organic I (atoms)	1.6260E+13	0.0000E+00	
Aerosols (kg)	4.8015E-07	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.1458E-12
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.8573E-12
Total I (Ci)			1.9326E+00

Time (h) = 0.0150	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.0150 Leakage Transport

Noble gases (atoms)	7.0430E+16
Elemental I (atoms)	5.2608E+14
Organic I (atoms)	1.6271E+13
Aerosols (kg)	4.8039E-07

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0150	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.5209E+13
Elemental I (atoms)	0.0000E+00	2.6299E+11
Organic I (atoms)	0.0000E+00	8.1336E+09
Aerosols (kg)	0.0000E+00	2.4016E-10

Detailed model information at time (H) = 0.0167

Natural deposition - Powers' Model, Compartment 1
Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0002E+00

EAB Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0167	Ci	kg	Atoms	Decay
Kr-85	4.0264E-03	1.0263E-08	7.2710E+16	3.4382E+09
Kr-85m	8.4606E-02	1.0281E-11	7.2838E+13	7.2294E+10
Kr-87	1.6512E-01	5.8294E-12	4.0351E+13	1.4134E+11
Kr-88	2.3404E-01	1.8665E-11	1.2773E+14	2.0006E+11
Rb-86	6.6496E-04	8.1723E-12	5.7226E+13	5.6783E+08
I-131	2.7412E-01	2.2111E-09	1.0164E+16	2.3408E+11
I-132	3.9453E-01	3.8222E-11	1.7438E+14	3.3724E+11
I-133	5.6652E-01	5.0010E-10	2.2644E+15	4.8384E+11
I-134	6.2073E-01	2.3269E-11	1.0457E+14	5.3191E+11
I-135	5.2878E-01	1.5057E-10	6.7166E+14	4.5175E+11
Xe-133	5.6029E-01	2.9933E-09	1.3553E+16	4.7843E+11
Xe-135	2.2762E-01	8.9134E-11	3.9761E+14	1.9428E+11
Cs-134	7.4272E-02	5.7405E-08	2.5798E+17	6.3423E+10
Cs-136	2.0679E-02	2.8215E-10	1.2494E+15	1.7659E+10
Cs-137	4.6297E-02	5.3226E-07	2.3397E+18	3.9535E+10

Reactor Enclosure Transport Group Inventory:
Time (h) = 0.0167 Atmosphere Sump

Noble gases (atoms)	8.6902E+16	0.0000E+00	
Elemental I (atoms)	6.4901E+14	0.0000E+00	
Organic I (atoms)	2.0072E+13	0.0000E+00	
Aerosols (kg)	5.9274E-07	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.5866E-12
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.6989E-12
Total I (Ci)			2.3847E+00

Time (h) = 0.0167	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.0167 Leakage Transport

Noble gases (atoms)	8.6951E+16
Elemental I (atoms)	6.4947E+14
Organic I (atoms)	2.0087E+13
Aerosols (kg)	5.9307E-07

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0167	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.8296E+13
Elemental I (atoms)	0.0000E+00	3.6072E+11
Organic I (atoms)	0.0000E+00	1.1156E+10
Aerosols (kg)	0.0000E+00	3.2942E-10

Detailed model information at time (H) = 0.0167

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0002E+00

EAB Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0167	Ci	kg	Atoms	Decay
Kr-85	4.0409E-03	1.0300E-08	7.2972E+16	3.4543E+09
Kr-85m	8.4910E-02	1.0318E-11	7.3100E+13	7.2634E+10
Kr-87	1.6571E-01	5.8503E-12	4.0496E+13	1.4200E+11
Kr-88	2.3488E-01	1.8732E-11	1.2819E+14	2.0100E+11
Rb-86	6.6735E-04	8.2017E-12	5.7433E+13	5.7050E+08
I-131	2.7511E-01	2.2190E-09	1.0201E+16	2.3518E+11
I-132	3.9595E-01	3.8359E-11	1.7500E+14	3.3882E+11
I-133	5.6856E-01	5.0190E-10	2.2726E+15	4.8611E+11
I-134	6.2295E-01	2.3352E-11	1.0495E+14	5.3440E+11
I-135	5.3068E-01	1.5111E-10	6.7408E+14	4.5387E+11
Xe-133	5.6231E-01	3.0041E-09	1.3602E+16	4.8068E+11
Xe-135	2.2844E-01	8.9455E-11	3.9905E+14	1.9519E+11
Cs-134	7.4539E-02	5.7611E-08	2.5891E+17	6.3721E+10
Cs-136	2.0753E-02	2.8317E-10	1.2539E+15	1.7742E+10
Cs-137	4.6464E-02	5.3418E-07	2.3481E+18	3.9721E+10

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0167	Atmosphere	Sump	
Noble gases (atoms)	8.7215E+16	0.0000E+00	
Elemental I (atoms)	6.5134E+14	0.0000E+00	
Organic I (atoms)	2.0145E+13	0.0000E+00	
Aerosols (kg)	5.9487E-07	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.6139E-12
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.7338E-12
Total I (Ci)			2.3932E+00

Time (h) = 0.0167	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.0167 Leakage Transport

Noble gases (atoms)	8.7264E+16
Elemental I (atoms)	6.5181E+14
Organic I (atoms)	2.0159E+13
Aerosols (kg)	5.9520E-07

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0167	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.8557E+13
Elemental I (atoms)	0.0000E+00	3.6267E+11
Organic I (atoms)	0.0000E+00	1.1217E+10
Aerosols (kg)	0.0000E+00	3.3121E-10

Detailed model information at time (H) = 0.0250

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0004E+00

EAB Doses:

Time (h) = 0.0250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0250	Ci	kg	Atoms	Decay
Kr-85	9.0533E-03	2.3076E-08	1.6349E+17	1.3463E+10
Kr-85m	1.8999E-01	2.3086E-11	1.6356E+14	2.8281E+11
Kr-87	3.6959E-01	1.3048E-11	9.0317E+13	5.5153E+11
Kr-88	5.2516E-01	4.1882E-11	2.8661E+14	7.8219E+11
Rb-86	1.4804E-03	1.8194E-11	1.2740E+14	2.2072E+09
I-131	6.1027E-01	4.9225E-09	2.2629E+16	9.0988E+11
I-132	8.7682E-01	8.4946E-11	3.8754E+14	1.3094E+12
I-133	1.2609E+00	1.1131E-09	5.0400E+15	1.8803E+12
I-134	1.3729E+00	5.1464E-11	2.3129E+14	2.0572E+12
I-135	1.1762E+00	3.3493E-10	1.4940E+15	1.7548E+12
Xe-133	1.2598E+00	6.7304E-09	3.0475E+16	1.8734E+12
Xe-135	5.1212E-01	2.0054E-10	8.9457E+14	7.6085E+11
Cs-134	1.6535E-01	1.2780E-07	5.7435E+17	2.4653E+11
Cs-136	4.6037E-02	6.2814E-10	2.7814E+15	6.8638E+10
Cs-137	1.0307E-01	1.1850E-06	5.2088E+18	1.5367E+11

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0250	Atmosphere	Sump	
Noble gases (atoms)	1.9540E+17	0.0000E+00	
Elemental I (atoms)	1.4453E+15	0.0000E+00	
Organic I (atoms)	4.4700E+13	0.0000E+00	
Aerosols (kg)	1.3196E-06	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.6888E-11
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.1585E-11
Total I (Ci)			5.2971E+00

Time (h) = 0.0250	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.3706E+13
Organic I (atoms)	0.0000E+00	4.2391E+11
Aerosols (kg)	0.0000E+00	1.3041E-08

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0250	Leakage Transport
Noble gases (atoms)	1.9556E+17
Elemental I (atoms)	1.4606E+15
Organic I (atoms)	4.5173E+13
Aerosols (kg)	1.3338E-06

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0250	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.6286E+14
Elemental I (atoms)	8.0625E+11	4.0511E+11
Organic I (atoms)	2.4936E+10	1.2529E+10
Aerosols (kg)	7.6712E-10	3.3895E-10

Detailed model information at time (H) = 0.0500

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0007E+00

EAB Doses:

Time (h) = 0.0500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0500	Ci	kg	Atoms	Decay
Kr-85	3.6183E-02	9.2225E-08	6.5340E+17	1.3395E+11
Kr-85m	7.5639E-01	9.1912E-11	6.5118E+14	2.8065E+12
Kr-87	1.4571E+00	5.1442E-11	3.5608E+14	5.4370E+12
Kr-88	2.0861E+00	1.6637E-10	1.1385E+15	7.7503E+12
Rb-86	5.8152E-03	7.1468E-11	5.0046E+14	2.1572E+10
I-131	2.3972E+00	1.9336E-08	8.8890E+16	8.8930E+12
I-132	3.4250E+00	3.3181E-10	1.5138E+15	1.2758E+13
I-133	4.9494E+00	4.3692E-09	1.9783E+16	1.8369E+13
I-134	5.2879E+00	1.9822E-10	8.9083E+14	1.9841E+13
I-135	4.6087E+00	1.3123E-09	5.8540E+15	1.7122E+13
Xe-133	5.0350E+00	2.6899E-08	1.2180E+17	1.8639E+13
Xe-135	2.0504E+00	8.0289E-10	3.5816E+15	7.5701E+12
Cs-134	6.4955E-01	5.0204E-07	2.2562E+18	2.4095E+12
Cs-136	1.8084E-01	2.4674E-09	1.0926E+16	6.7084E+11
Cs-137	4.0490E-01	4.6550E-06	2.0462E+19	1.5020E+12

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0500	Atmosphere	Sump	
Noble gases (atoms)	7.8093E+17	0.0000E+00	
Elemental I (atoms)	5.6797E+15	0.0000E+00	
Organic I (atoms)	1.7566E+14	0.0000E+00	
Aerosols (kg)	5.1838E-06	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.6316E-11
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.4703E-11
Total I (Ci)			2.0668E+01

Time (h) = 0.0500	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.4833E+14
Organic I (atoms)	0.0000E+00	4.5875E+12
Aerosols (kg)	0.0000E+00	1.4105E-07

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0500	Leakage Transport
Noble gases (atoms)	7.8224E+17
Elemental I (atoms)	5.8414E+15
Organic I (atoms)	1.8066E+14
Aerosols (kg)	5.3337E-06

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0500	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.3021E+15
Elemental I (atoms)	8.7252E+12	8.2190E+11
Organic I (atoms)	2.6985E+11	2.5419E+10
Aerosols (kg)	8.2971E-09	4.1501E-10

Detailed model information at time (H) = 0.0750

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0011E+00

EAB Doses:

Time (h) = 0.0750	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0750	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0750	Ci	kg	Atoms	Decay
Kr-85	8.1344E-02	2.0733E-07	1.4689E+18	4.0483E+11
Kr-85m	1.6939E+00	2.0583E-10	1.4583E+15	8.4581E+12
Kr-87	3.2315E+00	1.1408E-10	7.8968E+14	1.6271E+13
Kr-88	4.6614E+00	3.7174E-10	2.5440E+15	2.3320E+13
Rb-86	1.2884E-02	1.5834E-10	1.1088E+15	6.4475E+10
I-131	5.3110E+00	4.2840E-08	1.9694E+17	2.6580E+13
I-132	7.5455E+00	7.3100E-10	3.3350E+15	3.7979E+13
I-133	1.0957E+01	9.6726E-09	4.3797E+16	5.4872E+13
I-134	1.1487E+01	4.3060E-10	1.9352E+15	5.8473E+13
I-135	1.0185E+01	2.9001E-09	1.2937E+16	5.1081E+13
Xe-133	1.1319E+01	6.0471E-08	2.7381E+17	5.6329E+13
Xe-135	4.6175E+00	1.8081E-09	8.0658E+15	2.2906E+13
Cs-134	1.4391E+00	1.1123E-06	4.9989E+18	7.2019E+12
Cs-136	4.0064E-01	5.4664E-09	2.4206E+16	2.0050E+12

Cs-137	8.9709E-01	1.0314E-05	4.5336E+19	4.4893E+12

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0750	Atmosphere	Sump	
Noble gases (atoms)	1.7556E+18	0.0000E+00	
Elemental I (atoms)	1.2587E+16	0.0000E+00	
Organic I (atoms)	3.8930E+14	0.0000E+00	
Aerosols (kg)	1.1485E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.4687E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.8747E-10
Total I (Ci)			4.5485E+01

Time (h) = 0.0750	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.0835E+14
Organic I (atoms)	0.0000E+00	1.5722E+13
Aerosols (kg)	0.0000E+00	4.8331E-07

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0750	Leakage Transport
Noble gases (atoms)	1.7600E+18
Elemental I (atoms)	1.3139E+16
Organic I (atoms)	4.0635E+14
Aerosols (kg)	1.1998E-05

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0750	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.3917E+15
Elemental I (atoms)	2.9903E+13	1.9365E+12
Organic I (atoms)	9.2484E+11	5.9893E+10
Aerosols (kg)	2.8430E-08	6.1838E-10

Detailed model information at time (H) = 0.1000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0015E+00

EAB Doses:

Time (h) = 0.1000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.1000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.1000	Ci	kg	Atoms	Decay
Kr-85	1.4449E-01	3.6829E-07	2.6093E+18	8.8599E+11
Kr-85m	2.9973E+00	3.6421E-10	2.5804E+15	1.8458E+13
Kr-87	5.6624E+00	1.9990E-10	1.3837E+15	3.5256E+13
Kr-88	8.2296E+00	6.5631E-10	4.4913E+15	5.0808E+13
Rb-86	2.2564E-02	2.7731E-10	1.9419E+15	1.3961E+11
I-131	9.3015E+00	7.5027E-08	3.4490E+17	5.7555E+13
I-132	1.3145E+01	1.2734E-09	5.8097E+15	8.1915E+13
I-133	1.9176E+01	1.6928E-08	7.6647E+16	1.1875E+14
I-134	1.9726E+01	7.3943E-10	3.3231E+15	1.2481E+14
I-135	1.7792E+01	5.0662E-09	2.2599E+16	1.1041E+14
Xe-133	2.0106E+01	1.0741E-07	4.8636E+17	1.2328E+14
Xe-135	8.2159E+00	3.2172E-09	1.4352E+16	5.0195E+13
Cs-134	2.5206E+00	1.9481E-06	8.7552E+18	1.5595E+13

Cs-136	7.0166E-01	9.5736E-09	4.2392E+16	4.3416E+12
Cs-137	1.5712E+00	1.8064E-05	7.9402E+19	9.7214E+12

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1000	Atmosphere	Sump	
Noble gases (atoms)	3.1184E+18	0.0000E+00	
Elemental I (atoms)	2.2051E+16	0.0000E+00	
Organic I (atoms)	6.8199E+14	0.0000E+00	
Aerosols (kg)	2.0116E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.5714E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.2799E-10
Total I (Ci)			7.9139E+01

Time (h) = 0.1000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.1994E+15
Organic I (atoms)	0.0000E+00	3.7094E+13
Aerosols (kg)	0.0000E+00	1.1401E-06

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1000	Leakage Transport
Noble gases (atoms)	3.1289E+18
Elemental I (atoms)	2.3349E+16
Organic I (atoms)	7.2214E+14
Aerosols (kg)	2.1324E-05

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.1000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.0404E+16
Elemental I (atoms)	7.0551E+13	4.0759E+12
Organic I (atoms)	2.1820E+12	1.2606E+11
Aerosols (kg)	6.7063E-08	1.0086E-09

Detailed model information at time (H) = 0.1250

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0019E+00

EAB Doses:

Time (h) = 0.1250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.1250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.1250	Ci	kg	Atoms	Decay
Kr-85	2.2558E-01	5.7497E-07	4.0736E+18	1.6372E+12
Kr-85m	4.6612E+00	5.6640E-10	4.0129E+15	3.4010E+13
Kr-87	8.7204E+00	3.0786E-10	2.1310E+15	6.4494E+13
Kr-88	1.2770E+01	1.0184E-09	6.9692E+15	9.3462E+13
Rb-86	3.4740E-02	4.2695E-10	2.9897E+15	2.5530E+11
I-131	1.4321E+01	1.1551E-07	5.3102E+17	1.0524E+14
I-132	2.0133E+01	1.9505E-09	8.8985E+15	1.4921E+14
I-133	2.9501E+01	2.6042E-08	1.1792E+17	2.1703E+14
I-134	2.9778E+01	1.1162E-09	5.0166E+15	2.2496E+14
I-135	2.7323E+01	7.7802E-09	3.4706E+16	2.0151E+14
Xe-133	3.1389E+01	1.6769E-07	7.5931E+17	2.2780E+14
Xe-135	1.2848E+01	5.0311E-09	2.2443E+16	9.2872E+13

Cs-134	3.8808E+00	2.9995E-06	1.3480E+19	2.8519E+13
Cs-136	1.0803E+00	1.4739E-08	6.5267E+16	7.9390E+12
Cs-137	2.4191E+00	2.7812E-05	1.2225E+20	1.7777E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1250	Atmosphere	Sump	
Noble gases (atoms)	4.8684E+18	0.0000E+00	
Elemental I (atoms)	3.3960E+16	0.0000E+00	
Organic I (atoms)	1.0503E+15	0.0000E+00	
Aerosols (kg)	3.0971E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.9575E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.0447E-10
Total I (Ci)			1.2106E+02

Time (h) = 0.1250	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.3223E+15
Organic I (atoms)	0.0000E+00	7.1825E+13
Aerosols (kg)	0.0000E+00	2.2071E-06

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1250	Leakage Transport
Noble gases (atoms)	4.8889E+18
Elemental I (atoms)	3.6470E+16
Organic I (atoms)	1.1279E+15
Aerosols (kg)	3.3310E-05

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.1250	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.0307E+16
Elemental I (atoms)	1.3661E+14	7.5526E+12
Organic I (atoms)	4.2250E+12	2.3358E+11
Aerosols (kg)	1.2983E-07	1.6426E-09

Detailed model information at time (H) = 0.1500

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0022E+00

EAB Doses:

Time (h) = 0.1500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.1500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.1500	Ci	kg	Atoms	Decay
Kr-85	3.2457E-01	8.2727E-07	5.8611E+18	2.7180E+12
Kr-85m	6.6807E+00	8.1180E-10	5.7515E+15	5.6300E+13
Kr-87	1.2377E+01	4.3696E-10	3.0246E+15	1.0599E+14
Kr-88	1.8262E+01	1.4564E-09	9.9663E+15	1.5446E+14
Rb-86	4.9300E-02	6.0589E-10	4.2427E+15	4.1947E+11
I-131	2.0322E+01	1.6392E-07	7.5357E+17	1.7292E+14
I-132	2.8427E+01	2.7540E-09	1.2564E+16	2.4423E+14
I-133	4.1834E+01	3.6929E-08	1.6721E+17	3.5640E+14
I-134	4.1434E+01	1.5532E-09	6.9803E+15	3.6431E+14
I-135	3.8676E+01	1.1013E-08	4.9127E+16	3.3047E+14
Xe-133	4.5162E+01	2.4128E-07	1.0925E+18	3.7818E+14

Xe-135	1.8516E+01	7.2505E-09	3.2343E+16	1.5438E+14
Cs-134	5.5076E+00	4.2568E-06	1.9131E+19	4.6859E+13
Cs-136	1.5330E+00	2.0917E-08	9.2620E+16	1.3044E+13
Cs-137	3.4332E+00	3.9470E-05	1.7350E+20	2.9210E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1500	Atmosphere	Sump	
Noble gases (atoms)	7.0046E+18	0.0000E+00	
Elemental I (atoms)	4.8206E+16	0.0000E+00	
Organic I (atoms)	1.4909E+15	0.0000E+00	
Aerosols (kg)	4.3954E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.6142E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.1520E-10
Total I (Ci)			1.7069E+02

Time (h) = 0.1500	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.9738E+15
Organic I (atoms)	0.0000E+00	1.2290E+14
Aerosols (kg)	0.0000E+00	3.7760E-06

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1500	Leakage Transport
Noble gases (atoms)	7.0399E+18
Elemental I (atoms)	5.2498E+16
Organic I (atoms)	1.6237E+15
Aerosols (kg)	4.7955E-05

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.1500	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.5068E+16
Elemental I (atoms)	2.3375E+14	1.2666E+13
Organic I (atoms)	7.2295E+12	3.9172E+11
Aerosols (kg)	2.2212E-07	2.5748E-09

Detailed model information at time (H) = 0.1750

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0026E+00

EAB Doses:

Time (h) = 0.1750	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.1750	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.1750	Ci	kg	Atoms	Decay
Kr-85	4.4140E-01	1.1251E-06	7.9709E+18	4.1878E+12
Kr-85m	9.0505E+00	1.0998E-09	7.7917E+15	8.6497E+13
Kr-87	1.6605E+01	5.8621E-10	4.0578E+15	1.6166E+14
Kr-88	2.4684E+01	1.9686E-09	1.3472E+16	2.3691E+14
Rb-86	6.6138E-02	8.1283E-10	5.6918E+15	6.3971E+11
I-131	2.7263E+01	2.1991E-07	1.0109E+18	2.6371E+14
I-132	3.7946E+01	3.6762E-09	1.6772E+16	3.7107E+14
I-133	5.6079E+01	4.9505E-08	2.2415E+17	5.4322E+14
I-134	5.4502E+01	2.0431E-09	9.1818E+15	5.4761E+14
I-135	5.1753E+01	1.4737E-08	6.5738E+16	5.0303E+14

Xe-133	6.1419E+01	3.2813E-07	1.4857E+18	5.8270E+14
Xe-135	2.5221E+01	9.8762E-09	4.4056E+16	2.3817E+14
Cs-134	7.3889E+00	5.7109E-06	2.5665E+19	7.1464E+13
Cs-136	2.0565E+00	2.8060E-08	1.2425E+17	1.9892E+13
Cs-137	4.6059E+00	5.2953E-05	2.3277E+20	4.4547E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1750	Atmosphere	Sump	
Noble gases (atoms)	9.5260E+18	0.0000E+00	
Elemental I (atoms)	6.4688E+16	0.0000E+00	
Organic I (atoms)	2.0007E+15	0.0000E+00	
Aerosols (kg)	5.8968E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.5291E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.5853E-10
Total I (Ci)			2.2754E+02

Time (h) = 0.1750	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.2461E+15
Organic I (atoms)	0.0000E+00	1.9318E+14
Aerosols (kg)	0.0000E+00	5.9342E-06

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.1750 Leakage Transport

Noble gases (atoms)	9.5820E+18
Elemental I (atoms)	7.1431E+16
Organic I (atoms)	2.2092E+15
Aerosols (kg)	6.5256E-05

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.1750	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	5.5651E+16
Elemental I (atoms)	3.6742E+14	1.9701E+13
Organic I (atoms)	1.1364E+13	6.0930E+11
Aerosols (kg)	3.4907E-07	3.8572E-09

Detailed model information at time (H) = 0.2000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0030E+00

EAB Doses:

Time (h) = 0.2000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.2000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.2000	Ci	kg	Atoms	Decay
Kr-85	5.7605E-01	1.4683E-06	1.0402E+19	6.1061E+12
Kr-85m	1.1766E+01	1.4297E-09	1.0129E+16	1.2575E+14
Kr-87	2.1377E+01	7.5468E-10	5.2239E+15	2.3334E+14
Kr-88	3.2018E+01	2.5534E-09	1.7474E+16	3.4385E+14
Rb-86	8.5152E-02	1.0465E-09	7.3281E+15	9.2327E+11
I-131	3.5101E+01	2.8313E-07	1.3016E+18	3.8060E+14
I-132	4.8615E+01	4.7098E-09	2.1487E+16	5.3357E+14
I-133	7.2147E+01	6.3688E-08	2.8838E+17	7.8357E+14
I-134	6.8803E+01	2.5791E-09	1.1591E+16	7.7900E+14

I-135	6.6462E+01	1.8925E-08	8.4422E+16	7.2464E+14
Xe-133	8.0154E+01	4.2821E-07	1.9389E+18	8.4959E+14
Xe-135	3.2965E+01	1.2909E-08	5.7584E+16	3.4769E+14
Cs-134	9.5135E+00	7.3530E-06	3.3045E+19	1.0314E+14
Cs-136	2.6477E+00	3.6126E-08	1.5997E+17	2.8710E+13
Cs-137	5.9303E+00	6.8179E-05	2.9969E+20	6.4295E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2000	Atmosphere	Sump	
Noble gases (atoms)	1.2432E+19	0.0000E+00	
Elemental I (atoms)	8.3308E+16	0.0000E+00	
Organic I (atoms)	2.5765E+15	0.0000E+00	
Aerosols (kg)	7.5923E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.6903E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.2329E-09
Total I (Ci)			2.9113E+02

Time (h) = 0.2000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	9.2276E+15
Organic I (atoms)	0.0000E+00	2.8539E+14
Aerosols (kg)	0.0000E+00	8.7653E-06

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2000	Leakage Transport
Noble gases (atoms)	1.2515E+19
Elemental I (atoms)	9.3264E+16
Organic I (atoms)	2.8845E+15
Aerosols (kg)	8.5211E-05

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.2000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	8.3018E+16
Elemental I (atoms)	5.4280E+14	2.8931E+13
Organic I (atoms)	1.6788E+13	8.9478E+11
Aerosols (kg)	5.1561E-07	5.5393E-09

Detailed model information at time (H) = 0.2250

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0033E+00

EAB Doses:

Time (h) = 0.2250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.2250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.2250	Ci	kg	Atoms	Decay
Kr-85	7.2845E-01	1.8567E-06	1.3155E+19	8.5318E+12
Kr-85m	1.4821E+01	1.8010E-09	1.2760E+16	1.7520E+14
Kr-87	2.6666E+01	9.4143E-10	6.5165E+15	3.2274E+14
Kr-88	4.0243E+01	3.2093E-09	2.1963E+16	4.7827E+14
Rb-86	1.0624E-01	1.3057E-09	9.1434E+15	1.2771E+12
I-131	4.3795E+01	3.5326E-07	1.6239E+18	5.2645E+14
I-132	6.0361E+01	5.8477E-09	2.6679E+16	7.3533E+14
I-133	8.9950E+01	7.9404E-08	3.5954E+17	1.0832E+15

I-134	8.4172E+01	3.1553E-09	1.4180E+16	1.0621E+15
I-135	8.2715E+01	2.3553E-08	1.0507E+17	1.0004E+15
Xe-133	1.0136E+02	5.4150E-07	2.4519E+18	1.1871E+15
Xe-135	4.1750E+01	1.6349E-08	7.2930E+16	4.8640E+14
Cs-134	1.1871E+01	9.1747E-06	4.1232E+19	1.4267E+14
Cs-136	3.3035E+00	4.5074E-08	1.9959E+17	3.9711E+13
Cs-137	7.3996E+00	8.5070E-05	3.7394E+20	8.8936E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2250	Atmosphere	Sump	
Noble gases (atoms)	1.5721E+19	0.0000E+00	
Elemental I (atoms)	1.0397E+17	0.0000E+00	
Organic I (atoms)	3.2156E+15	0.0000E+00	
Aerosols (kg)	9.4733E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.2087E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.5368E-09
Total I (Ci)			3.6099E+02

Time (h) = 0.2250	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.3003E+16
Organic I (atoms)	0.0000E+00	4.0214E+14
Aerosols (kg)	0.0000E+00	1.2349E-05

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2250	Leakage Transport
Noble gases (atoms)	1.5839E+19
Elemental I (atoms)	1.1800E+17
Organic I (atoms)	3.6493E+15
Aerosols (kg)	1.0782E-04

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.2250	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.1813E+17
Elemental I (atoms)	7.6486E+14	4.0619E+13
Organic I (atoms)	2.3656E+13	1.2562E+12
Aerosols (kg)	7.2642E-07	7.6687E-09

Detailed model information at time (H) = 0.2500

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0037E+00

EAB Doses:

Time (h) = 0.2500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.2500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.2500	Ci	kg	Atoms	Decay
Kr-85	8.9858E-01	2.2903E-06	1.6227E+19	1.1524E+13
Kr-85m	1.8212E+01	2.2130E-09	1.5679E+16	2.3597E+14
Kr-87	3.2449E+01	1.1456E-09	7.9296E+15	4.3154E+14
Kr-88	4.9339E+01	3.9348E-09	2.6927E+16	6.4307E+14
Rb-86	1.2932E-01	1.5894E-09	1.1129E+16	1.7077E+12
I-131	5.3307E+01	4.2999E-07	1.9767E+18	7.0397E+14
I-132	7.3117E+01	7.0835E-09	3.2317E+16	9.7973E+14

I-133	1.0941E+02	9.6579E-08	4.3730E+17	1.4477E+15
I-134	1.0046E+02	3.7658E-09	1.6924E+16	1.3999E+15
I-135	1.0043E+02	2.8596E-08	1.2756E+17	1.3353E+15
Xe-133	1.2503E+02	6.6795E-07	3.0244E+18	1.6034E+15
Xe-135	5.1577E+01	2.0197E-08	9.0095E+16	6.5777E+14
Cs-134	1.4450E+01	1.1168E-05	5.0191E+19	1.9079E+14
Cs-136	4.0211E+00	5.4864E-08	2.4294E+17	5.3101E+13
Cs-137	9.0072E+00	1.0355E-04	4.5519E+20	1.1893E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2500	Atmosphere	Sump	
Noble gases (atoms)	1.9392E+19	0.0000E+00	
Elemental I (atoms)	1.2659E+17	0.0000E+00	
Organic I (atoms)	3.9152E+15	0.0000E+00	
Aerosols (kg)	1.1531E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.4707E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.8689E-09
Total I (Ci)			4.3672E+02

Time (h) = 0.2500	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.7652E+16
Organic I (atoms)	0.0000E+00	5.4594E+14
Aerosols (kg)	0.0000E+00	1.6762E-05

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2500	Leakage Transport
Noble gases (atoms)	1.9555E+19
Elemental I (atoms)	1.4562E+17
Organic I (atoms)	4.5038E+15
Aerosols (kg)	1.3307E-04

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.2500	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.6194E+17
Elemental I (atoms)	1.0384E+15	5.5013E+13
Organic I (atoms)	3.2114E+13	1.7014E+12
Aerosols (kg)	9.8599E-07	1.0291E-08

Detailed model information at time (H) = 0.2583

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0038E+00

EAB Doses:

Time (h) = 0.2583	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.2583	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.2583	Ci	kg	Atoms	Decay
Kr-85	9.5897E-01	2.4443E-06	1.7317E+19	1.2584E+13
Kr-85m	1.9411E+01	2.3587E-09	1.6711E+16	2.5744E+14
Kr-87	3.4473E+01	1.2170E-09	8.4244E+15	4.6974E+14
Kr-88	5.2548E+01	4.1907E-09	2.8678E+16	7.0123E+14
Rb-86	1.3741E-01	1.6887E-09	1.1825E+16	1.8596E+12
I-131	5.6640E+01	4.5687E-07	2.1003E+18	7.6659E+14

I-132	7.7564E+01	7.5143E-09	3.4282E+16	1.0656E+15
I-133	1.1622E+02	1.0259E-07	4.6453E+17	1.5762E+15
I-134	1.0604E+02	3.9751E-09	1.7865E+16	1.5176E+15
I-135	1.0661E+02	3.0359E-08	1.3542E+17	1.4532E+15
Xe-133	1.3343E+02	7.1284E-07	3.2277E+18	1.7509E+15
Xe-135	5.5071E+01	2.1565E-08	9.6198E+16	7.1861E+14
Cs-134	1.5353E+01	1.1866E-05	5.3329E+19	2.0776E+14
Cs-136	4.2724E+00	5.8294E-08	2.5813E+17	5.7825E+13
Cs-137	9.5705E+00	1.1003E-04	4.8366E+20	1.2951E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2583	Atmosphere	Sump	
Noble gases (atoms)	2.0695E+19	0.0000E+00	
Elemental I (atoms)	1.3452E+17	0.0000E+00	
Organic I (atoms)	4.1603E+15	0.0000E+00	
Aerosols (kg)	1.2253E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.5625E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.9851E-09
Total I (Ci)			4.6308E+02

Time (h) = 0.2583	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.9402E+16
Organic I (atoms)	0.0000E+00	6.0006E+14
Aerosols (kg)	0.0000E+00	1.8423E-05

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.2583 Leakage Transport

Noble gases (atoms)	2.0875E+19
Elemental I (atoms)	1.5543E+17
Organic I (atoms)	4.8072E+15
Aerosols (kg)	1.4205E-04

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.2583	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.7857E+17
Elemental I (atoms)	1.1413E+15	6.0431E+13
Organic I (atoms)	3.5298E+13	1.8690E+12
Aerosols (kg)	1.0837E-06	1.1278E-08

Detailed model information at time (H) = 0.2966

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0044E+00

EAB Doses:

Time (h) = 0.2966	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.2966	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.2966	Ci	kg	Atoms	Decay
Kr-85	1.2635E+00	3.2206E-06	2.2817E+19	1.9030E+13
Kr-85m	2.5425E+01	3.0894E-09	2.1888E+16	3.8753E+14
Kr-87	4.4484E+01	1.5704E-09	1.0871E+16	6.9906E+14
Kr-88	6.8593E+01	5.4703E-09	3.7435E+16	1.0528E+15
Rb-86	1.7743E-01	2.1806E-09	1.5270E+16	2.7649E+12

I-131	7.3138E+01	5.8994E-07	2.7120E+18	1.1397E+15
I-132	9.9424E+01	9.6321E-09	4.3944E+16	1.5757E+15
I-133	1.4990E+02	1.3232E-07	5.9915E+17	2.3414E+15
I-134	1.3286E+02	4.9805E-09	2.2383E+16	2.2057E+15
I-135	1.3714E+02	3.9049E-08	1.7419E+17	2.1542E+15
Xe-133	1.7580E+02	9.3922E-07	4.2527E+18	2.6478E+15
Xe-135	7.2717E+01	2.8475E-08	1.2702E+17	1.0884E+15
Cs-134	1.9827E+01	1.5324E-05	6.8868E+19	3.0891E+14
Cs-136	5.5168E+00	7.5273E-08	3.3331E+17	8.5970E+13
Cs-137	1.2359E+01	1.4209E-04	6.2458E+20	1.9256E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2966	Atmosphere	Sump	
Noble gases (atoms)	2.7267E+19	0.0000E+00	
Elemental I (atoms)	1.7377E+17	0.0000E+00	
Organic I (atoms)	5.3744E+15	0.0000E+00	
Aerosols (kg)	1.5823E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.0165E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.5596E-09
Total I (Ci)			5.9246E+02

Time (h) = 0.2966	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.8919E+16
Organic I (atoms)	0.0000E+00	8.9440E+14
Aerosols (kg)	0.0000E+00	2.7451E-05

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2966 Leakage Transport	
Noble gases (atoms)	2.7524E+19
Elemental I (atoms)	2.0484E+17
Organic I (atoms)	6.3354E+15
Aerosols (kg)	1.8722E-04

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.2966	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.5488E+17
Elemental I (atoms)	1.6078E+15	8.4984E+13
Organic I (atoms)	4.9726E+13	2.6284E+12
Aerosols (kg)	1.5262E-06	1.5748E-08

Detailed model information at time (H) = 0.4449

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0066E+00

EAB Doses:

Time (h) = 0.4449	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.4449	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.4449	Ci	kg	Atoms	Decay
Kr-85	2.8330E+00	7.2209E-06	5.1159E+19	6.7280E+13
Kr-85m	5.5712E+01	6.7698E-09	4.7963E+16	1.3468E+15
Kr-87	9.1993E+01	3.2477E-09	2.2481E+16	2.3275E+15
Kr-88	1.4833E+02	1.1829E-08	8.0951E+16	3.6229E+15

Rb-86	3.6872E-01	4.5315E-09	3.1732E+16	9.1414E+12
I-131	1.5198E+02	1.2259E-06	5.6354E+18	3.7682E+15
I-132	2.0068E+02	1.9441E-08	8.8696E+16	5.1100E+15
I-133	3.1010E+02	2.7374E-07	1.2395E+18	7.7160E+15
I-134	2.4566E+02	9.2089E-09	4.1386E+16	6.7005E+15
I-135	2.8070E+02	7.9931E-08	3.5656E+17	7.0441E+15
Xe-133	3.9413E+02	2.1056E-06	9.5340E+18	9.3596E+15
Xe-135	1.6423E+02	6.4309E-08	2.8687E+17	3.8640E+15
Cs-134	4.1210E+01	3.1851E-05	1.4314E+20	1.0215E+15
Cs-136	1.1463E+01	1.5641E-07	6.9258E+17	2.8422E+14
Cs-137	2.5689E+01	2.9534E-04	1.2982E+21	6.3677E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.4449	Atmosphere	Sump	
Noble gases (atoms)	6.1132E+19	0.0000E+00	
Elemental I (atoms)	3.6165E+17	0.0000E+00	
Organic I (atoms)	1.1185E+16	0.0000E+00	
Aerosols (kg)	3.2888E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.1820E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.2902E-09
Total I (Ci)			1.1891E+03

Time (h) = 0.4449	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	9.2021E+16
Organic I (atoms)	0.0000E+00	2.8460E+15
Aerosols (kg)	0.0000E+00	8.7228E-05

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.4449	Leakage Transport
Noble gases (atoms)	6.1926E+19
Elemental I (atoms)	4.6012E+17
Organic I (atoms)	1.4230E+16
Aerosols (kg)	4.2062E-04

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.4449	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	7.8738E+17
Elemental I (atoms)	4.7011E+15	2.4779E+14
Organic I (atoms)	1.4539E+14	7.6635E+12
Aerosols (kg)	4.4565E-06	4.5346E-08

Detailed model information at time (H) = 0.5000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	2.9698E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0074E+00

EAB Doses:

Time (h) = 0.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.5000	Ci	kg	Atoms	Decay
Kr-85	3.5731E+00	9.1073E-06	6.4524E+19	9.3504E+13
Kr-85m	6.9670E+01	8.4658E-09	5.9979E+16	1.8603E+15
Kr-87	1.1259E+02	3.9749E-09	2.7515E+16	3.1664E+15

Kr-88	1.8458E+02	1.4720E-08	1.0073E+17	4.9867E+15
Rb-86	4.5248E-01	5.5610E-09	3.8941E+16	1.2462E+13
I-131	1.8650E+02	1.5043E-06	6.9154E+18	5.1371E+15
I-132	2.4365E+02	2.3605E-08	1.0769E+17	6.9132E+15
I-133	3.7991E+02	3.3537E-07	1.5185E+18	1.0507E+16
I-134	2.8867E+02	1.0821E-08	4.8631E+16	8.8659E+15
I-135	3.4254E+02	9.7539E-08	4.3511E+17	9.5655E+15
Xe-133	4.9707E+02	2.6555E-06	1.2024E+19	1.3007E+16
Xe-135	2.0768E+02	8.1323E-08	3.6277E+17	5.3824E+15
Cs-134	5.0576E+01	3.9090E-05	1.7568E+20	1.3927E+15
Cs-136	1.4067E+01	1.9193E-07	8.4988E+17	3.8747E+14
Cs-137	3.1527E+01	3.6246E-04	1.5933E+21	8.6816E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.5000	Atmosphere	Sump	
Noble gases (atoms)	7.7099E+19	0.0000E+00	
Elemental I (atoms)	4.4404E+17	0.0000E+00	
Organic I (atoms)	1.3733E+16	0.0000E+00	
Aerosols (kg)	4.0362E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.1282E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.4793E-09
Total I (Ci)			1.4413E+03

Time (h) = 0.5000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.2784E+17
Organic I (atoms)	0.0000E+00	3.9540E+15
Aerosols (kg)	0.0000E+00	1.2115E-04

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.5000 Leakage Transport

Noble gases (atoms)	7.8213E+19
Elemental I (atoms)	5.8070E+17
Organic I (atoms)	1.7960E+16
Aerosols (kg)	5.3097E-04

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.5000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.1040E+18
Elemental I (atoms)	6.4571E+15	3.4021E+14
Organic I (atoms)	1.9970E+14	1.0522E+13
Aerosols (kg)	6.1192E-06	6.2142E-08

Detailed model information at time (H) = 0.5932

Natural deposition - Powers' Model, Compartment 1
Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	5.3892E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0104E+00

EAB Doses:

Time (h) = 0.5932	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.5932	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.5932	Ci	kg	Atoms	Decay
Co-58	7.6890E-04	2.4181E-11	2.5107E+14	9.5455E+09
Co-60	9.2048E-04	8.1431E-10	8.1731E+15	1.1427E+10

Kr-85	5.6868E+00	1.4495E-05	1.0269E+20	1.6410E+14
Kr-85m	1.0930E+02	1.3281E-08	9.4094E+16	3.2270E+15
Kr-87	1.7032E+02	6.0130E-09	4.1622E+16	5.3354E+15
Kr-88	2.8716E+02	2.2901E-08	1.5672E+17	8.5924E+15
Rb-86	6.1349E-01	7.5397E-09	5.2797E+16	2.0079E+13
Sr-89	1.1255E+00	3.8742E-08	2.6214E+17	1.3973E+13
Sr-90	1.2788E-01	9.3751E-07	6.2731E+18	1.5876E+12
Sr-91	1.4647E+00	4.0407E-10	2.6740E+15	1.8246E+13
Sr-92	1.3889E+00	1.1050E-10	7.2329E+14	1.7449E+13
Y-90	1.4442E-03	2.6545E-12	1.7762E+13	1.6334E+10
Y-91	1.3901E-02	5.6682E-10	3.7511E+15	1.7222E+11
Y-92	4.1479E-02	4.3107E-12	2.8217E+13	1.9831E+11
Y-93	1.7486E-02	5.2411E-12	3.3939E+13	2.1777E+11
Zr-95	1.8059E-02	8.4062E-10	5.3288E+15	2.2419E+11
Zr-97	1.8289E-02	9.5672E-12	5.9397E+13	2.2748E+11
Nb-95	1.8156E-02	4.6431E-10	2.9433E+15	2.2539E+11
Mo-99	2.5384E-01	5.2925E-10	3.2194E+15	3.1527E+12
Tc-99m	2.2375E-01	4.2553E-11	2.5885E+14	2.7628E+12
Ru-103	2.1127E-01	6.5461E-09	3.8273E+16	2.6228E+12
Ru-105	1.3333E-01	1.9836E-11	1.1376E+14	1.6674E+12
Ru-106	8.7015E-02	2.6009E-08	1.4776E+17	1.0802E+12
Rh-105	1.3844E-01	1.6402E-10	9.4071E+14	1.7172E+12
Sb-127	2.9004E-01	1.0861E-09	5.1501E+15	3.6019E+12
Sb-129	7.9009E-01	1.4050E-10	6.5590E+14	9.8820E+12
Te-127	2.8850E-01	1.0932E-10	5.1837E+14	3.5702E+12
Te-127m	3.8783E-02	4.1116E-09	1.9497E+16	4.8146E+11
Te-129	8.1819E-01	3.9069E-11	1.8239E+14	9.9507E+12
Te-129m	1.2749E-01	4.2319E-09	1.9756E+16	1.5826E+12
Te-131m	3.8392E-01	4.8147E-10	2.2133E+15	4.7713E+12
Te-132	3.8238E+00	1.2595E-08	5.7462E+16	4.7489E+13
I-131	2.5555E+02	2.0613E-06	9.4758E+18	8.3101E+15
I-132	3.2880E+02	3.1854E-08	1.4533E+17	1.1052E+16
I-133	5.1912E+02	4.5826E-07	2.0750E+18	1.6961E+16
I-134	3.6756E+02	1.3778E-08	6.1922E+16	1.3601E+16
I-135	4.6495E+02	1.3240E-07	5.9060E+17	1.5366E+16
Xe-133	7.9103E+02	4.2260E-06	1.9135E+19	2.2827E+16
Xe-135	3.3166E+02	1.2987E-07	5.7933E+17	9.4791E+15
Cs-134	6.8582E+01	5.3007E-05	2.3822E+20	2.2441E+15
Cs-136	1.9071E+01	2.6021E-07	1.1522E+18	6.2425E+14
Cs-137	4.2752E+01	4.9150E-04	2.1605E+21	1.3989E+15
Ba-139	1.5181E+00	9.2812E-11	4.0211E+14	1.9295E+13
Ba-140	1.9675E+00	2.6875E-08	1.1560E+17	2.4428E+13
La-140	2.3316E-02	4.1949E-11	1.8044E+14	2.5047E+11
La-141	1.6817E-02	2.9736E-12	1.2700E+13	2.1049E+11
La-142	1.3967E-02	9.7572E-13	4.1380E+12	1.7708E+11
Ce-141	4.5187E-02	1.5859E-09	6.7733E+15	5.6097E+11
Ce-143	4.3984E-02	6.6233E-11	2.7893E+14	5.4657E+11
Ce-144	3.6174E-02	1.1342E-08	4.7431E+16	4.4907E+11
Pr-143	1.7281E-02	2.5663E-10	1.0807E+15	2.1444E+11
Nd-147	7.3846E-03	9.1282E-11	3.7395E+14	9.1685E+10
Np-239	5.3900E-01	2.3234E-09	5.8543E+15	6.6951E+12
Pu-238	1.8068E-04	1.0554E-08	2.6705E+16	2.2430E+09
Pu-239	1.2073E-05	1.9424E-07	4.8942E+17	1.4988E+08
Pu-240	1.2957E-05	5.6863E-08	1.4268E+17	1.6085E+08
Pu-241	6.2191E-03	6.0372E-08	1.5086E+17	7.7205E+10
Am-241	3.8344E-06	1.1172E-09	2.7917E+15	4.7600E+07
Cm-242	9.6083E-04	2.8991E-10	7.2143E+14	1.1928E+10
Cm-244	1.0470E-04	1.2942E-09	3.1942E+15	1.2998E+09

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.5932	Atmosphere	Sump	
Noble gases (atoms)	1.2270E+20	0.0000E+00	
Elemental I (atoms)	6.0909E+17	0.0000E+00	
Organic I (atoms)	1.8838E+16	0.0000E+00	
Aerosols (kg)	5.4874E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.0186E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.8505E-09
Total I (Ci)			1.9360E+03

Time (h) = 0.5932	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.0667E+17
Organic I (atoms)	0.0000E+00	6.3918E+15

Aerosols (kg)	0.0000E+00	1.9547E-04

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.5932 Leakage Transport

Noble gases (atoms)	1.2458E+20
Elemental I (atoms)	8.2986E+17
Organic I (atoms)	2.5666E+16
Aerosols (kg)	7.5411E-04

Reactor Enclosure to SGTS Node Transport Group Inventory:

	Pathway	
Time (h) = 0.5932	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.8579E+18
Elemental I (atoms)	1.0321E+16	5.4357E+14
Organic I (atoms)	3.1921E+14	1.6811E+13
Aerosols (kg)	9.7625E-06	9.8942E-08

Detailed model information at time (H) = 0.7415

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	4.7110E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0141E+00

EAB Doses:

Time (h) = 0.7415	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.7415	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.7415	Ci	kg	Atoms	Decay
Co-58	4.7388E-03	1.4903E-10	1.5474E+15	8.1558E+10
Co-60	5.6734E-03	5.0190E-09	5.0375E+16	9.7638E+10
Kr-85	1.2287E+01	3.1318E-05	2.2188E+20	3.7240E+14
Kr-85m	2.3079E+02	2.8044E-08	1.9869E+17	7.1822E+15
Kr-87	3.3942E+02	1.1983E-08	8.2946E+16	1.1315E+16
Kr-88	5.9839E+02	4.7721E-08	3.2657E+17	1.8912E+16
Rb-86	9.2034E-01	1.1311E-08	7.9205E+16	3.6848E+13
Sr-89	6.9366E+00	2.3876E-07	1.6156E+18	1.1938E+14
Sr-90	7.8820E-01	5.7783E-06	3.8664E+19	1.3565E+13
Sr-91	8.9307E+00	2.4637E-09	1.6304E+16	1.5462E+14
Sr-92	8.2418E+00	6.5570E-10	4.2921E+15	1.4486E+14
Y-90	9.8019E-03	1.8016E-11	1.2055E+14	1.5276E+11
Y-91	8.5869E-02	3.5015E-09	2.3172E+16	1.4744E+12
Y-92	4.2295E-01	4.3955E-11	2.8772E+14	4.2595E+12
Y-93	1.0668E-01	3.1977E-11	2.0706E+14	1.8464E+12
Zr-95	1.1130E-01	5.1808E-09	3.2842E+16	1.9155E+12
Zr-97	1.1204E-01	5.8610E-11	3.6387E+14	1.9347E+12
Nb-95	1.1191E-01	2.8618E-09	1.8141E+16	1.9258E+12
Mo-99	1.5621E+00	3.2570E-09	1.9812E+16	2.6907E+13
Tc-99m	1.3792E+00	2.6229E-10	1.5955E+15	2.3626E+13
Ru-103	1.3020E+00	4.0342E-08	2.3587E+17	2.2409E+13
Ru-105	8.0300E-01	1.1946E-10	6.8514E+14	1.3998E+13
Ru-106	5.3631E-01	1.6030E-07	9.1073E+17	9.2299E+12
Rh-105	8.5316E-01	1.0108E-09	5.7973E+15	1.4673E+13
Sb-127	1.7857E+00	6.6867E-09	3.1707E+16	3.0751E+13
Sb-129	4.7552E+00	8.4561E-10	3.9476E+15	8.2923E+13
Te-127	1.7774E+00	6.7348E-10	3.1935E+15	3.0510E+13
Te-127m	2.3904E-01	2.5342E-08	1.2017E+17	4.1138E+12
Te-129	4.9817E+00	2.3788E-10	1.1105E+15	8.4572E+13
Te-129m	7.8581E-01	2.6085E-08	1.2177E+17	1.3523E+13

Te-131m	2.3582E+00	2.9574E-09	1.3595E+16	4.0662E+13
Te-132	2.3537E+01	7.7528E-08	3.5370E+17	4.0536E+14
I-131	3.9593E+02	3.1937E-06	1.4681E+19	1.5475E+16
I-132	4.9957E+02	4.8398E-08	2.2080E+17	2.0230E+16
I-133	8.0074E+02	7.0686E-07	3.2006E+18	3.1482E+16
I-134	5.0673E+02	1.8995E-08	8.5367E+16	2.3311E+16
I-135	7.0962E+02	2.0207E-07	9.0138E+17	2.8301E+16
Xe-133	1.7085E+03	9.1277E-06	4.1329E+19	5.1793E+16
Xe-135	7.1739E+02	2.8092E-07	1.2531E+18	2.1609E+16
Cs-134	1.0291E+02	7.9538E-05	3.5745E+20	4.1190E+15
Cs-136	2.8607E+01	3.9033E-07	1.7284E+18	1.1455E+15
Cs-137	6.4150E+01	7.3751E-04	3.2419E+21	2.5676E+15
Ba-139	8.6845E+00	5.3094E-10	2.3003E+15	1.5581E+14
Ba-140	1.2123E+01	1.6559E-07	7.1229E+17	2.0867E+14
La-140	1.6571E-01	2.9813E-10	1.2824E+15	2.4626E+12
La-141	1.0097E-01	1.7854E-11	7.6257E+13	1.7631E+12
La-142	8.0536E-02	5.6259E-12	2.3859E+13	1.4385E+12
Ce-141	2.7849E-01	9.7739E-09	4.1745E+16	4.7930E+12
Ce-143	2.7025E-01	4.0696E-10	1.7138E+15	4.6590E+12
Ce-144	2.2295E-01	6.9902E-08	2.9233E+17	3.8370E+12
Pr-143	1.0655E-01	1.5823E-09	6.6634E+15	1.8329E+12
Nd-147	4.5497E-02	5.6240E-10	2.3040E+15	7.8317E+11
Np-239	3.3161E+00	1.4294E-08	3.6017E+16	5.7127E+13
Pu-238	1.1136E-03	6.5049E-08	1.6459E+17	1.9165E+10
Pu-239	7.4414E-05	1.1972E-06	3.0166E+18	1.2806E+09
Pu-240	7.9862E-05	3.5048E-07	8.7943E+17	1.3744E+09
Pu-241	3.8331E-02	3.7210E-07	9.2981E+17	6.5968E+11
Am-241	2.3634E-05	6.8861E-09	1.7207E+16	4.0673E+08
Cm-242	5.9219E-03	1.7868E-09	4.4464E+15	1.0192E+11
Cm-244	6.4534E-04	7.9768E-09	1.9687E+16	1.1106E+10

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.7415	Atmosphere	Sump	
Noble gases (atoms)	2.6507E+20	0.0000E+00	
Elemental I (atoms)	9.4552E+17	0.0000E+00	
Organic I (atoms)	2.9243E+16	0.0000E+00	
Aerosols (kg)	8.3005E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.0854E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.3648E-08
Total I (Ci)			2.9126E+03

Time (h) = 0.7415	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.9135E+17
Organic I (atoms)	0.0000E+00	1.2103E+16
Aerosols (kg)	0.0000E+00	3.6637E-04

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 0.7415 Leakage Transport

Noble gases (atoms)	2.6930E+20
Elemental I (atoms)	1.3631E+18
Organic I (atoms)	4.2159E+16
Aerosols (kg)	1.2148E-03

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.7415	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.1662E+18
Elemental I (atoms)	1.9374E+16	1.0200E+15
Organic I (atoms)	5.9919E+14	3.1548E+13
Aerosols (kg)	1.8140E-05	1.8356E-07

Detailed model information at time (H) = 0.8898

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	4.3432E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0172E+00

EAB Doses:

Time (h) = 0.8898	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.8898	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.8898	Ci	kg	Atoms	Decay
Co-58	1.1375E-02	3.5772E-10	3.7142E+15	2.7413E+11
Co-60	1.3619E-02	1.2048E-08	1.2092E+17	3.2819E+11
Kr-85	2.2820E+01	5.8165E-05	4.1209E+20	7.7177E+14
Kr-85m	4.1891E+02	5.0903E-08	3.6064E+17	1.4595E+16
Kr-87	5.8144E+02	2.0527E-08	1.4209E+17	2.1896E+16
Kr-88	1.0718E+03	8.5478E-08	5.8496E+17	3.8000E+16
Rb-86	1.2762E+00	1.5685E-08	1.0983E+17	6.0455E+13
Sr-89	1.6650E+01	5.7310E-07	3.8778E+18	4.0126E+14
Sr-90	1.8921E+00	1.3871E-05	9.2813E+19	4.5596E+13
Sr-91	2.1207E+01	5.8503E-09	3.8716E+16	5.1549E+14
Sr-92	1.9048E+01	1.5154E-09	9.9196E+15	4.7318E+14
Y-90	2.5448E-02	4.6773E-11	3.1297E+14	5.4929E+11
Y-91	2.0653E-01	8.4216E-09	5.5732E+16	4.9634E+12
Y-92	1.3440E+00	1.3968E-10	9.1431E+14	2.0864E+13
Y-93	2.5350E-01	7.5982E-11	4.9201E+14	6.1586E+12
Zr-95	2.6715E-01	1.2436E-08	7.8830E+16	6.4383E+12
Zr-97	2.6732E-01	1.3984E-10	8.6817E+14	6.4734E+12
Nb-95	2.6863E-01	6.8697E-09	4.3547E+16	6.4733E+12
Mo-99	3.7439E+00	7.8061E-09	4.7484E+16	9.0335E+13
Tc-99m	3.3107E+00	6.2962E-10	3.8300E+15	7.9415E+13
Ru-103	3.1251E+00	9.6831E-08	5.6614E+17	7.5317E+13
Ru-105	1.8835E+00	2.8019E-10	1.6070E+15	4.6235E+13
Ru-106	1.2874E+00	3.8480E-07	2.1862E+18	3.1024E+13
Rh-105	2.0476E+00	2.4259E-09	1.3913E+16	4.9315E+13
Sb-127	4.2818E+00	1.6033E-08	7.6028E+16	1.0328E+14
Sb-129	1.1146E+01	1.9821E-09	9.2532E+15	2.7376E+14
Te-127	4.2646E+00	1.6159E-09	7.6625E+15	1.0252E+14
Te-127m	5.7383E-01	6.0835E-08	2.8847E+17	1.3828E+13
Te-129	1.1806E+01	5.6373E-10	2.6317E+15	2.8161E+14
Te-129m	1.8864E+00	6.2618E-08	2.9232E+17	4.5456E+13
Te-131m	5.6415E+00	7.0748E-09	3.2523E+16	1.3632E+14
Te-132	5.6425E+01	1.8586E-07	8.4793E+17	1.3612E+15
I-131	5.6587E+02	4.5644E-06	2.0983E+19	2.5880E+16
I-132	7.0156E+02	6.7967E-08	3.1008E+17	3.3314E+16
I-133	1.1394E+03	1.0058E-06	4.5541E+18	5.2478E+16
I-134	6.4442E+02	2.4157E-08	1.0856E+17	3.5862E+16
I-135	9.9905E+02	2.8448E-07	1.2690E+18	4.6807E+16
Xe-133	3.1718E+03	1.6945E-05	7.6726E+19	1.0731E+17
Xe-135	1.3308E+03	5.2114E-07	2.3247E+18	4.4880E+16
Cs-134	1.4274E+02	1.1032E-04	4.9579E+20	6.7589E+15
Cs-136	3.9666E+01	5.4121E-07	2.3965E+18	1.8793E+15
Cs-137	8.8977E+01	1.0229E-03	4.4966E+21	4.2133E+15
Ba-139	1.9349E+01	1.1829E-09	5.1249E+15	4.9521E+14
Ba-140	2.9090E+01	3.9736E-07	1.7093E+18	7.0122E+14
La-140	4.4457E-01	7.9984E-10	3.4405E+15	9.1519E+12
La-141	2.3613E-01	4.1753E-11	1.7833E+14	5.8104E+12
La-142	1.8085E-01	1.2634E-11	5.3579E+13	4.5989E+12
Ce-141	6.6847E-01	2.3461E-08	1.0020E+17	1.6110E+13
Ce-143	6.4672E-01	9.7385E-10	4.1012E+15	1.5624E+13
Ce-144	5.3518E-01	1.6780E-07	7.0173E+17	1.2897E+13
Pr-143	2.5584E-01	3.7994E-09	1.6000E+16	6.1623E+12
Nd-147	1.0917E-01	1.3495E-09	5.5285E+15	2.6317E+12
Np-239	7.9458E+00	3.4250E-08	8.6301E+16	1.9176E+14
Pu-238	2.6732E-03	1.5615E-07	3.9510E+17	6.4420E+10
Pu-239	1.7863E-04	2.8739E-06	7.2415E+18	4.3047E+09
Pu-240	1.9171E-04	8.4131E-07	2.1110E+18	4.6199E+09
Pu-241	9.2013E-02	8.9322E-07	2.2320E+18	2.2174E+12
Am-241	5.6735E-05	1.6530E-08	4.1306E+16	1.3672E+09

Cm-242	1.4215E-02	4.2890E-09	1.0673E+16	3.4257E+11
Cm-244	1.5491E-03	1.9148E-08	4.7259E+16	3.7332E+10

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.8898	Atmosphere	Sump	
Noble gases (atoms)	4.9223E+20	0.0000E+00	
Elemental I (atoms)	1.3540E+18	0.0000E+00	
Organic I (atoms)	4.1875E+16	0.0000E+00	
Aerosols (kg)	1.1602E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.5485E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.9419E-08
Total I (Ci)			4.0502E+03

Time (h) = 0.8898	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.6568E+17
Organic I (atoms)	0.0000E+00	2.0588E+16
Aerosols (kg)	0.0000E+00	6.1385E-04

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.8898	Leakage Transport
Noble gases (atoms)	5.0112E+20
Elemental I (atoms)	2.0638E+18
Organic I (atoms)	6.3829E+16
Aerosols (kg)	1.8047E-03

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.8898	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	8.7591E+18
Elemental I (atoms)	3.2822E+16	1.7278E+15
Organic I (atoms)	1.0151E+15	5.3437E+13
Aerosols (kg)	3.0271E-05	3.0610E-07

Detailed model information at time (H) = 1.0381

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	4.1124E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0201E+00

EAB Doses:

Time (h) = 1.0381	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.0381	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.0381	Ci	kg	Atoms	Decay
Co-58	2.0042E-02	6.3028E-10	6.5442E+15	6.2989E+11
Co-60	2.3997E-02	2.1229E-08	2.1307E+17	7.5416E+11
Kr-85	3.7237E+01	9.4911E-05	6.7243E+20	1.4391E+15
Kr-85m	6.6805E+02	8.1178E-08	5.7513E+17	2.6702E+16
Kr-87	8.7509E+02	3.0894E-08	2.1385E+17	3.8209E+16
Kr-88	1.6868E+03	1.3452E-07	9.2058E+17	6.8767E+16
Rb-86	1.6693E+00	2.0515E-08	1.4366E+17	9.1680E+13
Sr-89	2.9335E+01	1.0097E-06	6.8324E+18	9.2201E+14
Sr-90	3.3339E+00	2.4441E-05	1.6354E+20	1.0478E+14
Sr-91	3.6966E+01	1.0198E-08	6.7485E+16	1.1751E+15
Sr-92	3.2314E+01	2.5708E-09	1.6828E+16	1.0574E+15
Y-90	4.8130E-02	8.8464E-11	5.9194E+14	1.3398E+12

Y-91	3.6460E-01	1.4867E-08	9.8386E+16	1.1422E+13
Y-92	2.8905E+00	3.0040E-10	1.9663E+15	6.1297E+13
Y-93	4.4216E-01	1.3253E-10	8.5818E+14	1.4046E+13
Zr-95	4.7070E-01	2.1911E-08	1.3889E+17	1.4794E+13
Zr-97	4.6818E-01	2.4491E-10	1.5205E+15	1.4808E+13
Nb-95	4.7333E-01	1.2105E-08	7.6733E+16	1.4875E+13
Mo-99	6.5867E+00	1.3733E-08	8.3540E+16	2.0734E+14
Tc-99m	5.8335E+00	1.1094E-09	6.7485E+15	1.8248E+14
Ru-103	5.5060E+00	1.7060E-07	9.9747E+17	1.7306E+14
Ru-105	3.2428E+00	4.8242E-10	2.7668E+15	1.0444E+14
Ru-106	2.2684E+00	6.7803E-07	3.8521E+18	7.1290E+13
Rh-105	3.6070E+00	4.2735E-09	2.4510E+16	1.1330E+14
Sb-127	7.5363E+00	2.8220E-08	1.3382E+17	2.3712E+14
Sb-129	1.9179E+01	3.4105E-09	1.5921E+16	6.1813E+14
Te-127	7.5110E+00	2.8460E-09	1.3495E+16	2.3549E+14
Te-127m	1.0111E+00	1.0720E-07	5.0830E+17	3.1776E+13
Te-129	2.0525E+01	9.8007E-10	4.5753E+15	6.4091E+14
Te-129m	3.3240E+00	1.1034E-07	5.1510E+17	1.0446E+14
Te-131m	9.9066E+00	1.2424E-08	5.7112E+16	3.1246E+14
Te-132	9.9294E+01	3.2706E-07	1.4921E+18	3.1248E+15
I-131	7.5822E+02	6.1159E-06	2.8115E+19	3.9997E+16
I-132	9.2413E+02	8.9529E-08	4.0845E+17	5.0753E+16
I-133	1.5199E+03	1.3417E-06	6.0750E+18	8.0838E+16
I-134	7.6831E+02	2.8801E-08	1.2943E+17	5.1018E+16
I-135	1.3186E+03	3.7548E-07	1.6750E+18	7.1540E+16
Xe-133	5.1733E+03	2.7638E-05	1.2514E+20	2.0005E+17
Xe-135	2.1674E+03	8.4873E-07	3.7860E+18	8.3730E+16
Cs-134	1.8674E+02	1.4433E-04	6.4863E+20	1.0252E+16
Cs-136	5.1877E+01	7.0782E-07	3.1343E+18	2.8497E+15
Cs-137	1.1641E+02	1.3383E-03	5.8828E+21	6.3905E+15
Ba-139	3.1644E+01	1.9346E-09	8.3814E+15	1.0776E+15
Ba-140	5.1241E+01	6.9994E-07	3.0108E+18	1.6109E+15
La-140	8.6354E-01	1.5536E-09	6.6829E+15	2.2922E+13
La-141	4.0532E-01	7.1671E-11	3.0611E+14	1.3097E+13
La-142	2.9812E-01	2.0826E-11	8.8320E+13	1.0064E+13
Ce-141	1.1778E+00	4.1337E-08	1.7655E+17	3.7018E+13
Ce-143	1.1360E+00	1.7106E-09	7.2040E+15	3.5819E+13
Ce-144	9.4301E-01	2.9566E-07	1.2365E+18	2.9636E+13
Pr-143	4.5095E-01	6.6967E-09	2.8202E+16	1.4164E+13
Nd-147	1.9229E-01	2.3770E-09	9.7376E+15	6.0457E+12
Np-239	1.3975E+01	6.0241E-08	1.5179E+17	4.4005E+14
Pu-238	4.7103E-03	2.7514E-07	6.9619E+17	1.4803E+11
Pu-239	3.1477E-04	5.0641E-06	1.2760E+19	9.8919E+09
Pu-240	3.3780E-04	1.4824E-06	3.7198E+18	1.0616E+10
Pu-241	1.6213E-01	1.5739E-06	3.9329E+18	5.0953E+12
Am-241	9.9974E-05	2.9129E-08	7.2787E+16	3.1417E+09
Cm-242	2.5047E-02	7.5573E-09	1.8806E+16	7.8718E+11
Cm-244	2.7297E-03	3.3740E-08	8.3273E+16	8.5785E+10

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.0381	Atmosphere	Sump	
Noble gases (atoms)	8.0307E+20	0.0000E+00	
Elemental I (atoms)	1.8175E+18	0.0000E+00	
Organic I (atoms)	5.6212E+16	0.0000E+00	
Aerosols (kg)	1.5275E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.0711E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.5909E-08
Total I (Ci)			5.2892E+03

Time (h) = 1.0381	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.0448E+18
Organic I (atoms)	0.0000E+00	3.2314E+16
Aerosols (kg)	0.0000E+00	9.4858E-04

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 1.0381 Leakage Transport

Noble gases (atoms)	8.2002E+20
Elemental I (atoms)	2.9309E+18
Organic I (atoms)	9.0648E+16
Aerosols (kg)	2.5233E-03

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.0381	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.6678E+19
Elemental I (atoms)	5.1407E+16	2.7060E+15
Organic I (atoms)	1.5899E+15	8.3690E+13
Aerosols (kg)	4.6680E-05	4.7184E-07

Detailed model information at time (H) = 1.1864

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	3.9541E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0227E+00

EAB Doses:

Time (h) = 1.1864	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.1864	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.1864	Ci	kg	Atoms	Decay
Co-58	3.0253E-02	9.5140E-10	9.8784E+15	1.1813E+12
Co-60	3.6225E-02	3.2047E-08	3.2165E+17	1.4144E+12
Kr-85	5.5490E+01	1.4144E-04	1.0021E+21	2.4505E+15
Kr-85m	9.7295E+02	1.1823E-07	8.3762E+17	4.4634E+16
Kr-87	1.2028E+03	4.2463E-08	2.9393E+17	6.1017E+16
Kr-88	2.4243E+03	1.9334E-07	1.3231E+18	1.1374E+17
Rb-86	2.0903E+00	2.5690E-08	1.7990E+17	1.3111E+14
Sr-89	4.4280E+01	1.5242E-06	1.0313E+19	1.7291E+15
Sr-90	5.0328E+00	3.6895E-05	2.4688E+20	1.9650E+14
Sr-91	5.5202E+01	1.5228E-08	1.0078E+17	2.1865E+15
Sr-92	4.6965E+01	3.7364E-09	2.4458E+16	1.9293E+15
Y-90	7.7518E-02	1.4248E-10	9.5337E+14	2.6533E+12
Y-91	5.5138E-01	2.2483E-08	1.4879E+17	2.1450E+13
Y-92	5.0766E+00	5.2758E-10	3.4535E+15	1.3778E+14
Y-93	6.6071E-01	1.9803E-10	1.2824E+15	2.6147E+13
Zr-95	7.1051E-01	3.3073E-08	2.0966E+17	2.7744E+13
Zr-97	7.0247E-01	3.6746E-10	2.2814E+15	2.7649E+13
Nb-95	7.1452E-01	1.8273E-08	1.1583E+17	2.7897E+13
Mo-99	9.9276E+00	2.0699E-08	1.2591E+17	3.8841E+14
Tc-99m	8.8058E+00	1.6747E-09	1.0187E+16	3.4222E+14
Ru-103	8.3108E+00	2.5751E-07	1.5056E+18	3.2453E+14
Ru-105	4.7832E+00	7.1158E-10	4.0812E+15	1.9261E+14
Ru-106	3.4243E+00	1.0235E-06	5.8149E+18	1.3370E+14
Rh-105	5.4433E+00	6.4490E-09	3.6987E+16	2.1246E+14
Sb-127	1.1364E+01	4.2553E-08	2.0178E+17	4.4435E+14
Sb-129	2.8271E+01	5.0273E-09	2.3469E+16	1.1394E+15
Te-127	1.1333E+01	4.2943E-09	2.0363E+16	4.4149E+14
Te-127m	1.5264E+00	1.6182E-07	7.6733E+17	5.9595E+13
Te-129	3.0554E+01	1.4590E-09	6.8110E+15	1.1903E+15
Te-129m	5.0180E+00	1.6657E-07	7.7761E+17	1.9591E+14
Te-131m	1.4904E+01	1.8690E-08	8.5919E+16	5.8454E+14
Te-132	1.4969E+02	4.9308E-07	2.2495E+18	5.8548E+15
I-131	9.6748E+02	7.8038E-06	3.5875E+19	5.8182E+16
I-132	1.1595E+03	1.1233E-07	5.1246E+17	7.2828E+16
I-133	1.9307E+03	1.7044E-06	7.7173E+18	1.1721E+17
I-134	8.7232E+02	3.2700E-08	1.4696E+17	6.8393E+16
I-135	1.6574E+03	4.7195E-07	2.1053E+18	1.0293E+17
Xe-133	7.7057E+03	4.1167E-05	1.8640E+20	3.4052E+17
Xe-135	3.2224E+03	1.2619E-06	5.6289E+18	1.4251E+17
Cs-134	2.3389E+02	1.8077E-04	8.1242E+20	1.4663E+16

Cs-136	6.4956E+01	8.8628E-07	3.9245E+18	4.0751E+15
Cs-137	1.4580E+02	1.6762E-03	7.3683E+21	9.1406E+15
Ba-139	4.4335E+01	2.7105E-09	1.1743E+16	1.9157E+15
Ba-140	7.7326E+01	1.0562E-06	4.5435E+18	3.0205E+15
La-140	1.4219E+00	2.5582E-09	1.1004E+16	4.6417E+13
La-141	5.9607E-01	1.0540E-10	4.5016E+14	2.4100E+13
La-142	4.2100E-01	2.9410E-11	1.2473E+14	1.7992E+13
Ce-141	1.7779E+00	6.2397E-08	2.6650E+17	6.9421E+13
Ce-143	1.7095E+00	2.5743E-09	1.0841E+16	6.7023E+13
Ce-144	1.4235E+00	4.4631E-07	1.8665E+18	5.5581E+13
Pr-143	6.8094E-01	1.0112E-08	4.2585E+16	2.6569E+13
Nd-147	2.9016E-01	3.5868E-09	1.4694E+16	1.1335E+13
Np-239	2.1059E+01	9.0773E-08	2.2872E+17	8.2419E+14
Pu-238	7.1106E-03	4.1535E-07	1.0510E+18	2.7763E+11
Pu-239	4.7517E-04	7.6448E-06	1.9263E+19	1.8552E+10
Pu-240	5.0993E-04	2.2378E-06	5.6153E+18	1.9910E+10
Pu-241	2.4475E-01	2.3759E-06	5.9370E+18	9.5560E+12
Am-241	1.5092E-04	4.3973E-08	1.0988E+17	5.8923E+09
Cm-242	3.7809E-02	1.1408E-08	2.8388E+16	1.4763E+12
Cm-244	4.1206E-03	5.0933E-08	1.2571E+17	1.6088E+11

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.1864	Atmosphere	Sump	
Noble gases (atoms)	1.1965E+21	0.0000E+00	
Elemental I (atoms)	2.3232E+18	0.0000E+00	
Organic I (atoms)	7.1850E+16	0.0000E+00	
Aerosols (kg)	1.9227E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.6380E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.2923E-08
Total I (Ci)			6.5874E+03

Time (h) = 1.1864	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.5403E+18
Organic I (atoms)	0.0000E+00	4.7639E+16
Aerosols (kg)	0.0000E+00	1.3786E-03

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 1.1864 Leakage Transport

Noble gases (atoms)	1.2260E+21
Elemental I (atoms)	3.9638E+18
Organic I (atoms)	1.2259E+17
Aerosols (kg)	3.3700E-03

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.1864	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.8950E+19
Elemental I (atoms)	7.5696E+16	3.9844E+15
Organic I (atoms)	2.3411E+15	1.2323E+14
Aerosols (kg)	6.7761E-05	6.8479E-07

Detailed model information at time (H) = 1.3347

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	3.8388E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0253E+00

EAB Doses:

Time (h) = 1.3347	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.3347 Whole Body Thyroid TEDE

Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.3347	Ci	kg	Atoms	Decay
Co-58	4.1633E-02	1.3093E-09	1.3594E+16	1.9529E+12
Co-60	4.9855E-02	4.4105E-08	4.4267E+17	2.3383E+12
Kr-85	7.7533E+01	1.9762E-04	1.4001E+21	3.8809E+15
Kr-85m	1.3286E+03	1.6144E-07	1.1438E+18	6.9422E+16
Kr-87	1.5501E+03	5.4723E-08	3.7880E+17	9.0774E+16
Kr-88	3.2669E+03	2.6054E-07	1.7829E+18	1.7509E+17
Rb-86	2.5324E+00	3.1123E-08	2.1794E+17	1.7920E+14
Sr-89	6.0936E+01	2.0975E-06	1.4192E+19	2.8584E+15
Sr-90	6.9264E+00	5.0778E-05	3.3977E+20	3.2486E+14
Sr-91	7.5156E+01	2.0733E-08	1.3720E+17	3.5867E+15
Sr-92	6.2230E+01	4.9509E-09	3.2408E+16	3.1043E+15
Y-90	1.1325E-01	2.0815E-10	1.3928E+15	4.6131E+12
Y-91	7.6016E-01	3.0997E-08	2.0513E+17	3.5509E+13
Y-92	7.8736E+00	8.1826E-10	5.3562E+15	2.6238E+14
Y-93	9.0010E-01	2.6979E-10	1.7470E+15	4.2912E+13
Zr-95	9.7779E-01	4.5515E-08	2.8852E+17	4.5865E+13
Zr-97	9.6092E-01	5.0266E-10	3.1207E+15	4.5511E+13
Nb-95	9.8337E-01	2.5148E-08	1.5942E+17	4.6121E+13
Mo-99	1.3642E+01	2.8443E-08	1.7302E+17	6.4142E+14
Tc-99m	1.2118E+01	2.3046E-09	1.4019E+16	5.6576E+14
Ru-103	1.1437E+01	3.5436E-07	2.0719E+18	5.3649E+14
Ru-105	6.4324E+00	9.5691E-10	5.4882E+15	3.1318E+14
Ru-106	4.7127E+00	1.4086E-06	8.0028E+18	2.2104E+14
Rh-105	7.4886E+00	8.8722E-09	5.0885E+16	3.5117E+14
Sb-127	1.5622E+01	5.8499E-08	2.7739E+17	7.3403E+14
Sb-129	3.7993E+01	6.7563E-09	3.1540E+16	1.8518E+15
Te-127	1.5590E+01	5.9073E-09	2.8011E+16	7.2963E+14
Te-127m	2.1008E+00	2.2271E-07	1.0561E+18	9.8526E+13
Te-129	4.1448E+01	1.9792E-09	9.2393E+15	1.9483E+15
Te-129m	6.9063E+00	2.2925E-07	1.0702E+18	3.2389E+14
Te-131m	2.0441E+01	2.5634E-08	1.1784E+17	9.6400E+14
Te-132	2.0575E+02	6.7771E-07	3.0919E+18	9.6703E+15
I-131	1.1894E+03	9.5941E-06	4.4105E+19	8.0702E+16
I-132	1.4018E+03	1.3581E-07	6.1958E+17	9.9699E+16
I-133	2.3631E+03	2.0861E-06	9.4456E+18	1.6205E+17
I-134	9.5426E+02	3.5771E-08	1.6076E+17	8.7542E+16
I-135	2.0072E+03	5.7155E-07	2.5496E+18	1.4121E+17
Xe-133	1.0762E+04	5.7493E-05	2.6032E+20	5.3911E+17
Xe-135	4.4911E+03	1.7586E-06	7.8450E+18	2.2546E+17
Cs-134	2.8341E+02	2.1905E-04	9.8443E+20	2.0044E+16
Cs-136	7.8684E+01	1.0736E-06	4.7539E+18	5.5692E+15
Cs-137	1.7667E+02	2.0312E-03	8.9284E+21	1.2495E+16
Ba-139	5.6632E+01	3.4623E-09	1.5000E+16	3.0044E+15
Ba-140	1.0639E+02	1.4532E-06	6.2509E+18	4.9924E+15
La-140	2.1164E+00	3.8077E-09	1.6379E+16	8.2254E+13
La-141	7.9917E-01	1.4131E-10	6.0355E+14	3.9101E+13
La-142	5.4204E-01	3.7865E-11	1.6058E+14	2.8372E+13
Ce-141	2.4467E+00	8.5869E-08	3.6675E+17	1.1477E+14
Ce-143	2.3455E+00	3.5319E-09	1.4874E+16	1.1056E+14
Ce-144	1.9591E+00	6.1424E-07	2.5688E+18	9.1888E+13
Pr-143	9.3741E-01	1.3921E-08	5.8625E+16	4.3934E+13
Nd-147	3.9919E-01	4.9344E-09	2.0215E+16	1.8734E+13
Np-239	2.8930E+01	1.2470E-07	3.1421E+17	1.3608E+15
Pu-238	9.7861E-03	5.7163E-07	1.4464E+18	4.5899E+11
Pu-239	6.5398E-04	1.0521E-05	2.6511E+19	3.0672E+10
Pu-240	7.0180E-04	3.0799E-06	7.7281E+18	3.2916E+10
Pu-241	3.3684E-01	3.2699E-06	8.1708E+18	1.5798E+13
Am-241	2.0772E-04	6.0521E-08	1.5123E+17	9.7417E+09
Cm-242	5.2034E-02	1.5700E-08	3.9069E+16	2.4406E+12
Cm-244	5.6710E-03	7.0097E-08	1.7301E+17	2.6598E+11

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.3347	Atmosphere	Sump	
Noble gases (atoms)	1.6716E+21	0.0000E+00	
Elemental I (atoms)	2.8608E+18	0.0000E+00	
Organic I (atoms)	8.8478E+16	0.0000E+00	
Aerosols (kg)	2.3391E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.2376E-08

Dose Effective (Ci/cc) I-131 (ICRP2 Thyroid) 4.0315E-08
Total I (Ci) 7.9159E+03

Time (h) = 1.3347	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.1610E+18
Organic I (atoms)	0.0000E+00	6.6836E+16
Aerosols (kg)	0.0000E+00	1.9101E-03

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 1.3347 Leakage Transport

Noble gases (atoms)	1.7190E+21
Elemental I (atoms)	5.1616E+18
Organic I (atoms)	1.5964E+17
Aerosols (kg)	4.3441E-03

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.3347	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.6590E+19
Elemental I (atoms)	1.0612E+17	5.5858E+15
Organic I (atoms)	3.2822E+15	1.7276E+14
Aerosols (kg)	9.3814E-05	9.4794E-07

Detailed model information at time (H) = 1.4830

Natural deposition - Powers' Model, Compartment 1
Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	3.7511E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0279E+00

EAB Doses:

Time (h) = 1.4830	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.4830	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.4830	Ci	kg	Atoms	Decay
Co-58	5.3896E-02	1.6949E-09	1.7599E+16	2.9632E+12
Co-60	6.4543E-02	5.7099E-08	5.7309E+17	3.5482E+12
Kr-85	1.0332E+02	2.6334E-04	1.8657E+21	5.8045E+15
Kr-85m	1.7303E+03	2.1025E-07	1.4896E+18	1.0200E+17
Kr-87	1.9052E+03	6.7260E-08	4.6557E+17	1.2769E+17
Kr-88	4.1986E+03	3.3484E-07	2.2914E+18	2.5466E+17
Rb-86	2.9899E+00	3.6746E-08	2.5731E+17	2.3626E+14
Sr-89	7.8882E+01	2.7152E-06	1.8372E+19	4.3372E+15
Sr-90	8.9671E+00	6.5738E-05	4.3987E+20	4.9296E+14
Sr-91	9.6251E+01	2.6552E-08	1.7571E+17	5.4007E+15
Sr-92	7.7566E+01	6.1710E-09	4.0394E+16	4.5857E+15
Y-90	1.5495E-01	2.8480E-10	1.9057E+15	7.3359E+12
Y-91	9.8578E-01	4.0197E-08	2.6601E+17	5.3951E+13
Y-92	1.1228E+01	1.1669E-09	7.6384E+15	4.4641E+14
Y-93	1.1535E+00	3.4574E-10	2.2388E+15	6.4644E+13
Zr-95	1.2658E+00	5.8921E-08	3.7350E+17	6.9594E+13
Zr-97	1.2365E+00	6.4681E-10	4.0157E+15	6.8759E+13
Nb-95	1.2731E+00	3.2557E-08	2.0638E+17	6.9986E+13
Mo-99	1.7634E+01	3.6766E-08	2.2365E+17	9.7223E+14
Tc-99m	1.5687E+01	2.9834E-09	1.8148E+16	8.5847E+14
Ru-103	1.4804E+01	4.5871E-07	2.6820E+18	8.1403E+14
Ru-105	8.1369E+00	1.2105E-09	6.9426E+15	4.6746E+14

Ru-106	6.1011E+00	1.8236E-06	1.0360E+19	3.3541E+14
Rh-105	9.6907E+00	1.1481E-08	6.5848E+16	5.3274E+14
Sb-127	2.0203E+01	7.5650E-08	3.5872E+17	1.1129E+15
Sb-129	4.8030E+01	8.5411E-09	3.9873E+16	2.7627E+15
Te-127	2.0173E+01	7.6440E-09	3.6247E+16	1.1068E+15
Te-127m	2.7197E+00	2.8833E-07	1.3672E+18	1.4951E+14
Te-129	5.2867E+01	2.5244E-09	1.1785E+16	2.9266E+15
Te-129m	8.9413E+00	2.9680E-07	1.3856E+18	4.9150E+14
Te-131m	2.6373E+01	3.3073E-08	1.5204E+17	1.4592E+15
Te-132	2.6602E+02	8.7623E-07	3.9976E+18	1.4660E+16
I-131	1.4208E+03	1.1461E-05	5.2685E+19	1.0776E+17
I-132	1.6471E+03	1.5956E-07	7.2797E+17	1.3144E+17
I-133	2.8103E+03	2.4809E-06	1.1233E+19	2.1568E+17
I-134	1.0143E+03	3.8021E-08	1.7087E+17	1.0801E+17
I-135	2.3619E+03	6.7254E-07	3.0001E+18	1.8652E+17
Xe-133	1.4334E+04	7.6577E-05	3.4674E+20	8.0604E+17
Xe-135	5.9684E+03	2.3371E-06	1.0426E+19	3.3675E+17
Cs-134	3.3469E+02	2.5868E-04	1.1626E+21	2.6431E+16
Cs-136	9.2891E+01	1.2674E-06	5.6122E+18	7.3420E+15
Cs-137	2.0864E+02	2.3987E-03	1.0544E+22	1.6476E+16
Ba-139	6.8048E+01	4.1602E-09	1.8024E+16	4.3280E+15
Ba-140	1.3768E+02	1.8807E-06	8.0899E+18	7.5738E+15
La-140	2.9425E+00	5.2939E-09	2.2772E+16	1.3299E+14
La-141	1.0079E+00	1.7822E-10	7.6119E+14	5.8241E+13
La-142	6.5647E-01	4.5859E-11	1.9448E+14	4.1090E+13
Ce-141	3.1674E+00	1.1116E-07	4.7477E+17	1.7414E+14
Ce-143	3.0271E+00	4.5583E-09	1.9196E+16	1.6739E+14
Ce-144	2.5363E+00	7.9519E-07	3.3255E+18	1.3943E+14
Pr-143	1.2139E+00	1.8027E-08	7.5918E+16	6.6681E+13
Nd-147	5.1660E-01	6.3857E-09	2.6160E+16	2.8420E+13
Np-239	3.7385E+01	1.6115E-07	4.0605E+17	2.0622E+15
Pu-238	1.2669E-02	7.4004E-07	1.8725E+18	6.9648E+11
Pu-239	8.4667E-04	1.3622E-05	3.4323E+19	4.6543E+10
Pu-240	9.0857E-04	3.9873E-06	1.0005E+19	4.9948E+10
Pu-241	4.3608E-01	4.2333E-06	1.0578E+19	2.3973E+13
Am-241	2.6892E-04	7.8354E-08	1.9579E+17	1.4783E+10
Cm-242	6.7363E-02	2.0325E-08	5.0578E+16	3.7034E+12
Cm-244	7.3418E-03	9.0749E-08	2.2398E+17	4.0361E+11

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.4830	Atmosphere	Sump	
Noble gases (atoms)	2.2272E+21	0.0000E+00	
Elemental I (atoms)	3.4226E+18	0.0000E+00	
Organic I (atoms)	1.0585E+17	0.0000E+00	
Aerosols (kg)	2.7711E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.8607E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		4.7972E-08
Total I (Ci)			9.2544E+03

Time (h) = 1.4830	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.9136E+18
Organic I (atoms)	0.0000E+00	9.0112E+16
Aerosols (kg)	0.0000E+00	2.5476E-03

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 1.4830 Leakage Transport

Noble gases (atoms)	2.2990E+21
Elemental I (atoms)	6.5235E+18
Organic I (atoms)	2.0176E+17
Aerosols (kg)	5.4452E-03

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.4830	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	7.0600E+19
Elemental I (atoms)	1.4301E+17	7.5274E+15
Organic I (atoms)	4.4231E+15	2.3281E+14
Aerosols (kg)	1.2506E-04	1.2636E-06

Detailed model information at time (H) = 1.6313

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	3.6821E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0303E+00

EAB Doses:

Time (h) = 1.6313	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.6313	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.6313	Ci	kg	Atoms	Decay
Co-58	6.6820E-02	2.1014E-09	2.1819E+16	4.2263E+12
Co-60	8.0026E-02	7.0795E-08	7.1056E+17	5.0609E+12
Kr-85	1.3280E+02	3.3849E-04	2.3981E+21	8.2945E+15
Kr-85m	2.1735E+03	2.6412E-07	1.8712E+18	1.4322E+17
Kr-87	2.2587E+03	7.9739E-08	5.5195E+17	1.7177E+17
Kr-88	5.2048E+03	4.1508E-07	2.8406E+18	3.5401E+17
Rb-86	3.4588E+00	4.2509E-08	2.9767E+17	3.0254E+14
Sr-89	9.7796E+01	3.3662E-06	2.2777E+19	6.1858E+15
Sr-90	1.1118E+01	8.1507E-05	5.4538E+20	7.0312E+14
Sr-91	1.1806E+02	3.2567E-08	2.1552E+17	7.6441E+15
Sr-92	9.2592E+01	7.3665E-09	4.8219E+16	6.3690E+15
Y-90	2.0228E-01	3.7179E-10	2.4878E+15	1.0932E+13
Y-91	1.2242E+00	4.9920E-08	3.3036E+17	7.7046E+13
Y-92	1.5076E+01	1.5668E-09	1.0256E+16	7.0005E+14
Y-93	1.4157E+00	4.2433E-10	2.7477E+15	9.1538E+13
Zr-95	1.5693E+00	7.3049E-08	4.6307E+17	9.9258E+13
Zr-97	1.5238E+00	7.9710E-10	4.9487E+15	9.7648E+13
Nb-95	1.5785E+00	4.0367E-08	2.5589E+17	9.9821E+13
Mo-99	2.1829E+01	4.5514E-08	2.7686E+17	1.3852E+15
Tc-99m	1.9448E+01	3.6986E-09	2.2498E+16	1.2244E+15
Ru-103	1.8354E+01	5.6869E-07	3.3250E+18	1.1610E+15
Ru-105	9.8578E+00	1.4665E-09	8.4109E+15	6.5593E+14
Ru-106	7.5645E+00	2.2610E-06	1.2846E+19	4.7839E+14
Rh-105	1.2009E+01	1.4228E-08	8.1604E+16	7.5965E+14
Sb-127	2.5021E+01	9.3693E-08	4.4428E+17	1.5862E+15
Sb-129	5.8151E+01	1.0341E-08	4.8275E+16	3.8749E+15
Te-127	2.5000E+01	9.4731E-09	4.4920E+16	1.5781E+15
Te-127m	3.3722E+00	3.5750E-07	1.6952E+18	2.1325E+14
Te-129	6.4554E+01	3.0825E-09	1.4390E+16	4.1315E+15
Te-129m	1.1086E+01	3.6801E-07	1.7180E+18	7.0104E+14
Te-131m	3.2587E+01	4.0867E-08	1.8787E+17	2.0762E+15
Te-132	3.2939E+02	1.0850E-06	4.9500E+18	2.0891E+16
I-131	1.6591E+03	1.3383E-05	6.1522E+19	1.3949E+17
I-132	1.8922E+03	1.8331E-07	8.3631E+17	1.6806E+17
I-133	3.2672E+03	2.8842E-06	1.3059E+19	2.7831E+17
I-134	1.0539E+03	3.9506E-08	1.7755E+17	1.2938E+17
I-135	2.7168E+03	7.7362E-07	3.4510E+18	2.3888E+17
Xe-133	1.8415E+04	9.8382E-05	4.4547E+20	1.1514E+18
Xe-135	7.6495E+03	2.9954E-06	1.3362E+19	4.8043E+17
Cs-134	3.8727E+02	2.9932E-04	1.3452E+21	3.3851E+16
Cs-136	1.0745E+02	1.4661E-06	6.4918E+18	9.4012E+15
Cs-137	2.4142E+02	2.7755E-03	1.2200E+22	2.1102E+16
Ba-139	7.8308E+01	4.7874E-09	2.0741E+16	5.8639E+15
Ba-140	1.7065E+02	2.3310E-06	1.0027E+19	1.0800E+16
La-140	3.8948E+00	7.0071E-09	3.0141E+16	2.0108E+14
La-141	1.2174E+00	2.1527E-10	9.1942E+14	8.1552E+13
La-142	7.6144E-01	5.3192E-11	2.2558E+14	5.5967E+13
Ce-141	3.9269E+00	1.3782E-07	5.8862E+17	2.4837E+14
Ce-143	3.7415E+00	5.6341E-09	2.3727E+16	2.3822E+14
Ce-144	3.1446E+00	9.8593E-07	4.1232E+18	1.9887E+14

Pr-143	1.5055E+00	2.2358E-08	9.4154E+16	9.5127E+13
Nd-147	6.4027E-01	7.9144E-09	3.2423E+16	4.0525E+13
Np-239	4.6268E+01	1.9944E-07	5.0253E+17	2.9376E+15
Pu-238	1.5708E-02	9.1756E-07	2.3217E+18	9.9340E+11
Pu-239	1.0498E-03	1.6890E-05	4.2557E+19	6.6386E+10
Pu-240	1.1265E-03	4.9437E-06	1.2405E+19	7.1241E+10
Pu-241	5.4068E-01	5.2487E-06	1.3116E+19	3.4193E+13
Am-241	3.3344E-04	9.7152E-08	2.4277E+17	2.1085E+10
Cm-242	8.3519E-02	2.5200E-08	6.2709E+16	5.2821E+12
Cm-244	9.1030E-03	1.1252E-07	2.7770E+17	5.7568E+11

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.6313	Atmosphere	Sump	
Noble gases (atoms)	2.8622E+21	0.0000E+00	
Elemental I (atoms)	4.0025E+18	0.0000E+00	
Organic I (atoms)	1.2379E+17	0.0000E+00	
Aerosols (kg)	3.2147E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.5006E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.5810E-08
Total I (Ci)			1.0589E+04

Time (h) = 1.6313	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.8031E+18
Organic I (atoms)	0.0000E+00	1.1762E+17
Aerosols (kg)	0.0000E+00	3.2943E-03

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 1.6313	Leakage Transport
Noble gases (atoms)	2.9660E+21
Elemental I (atoms)	8.0488E+18
Organic I (atoms)	2.4893E+17
Aerosols (kg)	6.6726E-03

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.6313	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.0197E+20
Elemental I (atoms)	1.8662E+17	9.8223E+15
Organic I (atoms)	5.7717E+15	3.0378E+14
Aerosols (kg)	1.6167E-04	1.6333E-06

Detailed model information at time (H) = 1.7796

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	3.6264E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0328E+00

EAB Doses:

Time (h) = 1.7796	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.7796	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.7796	Ci	kg	Atoms	Decay
Co-58	8.0236E-02	2.5233E-09	2.6200E+16	5.7525E+12
Co-60	9.6099E-02	8.5014E-08	8.5328E+17	6.8887E+12
Kr-85	1.6593E+02	4.2294E-04	2.9964E+21	1.1423E+16
Kr-85m	2.6542E+03	3.2252E-07	2.2850E+18	1.9384E+17

Kr-87	2.6030E+03	9.1896E-08	6.3610E+17	2.2285E+17
Kr-88	6.2722E+03	5.0021E-07	3.4231E+18	4.7441E+17
Rb-86	3.9359E+00	4.8372E-08	3.3872E+17	3.7821E+14
Sr-89	1.1743E+02	4.0420E-06	2.7350E+19	8.4194E+15
Sr-90	1.3351E+01	9.7878E-05	6.5492E+20	9.5706E+14
Sr-91	1.4024E+02	3.8687E-08	2.5602E+17	1.0326E+16
Sr-92	1.0705E+02	8.5168E-09	5.5749E+16	8.4438E+15
Y-90	2.5491E-01	4.6853E-10	3.1351E+15	1.5507E+13
Y-91	1.4724E+00	6.0040E-08	3.9733E+17	1.0500E+14
Y-92	1.9348E+01	2.0108E-09	1.3162E+16	1.0322E+15
Y-93	1.6828E+00	5.0440E-10	3.2662E+15	1.2371E+14
Zr-95	1.8844E+00	8.7715E-08	5.5604E+17	1.3510E+14
Zr-97	1.8188E+00	9.5140E-10	5.9066E+15	1.3235E+14
Nb-95	1.8955E+00	4.8475E-08	3.0729E+17	1.3587E+14
Mo-99	2.6173E+01	5.4571E-08	3.3195E+17	1.8834E+15
Tc-99m	2.3351E+01	4.4408E-09	2.7013E+16	1.6665E+15
Ru-103	2.2038E+01	6.8283E-07	3.9923E+18	1.5802E+15
Ru-105	1.1567E+01	1.7207E-09	9.8691E+15	8.7848E+14
Ru-106	9.0837E+00	2.7151E-06	1.5425E+19	6.5117E+14
Rh-105	1.4414E+01	1.7077E-08	9.7940E+16	1.0337E+15
Sb-127	3.0013E+01	1.1239E-07	5.3292E+17	2.1573E+15
Sb-129	6.8189E+01	1.2126E-08	5.6608E+16	5.1872E+15
Te-127	3.0007E+01	1.1370E-08	5.3916E+16	2.1473E+15
Te-127m	4.0495E+00	4.2931E-07	2.0357E+18	2.9027E+14
Te-129	7.6316E+01	3.6441E-09	1.7012E+16	5.5652E+15
Te-129m	1.3313E+01	4.4193E-07	2.0631E+18	9.5425E+14
Te-131m	3.8999E+01	4.8907E-08	2.2483E+17	2.8192E+15
Te-132	3.9503E+02	1.3012E-06	5.9364E+18	2.8409E+16
I-131	1.9025E+03	1.5346E-05	7.0545E+19	1.7602E+17
I-132	2.1350E+03	2.0684E-07	9.4364E+17	2.0951E+17
I-133	3.7298E+03	3.2925E-06	1.4908E+19	3.5007E+17
I-134	1.0753E+03	4.0309E-08	1.8115E+17	1.5127E+17
I-135	3.0688E+03	8.7383E-07	3.8980E+18	2.9823E+17
Xe-133	2.2999E+04	1.2287E-04	5.5634E+20	1.5852E+18
Xe-135	9.5294E+03	3.7316E-06	1.6646E+19	6.6047E+17
Cs-134	4.4079E+02	3.4068E-04	1.5311E+21	4.2325E+16
Cs-136	1.2226E+02	1.6681E-06	7.3865E+18	1.1752E+16
Cs-137	2.7478E+02	3.1591E-03	1.3886E+22	2.6384E+16
Ba-139	8.7278E+01	5.3358E-09	2.3117E+16	7.5867E+15
Ba-140	2.0486E+02	2.7983E-06	1.2037E+19	1.4697E+16
La-140	4.9678E+00	8.9377E-09	3.8446E+16	2.8891E+14
La-141	1.4242E+00	2.5183E-10	1.0756E+15	1.0899E+14
La-142	8.5540E-01	5.9755E-11	2.5342E+14	7.2784E+13
Ce-141	4.7153E+00	1.6549E-07	7.0681E+17	3.3806E+14
Ce-143	4.4790E+00	6.7447E-09	2.8404E+16	3.2354E+14
Ce-144	3.7761E+00	1.1839E-06	4.9513E+18	2.7070E+14
Pr-143	1.8084E+00	2.6855E-08	1.1310E+17	1.2951E+14
Nd-147	7.6857E-01	9.5004E-09	3.8920E+16	5.5146E+13
Np-239	5.5460E+01	2.3906E-07	6.0237E+17	3.9934E+15
Pu-238	1.8863E-02	1.1019E-06	2.7880E+18	1.3522E+12
Pu-239	1.2607E-03	2.0282E-05	5.1106E+19	9.0364E+10
Pu-240	1.3528E-03	5.9367E-06	1.4896E+19	9.6971E+10
Pu-241	6.4928E-01	6.3029E-06	1.5750E+19	4.6543E+13
Am-241	4.0043E-04	1.1667E-07	2.9153E+17	2.8701E+10
Cm-242	1.0029E-01	3.0260E-08	7.5303E+16	7.1897E+12
Cm-244	1.0931E-02	1.3512E-07	3.3348E+17	7.8360E+11

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.7796	Atmosphere	Sump	
Noble gases (atoms)	3.5758E+21	0.0000E+00	
Elemental I (atoms)	4.5959E+18	0.0000E+00	
Organic I (atoms)	1.4214E+17	0.0000E+00	
Aerosols (kg)	3.6666E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.1519E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.3763E-08
Total I (Ci)			1.1911E+04

Time (h) = 1.7796	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.8333E+18
Organic I (atoms)	0.0000E+00	1.4948E+17
Aerosols (kg)	0.0000E+00	4.1529E-03

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 1.7796 Leakage Transport

Noble gases (atoms)	3.7200E+21
Elemental I (atoms)	9.7369E+18
Organic I (atoms)	3.0114E+17
Aerosols (kg)	8.0257E-03

Reactor Enclosure to SGTS Node Transport Group Inventory:

	Pathway Filtered	Transported
Time (h) = 1.7796		
Noble gases (atoms)	0.0000E+00	1.4167E+20
Elemental I (atoms)	2.3712E+17	1.2480E+16
Organic I (atoms)	7.3335E+15	3.8599E+14
Aerosols (kg)	2.0376E-04	2.0585E-06

Detailed model information at time (H) = 1.9279

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	8.9614E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0432E+00

EAB Doses:

Time (h) = 1.9279	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.9279	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.9279	Ci	kg	Atoms	Decay
Co-58	9.3883E-02	2.9525E-09	3.0656E+16	7.5477E+12
Co-60	1.1245E-01	9.9479E-08	9.9846E+17	9.0390E+12
Kr-85	2.0267E+02	5.1658E-04	3.6599E+21	1.5262E+16
Kr-85m	3.1683E+03	3.8500E-07	2.7276E+18	2.5453E+17
Kr-87	2.9324E+03	1.0353E-07	7.1661E+17	2.8067E+17
Kr-88	7.3886E+03	5.8924E-07	4.0323E+18	6.1689E+17
Rb-86	4.4130E+00	5.4235E-08	3.7978E+17	4.6333E+14
Sr-89	1.3740E+02	4.7293E-06	3.2001E+19	1.1047E+16
Sr-90	1.5623E+01	1.1453E-04	7.6636E+20	1.2558E+15
Sr-91	1.6234E+02	4.4783E-08	2.9636E+17	1.3447E+16
Sr-92	1.2060E+02	9.5950E-09	6.2807E+16	1.0794E+16
Y-90	3.1214E-01	5.7372E-10	3.8389E+15	2.1154E+13
Y-91	1.7256E+00	7.0363E-08	4.6564E+17	1.3793E+14
Y-92	2.3946E+01	2.4885E-09	1.6289E+16	1.4502E+15
Y-93	1.9492E+00	5.8425E-10	3.7832E+15	1.6117E+14
Zr-95	2.2049E+00	1.0263E-07	6.5060E+17	1.7726E+14
Zr-97	2.1153E+00	1.1065E-09	6.8698E+15	1.7292E+14
Nb-95	2.2180E+00	5.6723E-08	3.5957E+17	1.7829E+14
Mo-99	3.0579E+01	6.3757E-08	3.8783E+17	2.4686E+15
Tc-99m	2.7319E+01	5.1956E-09	3.1604E+16	2.1864E+15
Ru-103	2.5785E+01	7.9893E-07	4.6711E+18	2.0732E+15
Ru-105	1.3225E+01	1.9675E-09	1.1284E+16	1.1343E+15
Ru-106	1.0629E+01	3.1771E-06	1.8050E+19	8.5442E+14
Rh-105	1.6856E+01	1.9970E-08	1.1454E+17	1.3559E+15
Sb-127	3.5081E+01	1.3136E-07	6.2290E+17	2.8285E+15
Sb-129	7.7915E+01	1.3856E-08	6.4682E+16	6.6948E+15
Te-127	3.5096E+01	1.3298E-08	6.3058E+16	2.8166E+15
Te-127m	4.7386E+00	5.0237E-07	2.3821E+18	3.8088E+14
Te-129	8.7885E+01	4.1965E-09	1.9591E+16	7.2255E+15
Te-129m	1.5579E+01	5.1713E-07	2.4142E+18	1.2521E+15
Te-131m	4.5478E+01	5.7033E-08	2.6218E+17	3.6904E+15
Te-132	4.6164E+02	1.5206E-06	6.9373E+18	3.7242E+16

I-131	2.1467E+03	1.7316E-05	7.9602E+19	2.1737E+17
I-132	2.3711E+03	2.2971E-07	1.0480E+18	2.5569E+17
I-133	4.1899E+03	3.6987E-06	1.6747E+19	4.3097E+17
I-134	1.0796E+03	4.0471E-08	1.8188E+17	1.7332E+17
I-135	3.4110E+03	9.7128E-07	4.3327E+18	3.6444E+17
Xe-133	2.8077E+04	1.5000E-04	6.7919E+20	2.1171E+18
Xe-135	1.1603E+04	4.5435E-06	2.0268E+19	8.8073E+17
Cs-134	4.9433E+02	3.8207E-04	1.7171E+21	5.1858E+16
Cs-136	1.3706E+02	1.8701E-06	8.2810E+18	1.4396E+16
Cs-137	3.0816E+02	3.5428E-03	1.5573E+22	3.2328E+16
Ba-139	9.4789E+01	5.7950E-09	2.5107E+16	9.4678E+15
Ba-140	2.3964E+02	3.2733E-06	1.4080E+19	1.9280E+16
La-140	6.1484E+00	1.1062E-08	4.7582E+16	3.9866E+14
La-141	1.6235E+00	2.8707E-10	1.2261E+15	1.4044E+14
La-142	9.3638E-01	6.5412E-11	2.7741E+14	9.1294E+13
Ce-141	5.5173E+00	1.9363E-07	8.2702E+17	4.4357E+14
Ce-143	5.2248E+00	7.8678E-09	3.3133E+16	4.2361E+14
Ce-144	4.4186E+00	1.3854E-06	5.7936E+18	3.5519E+14
Pr-143	2.1167E+00	3.1433E-08	1.3237E+17	1.6997E+14
Nd-147	8.9899E-01	1.1113E-08	4.5525E+16	7.2340E+13
Np-239	6.4779E+01	2.7923E-07	7.0358E+17	5.2332E+15
Pu-238	2.2073E-02	1.2893E-06	3.2624E+18	1.7743E+12
Pu-239	1.4752E-03	2.3734E-05	5.9803E+19	1.1857E+11
Pu-240	1.5829E-03	6.9468E-06	1.7431E+19	1.2724E+11
Pu-241	7.5976E-01	7.3754E-06	1.8430E+19	6.1071E+13
Am-241	4.6858E-04	1.3653E-07	3.4115E+17	3.7661E+10
Cm-242	1.1735E-01	3.5408E-08	8.8113E+16	9.4338E+12
Cm-244	1.2791E-02	1.5811E-07	3.9022E+17	1.0282E+12

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.9279	Atmosphere	Sump	
Noble gases (atoms)	4.3668E+21	0.0000E+00	
Elemental I (atoms)	5.1992E+18	0.0000E+00	
Organic I (atoms)	1.6080E+17	0.0000E+00	
Aerosols (kg)	4.1192E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.8036E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.1695E-08
Total I (Ci)			1.3198E+04

Time (h) = 1.9279	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.0069E+18
Organic I (atoms)	0.0000E+00	1.8578E+17
Aerosols (kg)	0.0000E+00	5.1247E-03

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 1.9279 Leakage Transport

Noble gases (atoms)	4.5609E+21
Elemental I (atoms)	1.1587E+19
Organic I (atoms)	3.5836E+17
Aerosols (kg)	9.4983E-03

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.9279	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.9067E+20
Elemental I (atoms)	2.9465E+17	1.5508E+16
Organic I (atoms)	9.1128E+15	4.7963E+14
Aerosols (kg)	2.5139E-04	2.5396E-06

Detailed model information at time (H) = 2.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	8.9614E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0481E+00

EAB Doses:

Time (h) = 2.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 2.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 2.0000	Ci	kg	Atoms	Decay
Co-58	1.0053E-01	3.1615E-09	3.2826E+16	8.5132E+12
Co-60	1.2041E-01	1.0652E-07	1.0692E+18	1.0195E+13
Kr-85	2.2182E+02	5.6539E-04	4.0057E+21	1.7392E+16
Kr-85m	3.4293E+03	4.1670E-07	2.9523E+18	2.8765E+17
Kr-87	3.0858E+03	1.0894E-07	7.5410E+17	3.1090E+17
Kr-88	7.9457E+03	6.3367E-07	4.3364E+18	6.9387E+17
Rb-86	4.6427E+00	5.7058E-08	3.9955E+17	5.0792E+14
Sr-89	1.4712E+02	5.0641E-06	3.4266E+19	1.2460E+16
Sr-90	1.6729E+01	1.2264E-04	8.2064E+20	1.4165E+15
Sr-91	1.7292E+02	4.7703E-08	3.1569E+17	1.5112E+16
Sr-92	1.2679E+02	1.0087E-08	6.6026E+16	1.2023E+16
Y-90	3.4138E-01	6.2746E-10	4.1985E+15	2.4308E+13
Y-91	1.8491E+00	7.5401E-08	4.9898E+17	1.5566E+14
Y-92	2.6263E+01	2.7293E-09	1.7866E+16	1.6867E+15
Y-93	2.0770E+00	6.2254E-10	4.0312E+15	1.8117E+14
Zr-95	2.3609E+00	1.0990E-07	6.9666E+17	1.9994E+14
Zr-97	2.2584E+00	1.1814E-09	7.3346E+15	1.9464E+14
Nb-95	2.3751E+00	6.0740E-08	3.8504E+17	2.0109E+14
Mo-99	3.2720E+01	6.8221E-08	4.1498E+17	2.7829E+15
Tc-99m	2.9252E+01	5.5630E-09	3.3840E+16	2.4662E+15
Ru-103	2.7609E+01	8.5547E-07	5.0017E+18	2.3384E+15
Ru-105	1.4003E+01	2.0832E-09	1.1948E+16	1.2695E+15
Ru-106	1.1382E+01	3.4021E-06	1.9328E+19	9.6373E+14
Rh-105	1.8044E+01	2.1378E-08	1.2261E+17	1.5291E+15
Sb-127	3.7545E+01	1.4059E-07	6.6666E+17	3.1892E+15
Sb-129	8.2474E+01	1.4666E-08	6.8467E+16	7.4914E+15
Te-127	3.7572E+01	1.4237E-08	6.7508E+16	3.1766E+15
Te-127m	5.0743E+00	5.3795E-07	2.5509E+18	4.2961E+14
Te-129	9.3360E+01	4.4580E-09	2.0811E+16	8.1101E+15
Te-129m	1.6682E+01	5.5376E-07	2.5852E+18	1.4123E+15
Te-131m	4.8618E+01	6.0970E-08	2.8028E+17	4.1577E+15
Te-132	4.9402E+02	1.6273E-06	7.4239E+18	4.1988E+16
I-131	2.2646E+03	1.8267E-05	8.3974E+19	2.3912E+17
I-132	2.4822E+03	2.4047E-07	1.0971E+18	2.7969E+17
I-133	4.4105E+03	3.8935E-06	1.7629E+19	4.7338E+17
I-134	1.0761E+03	4.0338E-08	1.8128E+17	1.8395E+17
I-135	3.5721E+03	1.0172E-06	4.5374E+18	3.9887E+17
Xe-133	3.0723E+04	1.6414E-04	7.4320E+20	2.4122E+18
Xe-135	1.2680E+04	4.9652E-06	2.2149E+19	1.0027E+18
Cs-134	5.2011E+02	4.0199E-04	1.8066E+21	5.6853E+16
Cs-136	1.4419E+02	1.9674E-06	8.7116E+18	1.5781E+16
Cs-137	3.2423E+02	3.7276E-03	1.6386E+22	3.5441E+16
Ba-139	9.7888E+01	5.9845E-09	2.5928E+16	1.0425E+16
Ba-140	2.5657E+02	3.5046E-06	1.5075E+19	2.1745E+16
La-140	6.7563E+00	1.2155E-08	5.2287E+16	4.6053E+14
La-141	1.7165E+00	3.0352E-10	1.2964E+15	1.5703E+14
La-142	9.7072E-01	6.7811E-11	2.8758E+14	1.0077E+14
Ce-141	5.9079E+00	2.0734E-07	8.8556E+17	5.0031E+14
Ce-143	5.5864E+00	8.4123E-09	3.5426E+16	4.7730E+14
Ce-144	4.7315E+00	1.4835E-06	6.2039E+18	4.0063E+14
Pr-143	2.2668E+00	3.3663E-08	1.4177E+17	1.9173E+14
Nd-147	9.6248E-01	1.1897E-08	4.8740E+16	8.1584E+13
Np-239	6.9306E+01	2.9874E-07	7.5275E+17	5.8991E+15
Pu-238	2.3636E-02	1.3807E-06	3.4935E+18	2.0013E+12
Pu-239	1.5797E-03	2.5415E-05	6.4039E+19	1.3374E+11
Pu-240	1.6951E-03	7.4388E-06	1.8666E+19	1.4352E+11
Pu-241	8.1357E-01	7.8977E-06	1.9735E+19	6.8884E+13
Am-241	5.0177E-04	1.4620E-07	3.6532E+17	4.2480E+10
Cm-242	1.2566E-01	3.7916E-08	9.4353E+16	1.0641E+13
Cm-244	1.3697E-02	1.6931E-07	4.1786E+17	1.1597E+12

Reactor Enclosure Transport Group Inventory:

Time (h) = 2.0000	Atmosphere	Sump	
Noble gases (atoms)	4.7791E+21	0.0000E+00	
Elemental I (atoms)	5.4952E+18	0.0000E+00	
Organic I (atoms)	1.6996E+17	0.0000E+00	
Aerosols (kg)	4.3373E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.1174E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.5506E-08
Total I (Ci)			1.3806E+04

Time (h) = 2.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.6299E+18
Organic I (atoms)	0.0000E+00	2.0505E+17
Aerosols (kg)	0.0000E+00	5.6378E-03

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 2.0000	Leakage Transport
Noble gases (atoms)	5.0011E+21
Elemental I (atoms)	1.2545E+19
Organic I (atoms)	3.8798E+17
Aerosols (kg)	1.0255E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 2.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.1814E+20
Elemental I (atoms)	3.2519E+17	1.7115E+16
Organic I (atoms)	1.0057E+16	5.2934E+14
Aerosols (kg)	2.7654E-04	2.7937E-06

Detailed model information at time (H) = 3.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	8.9614E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.1463E+00

EAB Doses:

Time (h) = 3.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 3.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 3.0000	Ci	kg	Atoms	Decay
Co-58	1.3672E-01	4.2997E-09	4.4644E+16	2.5467E+13
Co-60	1.6383E-01	1.4493E-07	1.4547E+18	3.0506E+13
Kr-85	4.8223E+02	1.2291E-03	8.7081E+21	6.6255E+16
Kr-85m	6.3862E+03	7.7601E-07	5.4979E+18	9.8119E+17
Kr-87	3.8895E+03	1.3731E-07	9.5048E+17	8.1833E+17
Kr-88	1.3532E+04	1.0792E-06	7.3853E+18	2.2248E+18
Rb-86	5.8302E+00	7.1653E-08	5.0175E+17	1.2457E+15
Sr-89	2.0006E+02	6.8862E-06	4.6595E+19	3.7269E+16
Sr-90	2.2762E+01	1.6687E-04	1.1165E+21	4.2383E+15
Sr-91	2.1872E+02	6.0337E-08	3.9929E+17	4.3201E+16
Sr-92	1.3357E+02	1.0627E-08	6.9560E+16	3.0798E+16
Y-90	6.7019E-01	1.2318E-09	8.2424E+15	9.2603E+13
Y-91	2.5543E+00	1.0416E-07	6.8928E+17	4.6957E+14
Y-92	5.2416E+01	5.4474E-09	3.5657E+16	6.9727E+15

Y-93	2.6385E+00	7.9084E-10	5.1210E+15	5.1930E+14
Zr-95	3.2108E+00	1.4946E-07	9.4744E+17	5.9808E+14
Zr-97	2.9493E+00	1.5428E-09	9.5783E+15	5.6758E+14
Nb-95	3.2315E+00	8.2641E-08	5.2387E+17	6.0170E+14
Mo-99	4.4053E+01	9.1850E-08	5.5872E+17	8.2719E+15
Tc-99m	3.9733E+01	7.5564E-09	4.5965E+16	7.3686E+15
Ru-103	3.7537E+01	1.1631E-06	6.8002E+18	6.9937E+15
Ru-105	1.6299E+01	2.4247E-09	1.3907E+16	3.4498E+15
Ru-106	1.5485E+01	4.6285E-06	2.6296E+19	2.8835E+15
Rh-105	2.4417E+01	2.8928E-08	1.6591E+17	4.5625E+15
Sb-127	5.0701E+01	1.8986E-07	9.0026E+17	9.4975E+15
Sb-129	9.5578E+01	1.6997E-08	7.9345E+16	2.0304E+16
Te-127	5.0945E+01	1.9304E-08	9.1537E+16	9.4806E+15
Te-127m	6.9045E+00	7.3199E-07	3.4710E+18	1.2855E+15
Te-129	1.1342E+02	5.4160E-09	2.5284E+16	2.2626E+16
Te-129m	2.2698E+01	7.5345E-07	3.5173E+18	4.2262E+15
Te-131m	6.4638E+01	8.1061E-08	3.7264E+17	1.2261E+16
Te-132	6.6623E+02	2.1945E-06	1.0012E+19	1.2494E+17
I-131	2.8857E+03	2.3276E-05	1.0700E+20	6.0276E+17
I-132	2.6326E+03	2.5505E-07	1.1636E+18	6.4488E+17
I-133	5.4548E+03	4.8153E-06	2.1803E+19	1.1708E+18
I-134	6.2406E+02	2.3393E-08	1.0513E+17	3.0209E+17
I-135	4.1129E+03	1.1711E-06	5.2242E+18	9.4348E+17
Xe-133	6.6520E+04	3.5538E-04	1.6091E+21	9.1654E+18
Xe-135	2.6434E+04	1.0351E-05	4.6175E+19	3.7382E+18
Cs-134	6.5414E+02	5.0558E-04	2.2721E+21	1.3957E+17
Cs-136	1.8095E+02	2.4690E-06	1.0933E+19	3.8686E+16
Cs-137	4.0780E+02	4.6883E-03	2.0609E+22	8.7006E+16
Ba-139	8.0548E+01	4.9244E-09	2.1335E+16	2.3273E+16
Ba-140	3.4829E+02	4.7575E-06	2.0465E+19	6.4970E+16
La-140	1.4155E+01	2.5467E-08	1.0955E+17	1.8585E+15
La-141	1.9578E+00	3.4619E-10	1.4786E+15	4.2157E+14
La-142	8.4247E-01	5.8852E-11	2.4959E+14	2.3148E+14
Ce-141	8.0335E+00	2.8194E-07	1.2042E+18	1.4965E+15
Ce-143	7.4428E+00	1.1208E-08	4.7199E+16	1.4094E+15
Ce-144	6.4370E+00	2.0182E-06	8.4401E+18	1.1987E+15
Pr-143	3.0923E+00	4.5921E-08	1.9339E+17	5.7447E+14
Nd-147	1.3061E+00	1.6145E-08	6.6140E+16	2.4371E+14
Np-239	9.3147E+01	4.0151E-07	1.0117E+18	1.7515E+16
Pu-238	3.2160E-02	1.8785E-06	4.7532E+18	5.9882E+12
Pu-239	2.1496E-03	3.4584E-05	8.7143E+19	4.0022E+11
Pu-240	2.3063E-03	1.0121E-05	2.5396E+19	4.2944E+11
Pu-241	1.1069E+00	1.0745E-05	2.6851E+19	2.0611E+14
Am-241	6.8289E-04	1.9897E-07	4.9718E+17	1.2713E+11
Cm-242	1.7095E-01	5.1578E-08	1.2835E+17	3.1835E+13
Cm-244	1.8636E-02	2.3035E-07	5.6853E+17	3.4701E+12

Reactor Enclosure Transport Group Inventory:

Time (h) = 3.0000	Atmosphere	Sump	
Noble gases (atoms)	1.0377E+22	0.0000E+00	
Elemental I (atoms)	7.4017E+18	0.0000E+00	
Organic I (atoms)	2.2892E+17	0.0000E+00	
Aerosols (kg)	5.4739E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.7085E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.4004E-08
Total I (Ci)			1.5710E+04

Time (h) = 3.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.7498E+19
Organic I (atoms)	0.0000E+00	5.4118E+17
Aerosols (kg)	0.0000E+00	1.4284E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 3.0000 Leakage Transport

Noble gases (atoms)	1.1245E+22
Elemental I (atoms)	2.5986E+19
Organic I (atoms)	8.0369E+17
Aerosols (kg)	2.0466E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 3.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	8.5306E+20
Elemental I (atoms)	8.5794E+17	4.5155E+16
Organic I (atoms)	2.6534E+16	1.3966E+15
Aerosols (kg)	7.0039E-04	7.0750E-06

Detailed model information at time (H) = 4.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.1690E-01

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.2607E+00

EAB Doses:

Time (h) = 4.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 4.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 4.0000	Ci	kg	Atoms	Decay
Co-58	1.3248E-01	4.1664E-09	4.3260E+16	4.3519E+13
Co-60	1.5881E-01	1.4050E-07	1.4101E+18	5.2143E+13
Kr-85	7.2176E+02	1.8396E-03	1.3034E+22	1.4826E+17
Kr-85m	8.1881E+03	9.9497E-07	7.0492E+18	1.9823E+18
Kr-87	3.3753E+03	1.1916E-07	8.2482E+17	1.3194E+18
Kr-88	1.5868E+04	1.2654E-06	8.6598E+18	4.2507E+18
Rb-86	5.5884E+00	6.8681E-08	4.8094E+17	2.0099E+15
Sr-89	1.9382E+02	6.6716E-06	4.5143E+19	6.3682E+16
Sr-90	2.2065E+01	1.6176E-04	1.0824E+21	7.2444E+15
Sr-91	1.9711E+02	5.4374E-08	3.5984E+17	7.1065E+16
Sr-92	1.0026E+02	7.9766E-09	5.2213E+16	4.6376E+16
Y-90	8.7656E-01	1.6111E-09	1.0781E+16	1.9477E+14
Y-91	2.5164E+00	1.0261E-07	6.7906E+17	8.0936E+14
Y-92	6.1813E+01	6.4239E-09	4.2050E+16	1.4564E+16
Y-93	2.3881E+00	7.1578E-10	4.6350E+15	8.5614E+14
Zr-95	3.1111E+00	1.4482E-07	9.1802E+17	1.0220E+15
Zr-97	2.7442E+00	1.4355E-09	8.9120E+15	9.4926E+14
Nb-95	3.1326E+00	8.0110E-08	5.0783E+17	1.0285E+15
Mo-99	4.2258E+01	8.8109E-08	5.3596E+17	1.4060E+16
Tc-99m	3.8417E+01	7.3060E-09	4.4442E+16	1.2580E+16
Ru-103	3.6361E+01	1.1267E-06	6.5872E+18	1.1949E+16
Ru-105	1.3516E+01	2.0108E-09	1.1532E+16	5.4437E+15
Ru-106	1.5010E+01	4.4864E-06	2.5489E+19	4.9285E+15
Rh-105	2.3494E+01	2.7835E-08	1.5964E+17	7.7738E+15
Sb-127	4.8782E+01	1.8267E-07	8.6619E+17	1.6169E+16
Sb-129	7.8918E+01	1.4034E-08	6.5514E+16	3.1972E+16
Te-127	4.9207E+01	1.8645E-08	8.8413E+16	1.6173E+16
Te-127m	6.6938E+00	7.0964E-07	3.3650E+18	2.1974E+15
Te-129	9.7424E+01	4.6520E-09	2.1717E+16	3.6416E+16
Te-129m	2.2000E+01	7.3029E-07	3.4092E+18	7.2235E+15
Te-131m	6.1229E+01	7.6785E-08	3.5298E+17	2.0700E+16
Te-132	6.4014E+02	2.1085E-06	9.6196E+18	2.1254E+17
I-131	2.7792E+03	2.2417E-05	1.0305E+20	9.8211E+17
I-132	2.0633E+03	1.9989E-07	9.1196E+17	9.5644E+17
I-133	5.0992E+03	4.5014E-06	2.0382E+19	1.8774E+18
I-134	2.7356E+02	1.0254E-08	4.6085E+16	3.5903E+17
I-135	3.5793E+03	1.0192E-06	4.5465E+18	1.4579E+18
Xe-133	9.9105E+04	5.2946E-04	2.3973E+21	2.0450E+19
Xe-135	3.7439E+04	1.4661E-05	6.5398E+19	8.1070E+18
Cs-134	6.2795E+02	4.8534E-04	2.1812E+21	2.2538E+17
Cs-136	1.7333E+02	2.3650E-06	1.0472E+19	6.2399E+16
Cs-137	3.9149E+02	4.5008E-03	1.9784E+22	1.4050E+17

Ba-139	4.7223E+01	2.8870E-09	1.2508E+16	3.1647E+16
Ba-140	3.3687E+02	4.6014E-06	1.9793E+19	1.1092E+17
La-140	1.9153E+01	3.4459E-08	1.4823E+17	4.0547E+15
La-141	1.5910E+00	2.8133E-10	1.2016E+15	6.5875E+14
La-142	5.2095E-01	3.6391E-11	1.5433E+14	3.2122E+14
Ce-141	7.7822E+00	2.7312E-07	1.1665E+18	2.5571E+15
Ce-143	7.0650E+00	1.0639E-08	4.4803E+16	2.3822E+15
Ce-144	6.2393E+00	1.9562E-06	8.1809E+18	2.0488E+15
Pr-143	3.0063E+00	4.4644E-08	1.8801E+17	9.8334E+14
Nd-147	1.2628E+00	1.5609E-08	6.3947E+16	4.1598E+14
Np-239	8.9195E+01	3.8448E-07	9.6877E+17	2.9742E+16
Pu-238	3.1175E-02	1.8210E-06	4.6077E+18	1.0235E+13
Pu-239	2.0841E-03	3.3530E-05	8.4487E+19	6.8413E+11
Pu-240	2.2357E-03	9.8113E-06	2.4619E+19	7.3402E+11
Pu-241	1.0730E+00	1.0416E-05	2.6029E+19	3.5230E+14
Am-241	6.6218E-04	1.9293E-07	4.8210E+17	2.1733E+11
Cm-242	1.6568E-01	4.9991E-08	1.2440E+17	5.4409E+13
Cm-244	1.8066E-02	2.2330E-07	5.5113E+17	5.9313E+12

Reactor Enclosure Transport Group Inventory:

Time (h) = 4.0000	Atmosphere	Sump	
Noble gases (atoms)	1.5513E+22	0.0000E+00	
Elemental I (atoms)	7.6559E+18	0.0000E+00	
Organic I (atoms)	2.3678E+17	0.0000E+00	
Aerosols (kg)	5.2570E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.3458E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.8660E-08
Total I (Ci)			1.3795E+04

Time (h) = 4.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.9745E+19
Organic I (atoms)	0.0000E+00	9.1994E+17
Aerosols (kg)	0.0000E+00	2.3379E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 4.0000	Leakage Transport
Noble gases (atoms)	1.7481E+22
Elemental I (atoms)	3.9226E+19
Organic I (atoms)	1.2132E+18
Aerosols (kg)	2.9795E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 4.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.9350E+21
Elemental I (atoms)	1.4583E+18	7.6751E+16
Organic I (atoms)	4.5101E+16	2.3737E+15
Aerosols (kg)	1.1462E-03	1.1578E-05

Detailed model information at time (H) = 5.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.1690E-01

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.4172E+00

EAB Doses:

Time (h) = 5.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 5.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 5.0000	Ci	kg	Atoms	Decay
Co-58	1.2020E-01	3.7802E-09	3.9250E+16	6.0299E+13
Co-60	1.4415E-01	1.2752E-07	1.2799E+18	7.2261E+13
Kr-85	9.4208E+02	2.4012E-03	1.7012E+22	2.6074E+17
Kr-85m	9.1555E+03	1.1125E-06	7.8821E+18	3.1606E+18
Kr-87	2.5543E+03	9.0178E-08	6.2421E+17	1.7201E+18
Kr-88	1.6226E+04	1.2940E-06	8.8553E+18	6.4334E+18
Rb-86	5.0560E+00	6.2138E-08	4.3512E+17	2.7165E+15
Sr-89	1.7583E+02	6.0522E-06	4.0952E+19	8.8229E+16
Sr-90	2.0028E+01	1.4682E-04	9.8244E+20	1.0040E+16
Sr-91	1.6632E+02	4.5882E-08	3.0363E+17	9.5159E+16
Sr-92	7.0466E+01	5.6062E-09	3.6697E+16	5.7606E+16
Y-90	1.0023E+00	1.8423E-09	1.2327E+16	3.1849E+14
Y-91	2.3186E+00	9.4545E-08	6.2568E+17	1.1303E+15
Y-92	6.0438E+01	6.2810E-09	4.1114E+16	2.2636E+16
Y-93	2.0238E+00	6.0661E-10	3.9280E+15	1.1487E+15
Zr-95	2.8226E+00	1.3139E-07	8.3289E+17	1.4161E+15
Zr-97	2.3907E+00	1.2506E-09	7.7642E+15	1.2900E+15
Nb-95	2.8433E+00	7.2713E-08	4.6094E+17	1.4253E+15
Mo-99	3.7956E+01	7.9139E-08	4.8140E+17	1.9385E+16
Tc-99m	3.4750E+01	6.6087E-09	4.0200E+16	1.7412E+16
Ru-103	3.2980E+01	1.0219E-06	5.9747E+18	1.6554E+16
Ru-105	1.0495E+01	1.5613E-09	8.9547E+15	7.0310E+15
Ru-106	1.3623E+01	4.0719E-06	2.3134E+19	6.8298E+15
Rh-105	2.1132E+01	2.5036E-08	1.4359E+17	1.0736E+16
Sb-127	4.3947E+01	1.6456E-07	7.8034E+17	2.2325E+16
Sb-129	6.1013E+01	1.0850E-08	5.0651E+16	4.1221E+16
Te-127	4.4494E+01	1.6859E-08	7.9945E+16	2.2373E+16
Te-127m	6.0763E+00	6.4418E-07	3.0546E+18	3.0454E+15
Te-129	7.8094E+01	3.7290E-09	1.7408E+16	4.7764E+16
Te-129m	1.9965E+01	6.6272E-07	3.0938E+18	1.0010E+16
Te-131m	5.4306E+01	6.8104E-08	3.1308E+17	2.8369E+16
Te-132	5.7591E+02	1.8970E-06	8.6545E+18	2.9328E+17
I-131	2.5275E+03	2.0387E-05	9.3720E+19	1.3345E+18
I-132	1.5476E+03	1.4993E-07	6.8403E+17	1.1932E+18
I-133	4.5012E+03	3.9735E-06	1.7992E+19	2.5145E+18
I-134	1.1323E+02	4.2445E-09	1.9076E+16	3.8319E+17
I-135	2.9414E+03	8.3757E-07	3.7363E+18	1.8898E+18
Xe-133	1.2874E+05	6.8780E-04	3.1143E+21	3.5857E+19
Xe-135	4.6053E+04	1.8034E-05	8.0445E+19	1.3768E+19
Cs-134	5.6899E+02	4.3977E-04	1.9764E+21	3.0483E+17
Cs-136	1.5672E+02	2.1383E-06	9.4685E+18	8.4307E+16
Cs-137	3.5474E+02	4.0783E-03	1.7927E+22	1.9004E+17
Ba-139	2.5923E+01	1.5848E-09	6.8662E+15	3.6367E+16
Ba-140	3.0507E+02	4.1672E-06	1.7925E+19	1.5354E+17
La-140	2.2290E+01	4.0102E-08	1.7250E+17	6.7817E+15
La-141	1.2106E+00	2.1407E-10	9.1429E+14	8.4379E+14
La-142	3.0162E-01	2.1070E-11	8.9357E+13	3.7457E+14
Ce-141	7.0587E+00	2.4773E-07	1.0581E+18	3.5426E+15
Ce-143	6.2795E+00	9.4559E-09	3.9821E+16	3.2680E+15
Ce-144	5.6627E+00	1.7754E-06	7.4249E+18	2.8391E+15
Pr-143	2.7364E+00	4.0636E-08	1.7113E+17	1.3646E+15
Nd-147	1.1432E+00	1.4131E-08	5.7891E+16	5.7574E+14
Np-239	7.9974E+01	3.4473E-07	8.6862E+17	4.0973E+16
Pu-238	2.8297E-02	1.6529E-06	4.1824E+18	1.4185E+13
Pu-239	1.8920E-03	3.0439E-05	7.6698E+19	9.4816E+11
Pu-240	2.0293E-03	8.9055E-06	2.2346E+19	1.0172E+12
Pu-241	9.7396E-01	9.4548E-06	2.3626E+19	4.8823E+14
Am-241	6.0122E-04	1.7517E-07	4.3772E+17	3.0122E+11
Cm-242	1.5036E-01	4.5367E-08	1.1290E+17	7.5396E+13
Cm-244	1.6398E-02	2.0268E-07	5.0024E+17	8.2199E+12

Reactor Enclosure Transport Group Inventory:

Time (h) = 5.0000	Atmosphere	Sump	
Noble gases (atoms)	2.0224E+22	0.0000E+00	
Elemental I (atoms)	7.6199E+18	0.0000E+00	
Organic I (atoms)	2.3567E+17	0.0000E+00	
Aerosols (kg)	4.7635E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.6140E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.9125E-08
Total I (Ci)			1.1631E+04

Time (h) = 5.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.2101E+19
Organic I (atoms)	0.0000E+00	1.3021E+18
Aerosols (kg)	0.0000E+00	3.1826E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 5.0000 Leakage Transport

Noble gases (atoms)	2.3708E+22
Elemental I (atoms)	5.2284E+19
Organic I (atoms)	1.6170E+18
Aerosols (kg)	3.8167E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 5.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.4269E+21
Elemental I (atoms)	2.0640E+18	1.0863E+17
Organic I (atoms)	6.3835E+16	3.3597E+15
Aerosols (kg)	1.5603E-03	1.5760E-05

Detailed model information at time (H) = 6.0000

Natural deposition - Powers' Model, Compartment 1
Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.1690E-01

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.5931E+00

EAB Doses:

Time (h) = 6.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 6.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 6.0000	Ci	kg	Atoms	Decay
Co-58	1.0729E-01	3.3740E-09	3.5033E+16	7.5355E+13
Co-60	1.2871E-01	1.1387E-07	1.1429E+18	9.0320E+13
Kr-85	1.1447E+03	2.9177E-03	2.0672E+22	4.0125E+17
Kr-85m	9.5302E+03	1.1581E-06	8.2046E+18	4.4228E+18
Kr-87	1.7996E+03	6.3532E-08	4.3977E+17	2.0113E+18
Kr-88	1.5446E+04	1.2318E-06	8.4299E+18	8.5727E+18
Rb-86	4.5062E+00	5.5380E-08	3.8780E+17	3.3493E+15
Sr-89	1.5691E+02	5.4010E-06	3.6545E+19	1.1025E+17
Sr-90	1.7883E+01	1.3110E-04	8.7723E+20	1.2549E+16
Sr-91	1.3806E+02	3.8086E-08	2.5204E+17	1.1527E+17
Sr-92	4.8720E+01	3.8761E-09	2.5372E+16	6.5414E+16
Y-90	1.0780E+00	1.9813E-09	1.3258E+16	4.5532E+14
Y-91	2.0990E+00	8.5589E-08	5.6640E+17	1.4226E+15
Y-92	5.4291E+01	5.6422E-09	3.6933E+16	3.0187E+16
Y-93	1.6873E+00	5.0572E-10	3.2748E+15	1.3939E+15
Zr-95	2.5192E+00	1.1727E-07	7.4337E+17	1.7696E+15
Zr-97	2.0489E+00	1.0718E-09	6.6541E+15	1.5835E+15
Nb-95	2.5388E+00	6.4926E-08	4.1157E+17	1.7815E+15
Mo-99	3.3538E+01	6.9926E-08	4.2536E+17	2.4116E+16
Tc-99m	3.0899E+01	5.8763E-09	3.5746E+16	2.1733E+16
Ru-103	2.9427E+01	9.1179E-07	5.3310E+18	2.0684E+16
Ru-105	8.0168E+00	1.1926E-09	6.8401E+15	8.2502E+15
Ru-106	1.2163E+01	3.6356E-06	2.0655E+19	8.5365E+15
Rh-105	1.8671E+01	2.2121E-08	1.2687E+17	1.3368E+16

Sb-127	3.8948E+01	1.4584E-07	6.9157E+17	2.7811E+16
Sb-129	4.6403E+01	8.2519E-09	3.8522E+16	4.8294E+16
Te-127	3.9571E+01	1.4994E-08	7.1099E+16	2.7917E+16
Te-127m	5.4260E+00	5.7524E-07	2.7277E+18	3.8067E+15
Te-129	6.1552E+01	2.9391E-09	1.3721E+16	5.6759E+16
Te-129m	1.7821E+01	5.9156E-07	2.7616E+18	1.2511E+16
Te-131m	4.7384E+01	5.9422E-08	2.7317E+17	3.5096E+16
Te-132	5.0970E+02	1.6789E-06	7.6595E+18	3.6512E+17
I-131	2.2668E+03	1.8284E-05	8.4053E+19	1.6519E+18
I-132	1.1662E+03	1.1298E-07	5.1543E+17	1.3705E+18
I-133	3.9184E+03	3.4590E-06	1.5662E+19	3.0716E+18
I-134	4.6221E+01	1.7326E-09	7.7867E+15	3.9310E+17
I-135	2.3838E+03	6.7879E-07	3.0280E+18	2.2414E+18
Xe-133	1.5568E+05	8.3171E-04	3.7659E+21	5.5012E+19
Xe-135	5.2617E+04	2.0604E-05	9.1911E+19	2.0427E+19
Cs-134	5.0787E+02	3.9254E-04	1.7641E+21	3.7610E+17
Cs-136	1.3958E+02	1.9045E-06	8.4333E+18	1.0392E+17
Cs-137	3.1665E+02	3.6404E-03	1.6002E+22	2.3447E+17
Ba-139	1.3999E+01	8.5583E-10	3.7079E+15	3.8932E+16
Ba-140	2.7179E+02	3.7125E-06	1.5969E+19	1.9172E+17
La-140	2.4208E+01	4.3553E-08	1.8735E+17	9.8388E+15
La-141	9.0620E-01	1.6024E-10	6.8438E+14	9.8307E+14
La-142	1.7179E-01	1.2001E-11	5.0895E+13	4.0513E+14
Ce-141	6.2981E+00	2.2104E-07	9.4405E+17	4.4266E+15
Ce-143	5.4905E+00	8.2678E-09	3.4818E+16	4.0466E+15
Ce-144	5.0558E+00	1.5851E-06	6.6291E+18	3.5485E+15
Pr-143	2.4500E+00	3.6383E-08	1.5322E+17	1.7078E+15
Nd-147	1.0181E+00	1.2585E-08	5.1556E+16	7.1878E+14
Np-239	7.0539E+01	3.0406E-07	7.6615E+17	5.0933E+16
Pu-238	2.5267E-02	1.4759E-06	3.7345E+18	1.7730E+13
Pu-239	1.6896E-03	2.7183E-05	6.8494E+19	1.1852E+12
Pu-240	1.8120E-03	7.9519E-06	1.9953E+19	1.2715E+12
Pu-241	8.6966E-01	8.4423E-06	2.1096E+19	6.1025E+14
Am-241	5.3700E-04	1.5646E-07	3.9097E+17	3.7655E+11
Cm-242	1.3424E-01	4.0502E-08	1.0079E+17	9.4232E+13
Cm-244	1.4642E-02	1.8098E-07	4.4667E+17	1.0274E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 6.0000	Atmosphere	Sump	
Noble gases (atoms)	2.4547E+22	0.0000E+00	
Elemental I (atoms)	7.5373E+18	0.0000E+00	
Organic I (atoms)	2.3311E+17	0.0000E+00	
Aerosols (kg)	4.2518E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.8760E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.9752E-08
Total I (Ci)			9.7814E+03

Time (h) = 6.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.4350E+19
Organic I (atoms)	0.0000E+00	1.6809E+18
Aerosols (kg)	0.0000E+00	3.9407E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 6.0000	Leakage Transport
Noble gases (atoms)	2.9927E+22
Elemental I (atoms)	6.5175E+19
Organic I (atoms)	2.0157E+18
Aerosols (kg)	4.5612E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 6.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	5.2951E+21
Elemental I (atoms)	2.6644E+18	1.4023E+17
Organic I (atoms)	8.2404E+16	4.3371E+15
Aerosols (kg)	1.9319E-03	1.9515E-05

Detailed model information at time (H) = 7.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.1690E-01

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.7908E+00

EAB Doses:

Time (h) = 7.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 7.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 7.0000	Ci	kg	Atoms	Decay
Co-58	9.5463E-02	3.0022E-09	3.1171E+16	8.8766E+13
Co-60	1.1457E-01	1.0135E-07	1.0173E+18	1.0641E+14
Kr-85	1.3311E+03	3.3928E-03	2.4038E+22	5.6756E+17
Kr-85m	9.4934E+03	1.1536E-06	8.1729E+18	5.7031E+18
Kr-87	1.2133E+03	4.2833E-08	2.9649E+17	2.2115E+18
Kr-88	1.4072E+04	1.1222E-06	7.6796E+18	1.0558E+19
Rb-86	4.0047E+00	4.9217E-08	3.4464E+17	3.9123E+15
Sr-89	1.3959E+02	4.8049E-06	3.2512E+19	1.2986E+17
Sr-90	1.5918E+01	1.1670E-04	7.8086E+20	1.4784E+16
Sr-91	1.1425E+02	3.1516E-08	2.0857E+17	1.3193E+17
Sr-92	3.3581E+01	2.6716E-09	1.7488E+16	7.0802E+16
Y-90	1.1208E+00	2.0600E-09	1.3784E+16	6.0001E+14
Y-91	1.8920E+00	7.7151E-08	5.1056E+17	1.6865E+15
Y-92	4.6575E+01	4.8403E-09	3.1684E+16	3.6819E+16
Y-93	1.4023E+00	4.2031E-10	2.7217E+15	1.5979E+15
Zr-95	2.2415E+00	1.0434E-07	6.6140E+17	2.0845E+15
Zr-97	1.7506E+00	9.1572E-10	5.6851E+15	1.8346E+15
Nb-95	2.2599E+00	5.7793E-08	3.6635E+17	2.0989E+15
Mo-99	2.9541E+01	6.1594E-08	3.7467E+17	2.8288E+16
Tc-99m	2.7372E+01	5.2055E-09	3.1665E+16	2.5566E+16
Ru-103	2.6175E+01	8.1103E-07	4.7419E+18	2.4362E+16
Ru-105	6.1047E+00	9.0816E-10	5.2086E+15	9.1796E+15
Ru-106	1.0826E+01	3.2360E-06	1.8384E+19	1.0057E+16
Rh-105	1.6426E+01	1.9461E-08	1.1161E+17	1.5689E+16
Sb-127	3.4410E+01	1.2885E-07	6.1100E+17	3.2663E+16
Sb-129	3.5183E+01	6.2565E-09	2.9207E+16	5.3662E+16
Te-127	3.5078E+01	1.3291E-08	6.3026E+16	3.2837E+16
Te-127m	4.8303E+00	5.1209E-07	2.4282E+18	4.4851E+15
Te-129	4.8431E+01	2.3126E-09	1.0796E+16	6.3837E+16
Te-129m	1.5857E+01	5.2636E-07	2.4572E+18	1.4738E+16
Te-131m	4.1215E+01	5.1686E-08	2.3760E+17	4.0954E+16
Te-132	4.4970E+02	1.4813E-06	6.7579E+18	4.2856E+17
I-131	2.0292E+03	1.6368E-05	7.5245E+19	1.9362E+18
I-132	8.9465E+02	8.6673E-08	3.9542E+17	1.5050E+18
I-133	3.4049E+03	3.0057E-06	1.3609E+19	3.5560E+18
I-134	1.8833E+01	7.0597E-10	3.1727E+15	3.9714E+17
I-135	1.9284E+03	5.4910E-07	2.4494E+18	2.5260E+18
Xe-133	1.8014E+05	9.6239E-04	4.3576E+21	7.7573E+19
Xe-135	5.7439E+04	2.2492E-05	1.0033E+20	2.7833E+19
Cs-134	4.5204E+02	3.4938E-04	1.5702E+21	4.3960E+17
Cs-136	1.2397E+02	1.6915E-06	7.4898E+18	1.2135E+17
Cs-137	2.8185E+02	3.2403E-03	1.4244E+22	2.7406E+17
Ba-139	7.5362E+00	4.6073E-10	1.9961E+15	4.0314E+16
Ba-140	2.4138E+02	3.2972E-06	1.4183E+19	2.2566E+17
La-140	2.5308E+01	4.5532E-08	1.9586E+17	1.3096E+16
La-141	6.7622E-01	1.1957E-10	5.1069E+14	1.0871E+15
La-142	9.7545E-02	6.8142E-12	2.8899E+13	4.2251E+14
Ce-141	5.6019E+00	1.9660E-07	8.3969E+17	5.2137E+15
Ce-143	4.7858E+00	7.2066E-09	3.0349E+16	4.7261E+15
Ce-144	4.4999E+00	1.4109E-06	5.9003E+18	4.1806E+15
Pr-143	2.1865E+00	3.2470E-08	1.3674E+17	2.0144E+15
Nd-147	9.0387E-01	1.1173E-08	4.5772E+16	8.4590E+14

Np-239	6.2025E+01	2.6736E-07	6.7367E+17	5.9699E+16
Pu-238	2.2491E-02	1.3138E-06	3.3243E+18	2.0889E+13
Pu-239	1.5042E-03	2.4200E-05	6.0978E+19	1.3965E+12
Pu-240	1.6129E-03	7.0783E-06	1.7761E+19	1.4980E+12
Pu-241	7.7412E-01	7.5148E-06	1.8778E+19	7.1898E+14
Am-241	4.7815E-04	1.3931E-07	3.4812E+17	4.4370E+11
Cm-242	1.1947E-01	3.6046E-08	8.9701E+16	1.1101E+14
Cm-244	1.3033E-02	1.6110E-07	3.9760E+17	1.2105E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 7.0000	Atmosphere	Sump	
Noble gases (atoms)	2.8512E+22	0.0000E+00	
Elemental I (atoms)	7.4510E+18	0.0000E+00	
Organic I (atoms)	2.3044E+17	0.0000E+00	
Aerosols (kg)	3.7842E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.2131E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.1454E-08
Total I (Ci)			8.2759E+03

Time (h) = 7.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.6460E+19
Organic I (atoms)	0.0000E+00	2.0555E+18
Aerosols (kg)	0.0000E+00	4.6163E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 7.0000	Leakage Transport
Noble gases (atoms)	3.6138E+22
Elemental I (atoms)	7.7910E+19
Organic I (atoms)	2.4096E+18
Aerosols (kg)	5.2235E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 7.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	7.5084E+21
Elemental I (atoms)	3.2580E+18	1.7148E+17
Organic I (atoms)	1.0076E+17	5.3034E+15
Aerosols (kg)	2.2631E-03	2.2859E-05

Detailed model information at time (H) = 8.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.1690E-01

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	2.0132E+00

EAB Doses:

Time (h) = 8.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 8.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 8.0000	Ci	kg	Atoms	Decay
Co-58	8.4890E-02	2.6697E-09	2.7719E+16	1.0069E+14
Co-60	1.0192E-01	9.0166E-08	9.0498E+17	1.2073E+14
Kr-85	1.5025E+03	3.8298E-03	2.7133E+22	7.5758E+17
Kr-85m	9.1799E+03	1.1155E-06	7.9030E+18	6.9567E+18
Kr-87	7.9406E+02	2.8033E-08	1.9405E+17	2.3444E+18
Kr-88	1.2444E+04	9.9239E-07	6.7913E+18	1.2336E+19

Rb-86	3.5571E+00	4.3716E-08	3.0612E+17	4.4124E+15
Sr-89	1.2411E+02	4.2721E-06	2.8907E+19	1.4730E+17
Sr-90	1.4161E+01	1.0382E-04	6.9466E+20	1.6774E+16
Sr-91	9.4484E+01	2.6065E-08	1.7249E+17	1.4571E+17
Sr-92	2.3132E+01	1.8403E-09	1.2046E+16	7.4514E+16
Y-90	1.1389E+00	2.0934E-09	1.4007E+16	7.4879E+14
Y-91	1.7027E+00	6.9429E-08	4.5946E+17	1.9241E+15
Y-92	3.8780E+01	4.0302E-09	2.6381E+16	4.2430E+16
Y-93	1.1648E+00	3.4911E-10	2.2606E+15	1.7674E+15
Zr-95	1.9931E+00	9.2778E-08	5.8813E+17	2.3646E+15
Zr-97	1.4947E+00	7.8190E-10	4.8543E+15	2.0491E+15
Nb-95	2.0104E+00	5.1412E-08	3.2591E+17	2.3813E+15
Mo-99	2.6006E+01	5.4223E-08	3.2983E+17	3.1961E+16
Tc-99m	2.4218E+01	4.6058E-09	2.8017E+16	2.8959E+16
Ru-103	2.3269E+01	7.2097E-07	4.2153E+18	2.7632E+16
Ru-105	4.6459E+00	6.9114E-10	3.9639E+15	9.8870E+15
Ru-106	9.6303E+00	2.8785E-06	1.6354E+19	1.1410E+16
Rh-105	1.4427E+01	1.7092E-08	9.8029E+16	1.7728E+16
Sb-127	3.0383E+01	1.1377E-07	5.3949E+17	3.6947E+16
Sb-129	2.6659E+01	4.7408E-09	2.2131E+16	5.7730E+16
Te-127	3.1071E+01	1.1773E-08	5.5828E+16	3.7197E+16
Te-127m	4.2974E+00	4.5560E-07	2.1604E+18	5.0887E+15
Te-129	3.8189E+01	1.8235E-09	8.5129E+15	6.9410E+16
Te-129m	1.4100E+01	4.6804E-07	2.1849E+18	1.6720E+16
Te-131m	3.5828E+01	4.4931E-08	2.0655E+17	4.6047E+16
Te-132	3.9653E+02	1.3061E-06	5.9589E+18	4.8452E+17
I-131	1.8175E+03	1.4660E-05	6.7394E+19	2.1908E+18
I-132	7.0035E+02	6.7849E-08	3.0954E+17	1.6091E+18
I-133	2.9601E+03	2.6131E-06	1.1832E+19	3.9769E+18
I-134	7.6775E+00	2.8780E-10	1.2934E+15	3.9879E+17
I-135	1.5607E+03	4.4442E-07	1.9825E+18	2.7563E+18
Xe-133	2.0234E+05	1.0810E-03	4.8945E+21	1.0322E+20
Xe-135	6.0793E+04	2.3806E-05	1.0619E+20	3.5773E+19
Cs-134	4.0212E+02	3.1080E-04	1.3968E+21	4.9609E+17
Cs-136	1.1004E+02	1.5014E-06	6.6483E+18	1.3682E+17
Cs-137	2.5073E+02	2.8826E-03	1.2671E+22	3.0929E+17
Ba-139	4.0546E+00	2.4788E-10	1.0740E+15	4.1058E+16
Ba-140	2.1425E+02	2.9266E-06	1.2589E+19	2.5580E+17
La-140	2.5793E+01	4.6405E-08	1.9961E+17	1.6459E+16
La-141	5.0430E-01	8.9173E-11	3.8086E+14	1.1647E+15
La-142	5.5354E-02	3.8668E-12	1.6399E+13	4.3237E+14
Ce-141	4.9796E+00	1.7476E-07	7.4642E+17	5.9135E+15
Ce-143	4.1690E+00	6.2778E-09	2.6438E+16	5.3180E+15
Ce-144	4.0028E+00	1.2550E-06	5.2485E+18	4.7429E+15
Pr-143	1.9499E+00	2.8957E-08	1.2195E+17	2.2879E+15
Nd-147	8.0198E-01	9.9134E-09	4.0612E+16	9.5871E+14
Np-239	5.4506E+01	2.3495E-07	5.9200E+17	6.7404E+16
Pu-238	2.0009E-02	1.1688E-06	2.9573E+18	2.3700E+13
Pu-239	1.3383E-03	2.1532E-05	5.4254E+19	1.5845E+12
Pu-240	1.4349E-03	6.2970E-06	1.5801E+19	1.6996E+12
Pu-241	6.8866E-01	6.6852E-06	1.6705E+19	8.1572E+14
Am-241	4.2550E-04	1.2397E-07	3.0978E+17	5.0347E+11
Cm-242	1.0626E-01	3.2062E-08	7.9785E+16	1.2594E+14
Cm-244	1.1594E-02	1.4331E-07	3.5371E+17	1.3734E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 8.0000	Atmosphere	Sump	
Noble gases (atoms)	3.2149E+22	0.0000E+00	
Elemental I (atoms)	7.3679E+18	0.0000E+00	
Organic I (atoms)	2.2787E+17	0.0000E+00	
Aerosols (kg)	3.3662E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.6293E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.4227E-08
Total I (Ci)			7.0464E+03

Time (h) = 8.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.8432E+19
Organic I (atoms)	0.0000E+00	2.4257E+18
Aerosols (kg)	0.0000E+00	5.2173E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 8.0000 Leakage Transport

Noble gases (atoms)	4.2341E+22
Elemental I (atoms)	9.0499E+19
Organic I (atoms)	2.7989E+18
Aerosols (kg)	5.8125E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 8.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.0038E+22
Elemental I (atoms)	3.8449E+18	2.0236E+17
Organic I (atoms)	1.1891E+17	6.2587E+15
Aerosols (kg)	2.5577E-03	2.5835E-05

Detailed model information at time (H) = 10.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.1690E-01

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	2.5442E+00

EAB Doses:

Time (h) = 10.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 10.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 10.0000	Ci	kg	Atoms	Decay
Co-58	6.7112E-02	2.1106E-09	2.1914E+16	1.2073E+14
Co-60	8.0640E-02	7.1338E-08	7.1602E+17	1.4480E+14
Kr-85	1.8052E+03	4.6012E-03	3.2599E+22	1.2013E+18
Kr-85m	8.0937E+03	9.8349E-07	6.9679E+18	9.2775E+18
Kr-87	3.2071E+02	1.1322E-08	7.8372E+16	2.4848E+18
Kr-88	9.1761E+03	7.3179E-07	5.0079E+18	1.5222E+19
Rb-86	2.8057E+00	3.4482E-08	2.4146E+17	5.2510E+15
Sr-89	9.8088E+01	3.3763E-06	2.2845E+19	1.7659E+17
Sr-90	1.1205E+01	8.2141E-05	5.4963E+20	2.0118E+16
Sr-91	6.4607E+01	1.7823E-08	1.1795E+17	1.6652E+17
Sr-92	1.0973E+01	8.7303E-10	5.7147E+15	7.8832E+16
Y-90	1.1221E+00	2.0624E-09	1.3800E+16	1.0477E+15
Y-91	1.3747E+00	5.6055E-08	3.7095E+17	2.3300E+15
Y-92	2.5352E+01	2.6347E-09	1.7246E+16	5.0799E+16
Y-93	8.0338E-01	2.4080E-10	1.5593E+15	2.0250E+15
Zr-95	1.5756E+00	7.3342E-08	4.6492E+17	2.8350E+15
Zr-97	1.0895E+00	5.6993E-10	3.5384E+15	2.3884E+15
Nb-95	1.5906E+00	4.0677E-08	2.5786E+17	2.8559E+15
Mo-99	2.0149E+01	4.2010E-08	2.5555E+17	3.8040E+16
Tc-99m	1.8926E+01	3.5993E-09	2.1894E+16	3.4614E+16
Ru-103	1.8383E+01	5.6961E-07	3.3303E+18	3.3122E+16
Ru-105	2.6901E+00	4.0019E-10	2.2952E+15	1.0835E+16
Ru-106	7.6185E+00	2.2772E-06	1.2937E+19	1.3684E+16
Rh-105	1.1097E+01	1.3147E-08	7.5405E+16	2.1089E+16
Sb-127	2.3682E+01	8.8678E-08	4.2050E+17	4.4070E+16
Sb-129	1.5303E+01	2.7213E-09	1.2704E+16	6.3149E+16
Te-127	2.4363E+01	9.2315E-09	4.3774E+16	4.4476E+16
Te-127m	3.4007E+00	3.6053E-07	1.7096E+18	6.1035E+15
Te-129	2.4024E+01	1.1471E-09	5.3552E+15	7.7301E+16
Te-129m	1.1144E+01	3.6991E-07	1.7269E+18	2.0047E+16
Te-131m	2.7068E+01	3.3945E-08	1.5604E+17	5.4321E+16
Te-132	3.0823E+02	1.0153E-06	4.6319E+18	5.7736E+17
I-131	1.4629E+03	1.1800E-05	5.4247E+19	2.6235E+18
I-132	4.5470E+02	4.4051E-08	2.0097E+17	1.7575E+18

I-133	2.2449E+03	1.9817E-06	8.9728E+18	4.6619E+18
I-134	1.2802E+00	4.7990E-11	2.1567E+14	3.9973E+17
I-135	1.0258E+03	2.9210E-07	1.3030E+18	3.0939E+18
Xe-133	2.4067E+05	1.2857E-03	5.8217E+21	1.6267E+20
Xe-135	6.4028E+04	2.5072E-05	1.1184E+20	5.2573E+19
Cs-134	3.1814E+02	2.4589E-04	1.1051E+21	5.9103E+17
Cs-136	8.6682E+01	1.1827E-06	5.2371E+18	1.6275E+17
Cs-137	1.9838E+02	2.2807E-03	1.0026E+22	3.6849E+17
Ba-139	1.1734E+00	7.1737E-11	3.1080E+14	4.1673E+16
Ba-140	1.6875E+02	2.3051E-06	9.9154E+18	3.0627E+17
La-140	2.5446E+01	4.5780E-08	1.9692E+17	2.3234E+16
La-141	2.8041E-01	4.9583E-11	2.1177E+14	1.2657E+15
La-142	1.7820E-02	1.2449E-12	5.2794E+12	4.4114E+14
Ce-141	3.9335E+00	1.3805E-07	5.8962E+17	7.0884E+15
Ce-143	3.1629E+00	4.7628E-09	2.0057E+16	6.2828E+15
Ce-144	3.1664E+00	9.9278E-07	4.1518E+18	5.6880E+15
Pr-143	1.5500E+00	2.3018E-08	9.6935E+16	2.7493E+15
Nd-147	6.3121E-01	7.8025E-09	3.1965E+16	1.1476E+15
Np-239	4.2081E+01	1.8139E-07	4.5705E+17	8.0124E+16
Pu-238	1.5831E-02	9.2475E-07	2.3399E+18	2.8424E+13
Pu-239	1.0592E-03	1.7041E-05	4.2938E+19	1.9005E+12
Pu-240	1.1353E-03	4.9823E-06	1.2502E+19	2.0384E+12
Pu-241	5.4488E-01	5.2894E-06	1.3217E+19	9.7833E+14
Am-241	3.3686E-04	9.8148E-08	2.4525E+17	6.0396E+11
Cm-242	8.4046E-02	2.5359E-08	6.3105E+16	1.5103E+14
Cm-244	9.1737E-03	1.1339E-07	2.7986E+17	1.6471E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 10.0000	Atmosphere	Sump	
Noble gases (atoms)	3.8545E+22	0.0000E+00	
Elemental I (atoms)	7.2135E+18	0.0000E+00	
Organic I (atoms)	2.2310E+17	0.0000E+00	
Aerosols (kg)	2.6631E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.6668E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		4.2471E-08
Total I (Ci)			5.1896E+03

Time (h) = 10.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.0199E+20
Organic I (atoms)	0.0000E+00	3.1543E+18
Aerosols (kg)	0.0000E+00	6.2274E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 10.0000	Leakage Transport
Noble gases (atoms)	5.4724E+22
Elemental I (atoms)	1.1527E+20
Organic I (atoms)	3.5650E+18
Aerosols (kg)	6.8024E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 10.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.5945E+22
Elemental I (atoms)	4.9997E+18	2.6314E+17
Organic I (atoms)	1.5463E+17	8.1384E+15
Aerosols (kg)	3.0528E-03	3.0837E-05

Detailed model information at time (H) = 12.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.1690E-01

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	3.2154E+00

EAB Doses:

Time (h) = 12.0000	Whole Body	Thyroid	TEDE

Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 12.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 12.0000	Ci	kg	Atoms	Decay
Co-58	5.3055E-02	1.6685E-09	1.7324E+16	1.3657E+14
Co-60	6.3800E-02	5.6441E-08	5.6649E+17	1.6384E+14
Kr-85	2.0612E+03	5.2536E-03	3.7221E+22	1.7190E+18
Kr-85m	6.7818E+03	8.2409E-07	5.8385E+18	1.1267E+19
Kr-87	1.2310E+02	4.3459E-09	3.0082E+16	2.5402E+18
Kr-88	6.4307E+03	5.1284E-07	3.5096E+18	1.7293E+19
Rb-86	2.2130E+00	2.7198E-08	1.9045E+17	5.9125E+15
Sr-89	7.7518E+01	2.6682E-06	1.8054E+19	1.9974E+17
Sr-90	8.8649E+00	6.4989E-05	4.3486E+20	2.2763E+16
Sr-91	4.4176E+01	1.2186E-08	8.0647E+16	1.8076E+17
Sr-92	5.2055E+00	4.1414E-10	2.7109E+15	8.0880E+16
Y-90	1.0588E+00	1.9461E-09	1.3022E+16	1.3358E+15
Y-91	1.1063E+00	4.5110E-08	2.9853E+17	2.6572E+15
Y-92	1.5746E+01	1.6364E-09	1.0711E+16	5.6138E+16
Y-93	5.5410E-01	1.6608E-10	1.0755E+15	2.2028E+15
Zr-95	1.2455E+00	5.7975E-08	3.6751E+17	3.2068E+15
Zr-97	7.9413E-01	4.1541E-10	2.5790E+15	2.6358E+15
Nb-95	1.2584E+00	3.2182E-08	2.0401E+17	3.2315E+15
Mo-99	1.5610E+01	3.2547E-08	1.9798E+17	4.2749E+16
Tc-99m	1.4765E+01	2.8079E-09	1.7081E+16	3.9029E+16
Ru-103	1.4523E+01	4.5001E-07	2.6311E+18	3.7460E+16
Ru-105	1.5576E+00	2.3171E-10	1.3289E+15	1.1384E+16
Ru-106	6.0268E+00	1.8014E-06	1.0234E+19	1.5482E+16
Rh-105	8.5127E+00	1.0085E-08	5.7844E+16	2.3670E+16
Sb-127	1.8458E+01	6.9117E-08	3.2774E+17	4.9621E+16
Sb-129	8.7841E+00	1.5621E-09	7.2922E+15	6.6259E+16
Te-127	1.9093E+01	7.2347E-09	3.4306E+16	5.0183E+16
Te-127m	2.6909E+00	2.8528E-07	1.3528E+18	6.9065E+15
Te-129	1.5419E+01	7.3625E-10	3.4371E+15	8.2306E+16
Te-129m	8.8055E+00	2.9230E-07	1.3645E+18	2.2677E+16
Te-131m	2.0449E+01	2.5644E-08	1.1789E+17	6.0572E+16
Te-132	2.3958E+02	7.8917E-07	3.6004E+18	6.4952E+17
I-131	1.1841E+03	9.5509E-06	4.3906E+19	2.9728E+18
I-132	3.1498E+02	3.0515E-08	1.3922E+17	1.8568E+18
I-133	1.7119E+03	1.5112E-06	6.8425E+18	5.1828E+18
I-134	2.1466E-01	8.0467E-12	3.6163E+13	3.9989E+17
I-135	6.7798E+02	1.9305E-07	8.6119E+17	3.3164E+18
Xe-133	2.7202E+05	1.4532E-03	6.5800E+21	2.3133E+20
Xe-135	6.3886E+04	2.5017E-05	1.1160E+20	6.9734E+19
Cs-134	2.5169E+02	1.9453E-04	8.7425E+20	6.6615E+17
Cs-136	6.8281E+01	9.3164E-07	4.1253E+18	1.8318E+17
Cs-137	1.5696E+02	1.8045E-03	7.9321E+21	4.1533E+17
Ba-139	3.3957E-01	2.0760E-11	8.9941E+13	4.1851E+16
Ba-140	1.3291E+02	1.8155E-06	7.8095E+18	3.4603E+17
La-140	2.3963E+01	4.3111E-08	1.8544E+17	2.9761E+16
La-141	1.5591E-01	2.7569E-11	1.1775E+14	1.3219E+15
La-142	5.7369E-03	4.0076E-13	1.6996E+12	4.4396E+14
Ce-141	3.1070E+00	1.0904E-07	4.6572E+17	8.0164E+15
Ce-143	2.3995E+00	3.6133E-09	1.5216E+16	7.0147E+15
Ce-144	2.5048E+00	7.8532E-07	3.2842E+18	6.4355E+15
Pr-143	1.2316E+00	1.8289E-08	7.7020E+16	3.1160E+15
Nd-147	4.9679E-01	6.1409E-09	2.5157E+16	1.2963E+15
Np-239	3.2487E+01	1.4004E-07	3.5286E+17	8.9943E+16
Pu-238	1.2526E-02	7.3166E-07	1.8513E+18	3.2162E+13
Pu-239	8.3825E-04	1.3486E-05	3.3981E+19	2.1506E+12
Pu-240	8.9824E-04	3.9420E-06	9.8913E+18	2.3064E+12
Pu-241	4.3110E-01	4.1849E-06	1.0457E+19	1.1070E+15
Am-241	2.6668E-04	7.7700E-08	1.9416E+17	6.8352E+11
Cm-242	6.6473E-02	2.0057E-08	4.9910E+16	1.7087E+14
Cm-244	7.2581E-03	8.9714E-08	2.2142E+17	1.8637E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 12.0000	Atmosphere	Sump	
Noble gases (atoms)	4.3922E+22	0.0000E+00	
Elemental I (atoms)	7.0725E+18	0.0000E+00	
Organic I (atoms)	2.1874E+17	0.0000E+00	
Aerosols (kg)	2.1068E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.9243E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.3538E-08
Total I (Ci)			3.8891E+03

Time (h) = 12.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.2507E+20
Organic I (atoms)	0.0000E+00	3.8681E+18
Aerosols (kg)	0.0000E+00	7.0265E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 12.0000	Leakage Transport
Noble gases (atoms)	6.7077E+22
Elemental I (atoms)	1.3954E+20
Organic I (atoms)	4.3156E+18
Aerosols (kg)	7.5855E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 12.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.2831E+22
Elemental I (atoms)	6.1310E+18	3.2269E+17
Organic I (atoms)	1.8962E+17	9.9800E+15
Aerosols (kg)	3.4446E-03	3.4794E-05

Detailed model information at time (H) = 14.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	8.5981E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	3.9401E+00

EAB Doses:

Time (h) = 14.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 14.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 14.0000	Ci	kg	Atoms	Decay
Co-58	4.2612E-02	1.3401E-09	1.3914E+16	1.4883E+14
Co-60	5.1282E-02	4.5367E-08	4.5534E+17	1.7859E+14
Kr-85	2.2776E+03	5.8053E-03	4.1130E+22	2.3061E+18
Kr-85m	5.4995E+03	6.6827E-07	4.7346E+18	1.2924E+19
Kr-87	4.5728E+01	1.6144E-09	1.1175E+16	2.5613E+18
Kr-88	4.3615E+03	3.4782E-07	2.3803E+18	1.8736E+19
Rb-86	1.7734E+00	2.1794E-08	1.5261E+17	6.4234E+15
Sr-89	6.2239E+01	2.1423E-06	1.4496E+19	2.1765E+17
Sr-90	7.1258E+00	5.2239E-05	3.4954E+20	2.4813E+16
Sr-91	3.0688E+01	8.4657E-09	5.6024E+16	1.9029E+17
Sr-92	2.5088E+00	1.9959E-10	1.3065E+15	8.1833E+16
Y-90	9.8604E-01	1.8124E-09	1.2127E+16	1.5928E+15
Y-91	9.0206E-01	3.6783E-08	2.4342E+17	2.9142E+15
Y-92	9.6646E+00	1.0044E-09	6.5745E+15	5.9299E+16
Y-93	3.8827E-01	1.1638E-10	7.5360E+14	2.3228E+15
Zr-95	1.0002E+00	4.6559E-08	2.9514E+17	3.4947E+15

Zr-97	5.8807E-01	3.0762E-10	1.9098E+15	2.8124E+15
Nb-95	1.0115E+00	2.5868E-08	1.6398E+17	3.5224E+15
Mo-99	1.2287E+01	2.5618E-08	1.5583E+17	4.6322E+16
Tc-99m	1.1757E+01	2.2359E-09	1.3601E+16	4.2317E+16
Ru-103	1.1657E+01	3.6119E-07	2.1118E+18	4.0815E+16
Ru-105	9.1623E-01	1.3630E-10	7.8175E+14	1.1695E+16
Ru-106	4.8437E+00	1.4478E-06	8.2252E+18	1.6876E+16
Rh-105	6.6211E+00	7.8444E-09	4.4991E+16	2.5606E+16
Sb-127	1.4616E+01	5.4730E-08	2.5952E+17	5.3858E+16
Sb-129	5.1226E+00	9.1094E-10	4.2526E+15	6.8008E+16
Te-127	1.5234E+01	5.7724E-09	2.7372E+16	5.4491E+16
Te-127m	2.1633E+00	2.2934E-07	1.0875E+18	7.5286E+15
Te-129	1.1601E+01	5.5395E-10	2.5860E+15	8.5189E+16
Te-129m	7.0682E+00	2.3463E-07	1.0953E+18	2.4711E+16
Te-131m	1.5695E+01	1.9682E-08	9.0480E+16	6.5197E+16
Te-132	1.8920E+02	6.2320E-07	2.8432E+18	7.0444E+17
I-131	9.7749E+02	7.8845E-06	3.6246E+19	3.2515E+18
I-132	2.3945E+02	2.3198E-08	1.0583E+17	1.9224E+18
I-133	1.3315E+03	1.1754E-06	5.3221E+18	5.5743E+18
I-134	3.6711E-02	1.3762E-12	6.1846E+12	3.9992E+17
I-135	4.5703E+02	1.3014E-07	5.8053E+17	3.4614E+18
Xe-133	2.9750E+05	1.5894E-03	7.1966E+21	3.0842E+20
Xe-135	6.1512E+04	2.4087E-05	1.0745E+20	8.6749E+19
Cs-134	2.0230E+02	1.5636E-04	7.0268E+20	7.2433E+17
Cs-136	5.4644E+01	7.4557E-07	3.3014E+18	1.9893E+17
Cs-137	1.2617E+02	1.4505E-03	6.3759E+21	4.5162E+17
Ba-139	9.9834E-02	6.1035E-12	2.6443E+13	4.1902E+16
Ba-140	1.0635E+02	1.4527E-06	6.2490E+18	3.7669E+17
La-140	2.2236E+01	4.0005E-08	1.7208E+17	3.5559E+16
La-141	8.8073E-02	1.5573E-11	6.6514E+13	1.3525E+15
La-142	1.8763E-03	1.3107E-13	5.5587E+11	4.4485E+14
Ce-141	2.4932E+00	8.7501E-08	3.7372E+17	8.7341E+15
Ce-143	1.8494E+00	2.7849E-09	1.1728E+16	7.5585E+15
Ce-144	2.0130E+00	6.3112E-07	2.6394E+18	7.0146E+15
Pr-143	9.9377E-01	1.4758E-08	6.2149E+16	3.4009E+15
Nd-147	3.9723E-01	4.9103E-09	2.0116E+16	1.4108E+15
Np-239	2.5481E+01	1.0984E-07	2.7676E+17	9.7366E+16
Pu-238	1.0069E-02	5.8813E-07	1.4881E+18	3.5058E+13
Pu-239	6.7397E-04	1.0843E-05	2.7322E+19	2.3444E+12
Pu-240	7.2202E-04	3.1686E-06	7.9508E+18	2.5141E+12
Pu-241	3.4652E-01	3.3639E-06	8.4057E+18	1.2066E+15
Am-241	2.1449E-04	6.2493E-08	1.5616E+17	7.4518E+11
Cm-242	5.3413E-02	1.6116E-08	4.0105E+16	1.8623E+14
Cm-244	5.8341E-03	7.2113E-08	1.7798E+17	2.0315E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 14.0000	Atmosphere	Sump	
Noble gases (atoms)	4.8441E+22	0.0000E+00	
Elemental I (atoms)	6.9430E+18	0.0000E+00	
Organic I (atoms)	2.1473E+17	0.0000E+00	
Aerosols (kg)	1.6933E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.3813E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.7076E-08
Total I (Ci)			3.0055E+03

Time (h) = 14.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.4776E+20
Organic I (atoms)	0.0000E+00	4.5700E+18
Aerosols (kg)	0.0000E+00	7.6602E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 14.0000	Leakage Transport
Noble gases (atoms)	7.9403E+22
Elemental I (atoms)	1.6340E+20
Organic I (atoms)	5.0536E+18
Aerosols (kg)	8.2094E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 14.0000	Pathway Filtered	Transported

Noble gases (atoms)	0.0000E+00	3.0541E+22
Elemental I (atoms)	7.2435E+18	3.8124E+17
Organic I (atoms)	2.2402E+17	1.1791E+16
Aerosols (kg)	3.7552E-03	3.7932E-05

Detailed model information at time (H) = 16.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	8.5981E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	4.6813E+00

EAB Doses:

Time (h) = 16.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 16.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 16.0000	Ci	kg	Atoms	Decay
Co-58	3.5715E-02	1.1232E-09	1.1662E+16	1.5878E+14
Co-60	4.3016E-02	3.8054E-08	3.8194E+17	1.9056E+14
Kr-85	2.4606E+03	6.2717E-03	4.4434E+22	2.9500E+18
Kr-85m	4.3602E+03	5.2982E-07	3.7537E+18	1.4259E+19
Kr-87	1.6607E+01	5.8631E-10	4.0584E+15	2.5692E+18
Kr-88	2.8920E+03	2.3064E-07	1.5783E+18	1.9709E+19
Rb-86	1.4829E+00	1.8225E-08	1.2762E+17	6.8370E+15
Sr-89	5.2149E+01	1.7950E-06	1.2146E+19	2.3218E+17
Sr-90	5.9773E+00	4.3820E-05	2.9321E+20	2.6477E+16
Sr-91	2.2247E+01	6.1371E-09	4.0614E+16	1.9697E+17
Sr-92	1.2617E+00	1.0038E-10	6.5708E+14	8.2294E+16
Y-90	9.3818E-01	1.7244E-09	1.1538E+16	1.8293E+15
Y-91	7.6586E-01	3.1229E-08	2.0667E+17	3.1255E+15
Y-92	6.0605E+00	6.2984E-10	4.1228E+15	6.1219E+16
Y-93	2.8393E-01	8.5101E-11	5.5107E+14	2.4077E+15
Zr-95	8.3827E-01	3.9020E-08	2.4735E+17	3.7282E+15
Zr-97	4.5444E-01	2.3772E-10	1.4758E+15	2.9444E+15
Nb-95	8.4846E-01	2.1698E-08	1.3755E+17	3.7585E+15
Mo-99	1.0092E+01	2.1043E-08	1.2800E+17	4.9163E+16
Tc-99m	9.7874E+00	1.8614E-09	1.1323E+16	4.4907E+16
Ru-103	9.7640E+00	3.0253E-07	1.7688E+18	4.3536E+16
Ru-105	5.6245E-01	8.3672E-11	4.7989E+14	1.1880E+16
Ru-106	4.0624E+00	1.2143E-06	6.8985E+18	1.8007E+16
Rh-105	5.3661E+00	6.3575E-09	3.6463E+16	2.7125E+16
Sb-127	1.2078E+01	4.5226E-08	2.1445E+17	5.7247E+16
Sb-129	3.1174E+00	5.5437E-10	2.5880E+15	6.9035E+16
Te-127	1.2699E+01	4.8117E-09	2.2816E+16	5.7916E+16
Te-127m	1.8148E+00	1.9240E-07	9.1233E+17	8.0338E+15
Te-129	9.0728E+00	4.3323E-10	2.0224E+15	8.7204E+16
Te-129m	5.9202E+00	1.9652E-07	9.1741E+17	2.6361E+16
Te-131m	1.2571E+01	1.5764E-08	7.2470E+16	6.8781E+16
Te-132	1.5592E+02	5.1357E-07	2.3430E+18	7.4825E+17
I-131	8.4058E+02	6.7802E-06	3.1169E+19	3.4844E+18
I-132	1.9637E+02	1.9024E-08	8.6794E+16	1.9712E+18
I-133	1.0788E+03	9.5233E-07	4.3121E+18	5.8826E+18
I-134	6.5402E-03	2.4516E-13	1.1018E+12	3.9992E+17
I-135	3.2093E+02	9.1385E-08	4.0765E+17	3.5602E+18
Xe-133	3.1809E+05	1.6993E-03	7.6945E+21	3.9209E+20
Xe-135	5.7786E+04	2.2628E-05	1.0094E+20	1.0301E+20
Cs-134	1.6968E+02	1.3115E-04	5.8939E+20	7.7158E+17
Cs-136	4.5635E+01	6.2266E-07	2.7572E+18	2.1166E+17
Cs-137	1.0583E+02	1.2167E-03	5.3483E+21	4.8109E+17
Ba-139	3.0630E-02	1.8726E-12	8.1131E+12	4.1916E+16
Ba-140	8.8809E+01	1.2131E-06	5.2182E+18	4.0148E+17

La-140	2.1059E+01	3.7887E-08	1.6297E+17	4.0869E+16
La-141	5.1918E-02	9.1804E-12	3.9209E+13	1.3699E+15
La-142	6.4041E-04	4.4737E-14	1.8973E+11	4.4514E+14
Ce-141	2.0878E+00	7.3272E-08	3.1295E+17	9.3160E+15
Ce-143	1.4875E+00	2.2400E-09	9.4332E+15	7.9817E+15
Ce-144	1.6882E+00	5.2930E-07	2.2136E+18	7.4847E+15
Pr-143	8.3653E-01	1.2423E-08	5.2316E+16	3.6330E+15
Nd-147	3.3146E-01	4.0973E-09	1.6785E+16	1.5034E+15
Np-239	2.0857E+01	8.9903E-08	2.2653E+17	1.0325E+17
Pu-238	8.4459E-03	4.9334E-07	1.2483E+18	3.7410E+13
Pu-239	5.6549E-04	9.0978E-06	2.2924E+19	2.5019E+12
Pu-240	6.0566E-04	2.6579E-06	6.6694E+18	2.6828E+12
Pu-241	2.9067E-01	2.8217E-06	7.0509E+18	1.2876E+15
Am-241	1.8003E-04	5.2452E-08	1.3107E+17	7.9529E+11
Cm-242	4.4789E-02	1.3514E-08	3.3629E+16	1.9871E+14
Cm-244	4.8938E-03	6.0490E-08	1.4929E+17	2.1678E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 16.0000	Atmosphere	Sump	
Noble gases (atoms)	5.2235E+22	0.0000E+00	
Elemental I (atoms)	6.8227E+18	0.0000E+00	
Organic I (atoms)	2.1101E+17	0.0000E+00	
Aerosols (kg)	1.4202E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.0220E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.2812E-08
Total I (Ci)			2.4367E+03

Time (h) = 16.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.7009E+20
Organic I (atoms)	0.0000E+00	5.2604E+18
Aerosols (kg)	0.0000E+00	8.1824E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 16.0000	Leakage Transport
Noble gases (atoms)	9.1702E+22
Elemental I (atoms)	1.8687E+20
Organic I (atoms)	5.7796E+18
Aerosols (kg)	8.7303E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 16.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.8944E+22
Elemental I (atoms)	8.3378E+18	4.3883E+17
Organic I (atoms)	2.5787E+17	1.3572E+16
Aerosols (kg)	4.0112E-03	4.0517E-05

Detailed model information at time (H) = 18.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	8.5981E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	5.5619E+00

EAB Doses:

Time (h) = 18.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 18.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 18.0000	Ci	kg	Atoms	Decay
Co-58	3.0032E-02	9.4446E-10	9.8063E+15	1.6715E+14
Co-60	3.6199E-02	3.2024E-08	3.2142E+17	2.0064E+14
Kr-85	2.6153E+03	6.6659E-03	4.7227E+22	3.6368E+18
Kr-85m	3.4009E+03	4.1325E-07	2.9278E+18	1.5304E+19
Kr-87	5.9339E+00	2.0949E-10	1.4501E+15	2.5720E+18
Kr-88	1.8866E+03	1.5046E-07	1.0296E+18	2.0347E+19
Rb-86	1.2441E+00	1.5290E-08	1.0707E+17	7.1839E+15
Sr-89	4.3836E+01	1.5089E-06	1.0210E+19	2.4439E+17
Sr-90	5.0302E+00	3.6877E-05	2.4675E+20	2.7878E+16
Sr-91	1.6180E+01	4.4635E-09	2.9538E+16	2.0183E+17
Sr-92	6.3664E-01	5.0650E-11	3.3155E+14	8.2527E+16
Y-90	8.8099E-01	1.6193E-09	1.0835E+16	2.0540E+15
Y-91	6.5110E-01	2.6550E-08	1.7570E+17	3.3053E+15
Y-92	3.7405E+00	3.8873E-10	2.5446E+15	6.2421E+16
Y-93	2.0830E-01	6.2433E-11	4.0428E+14	2.4699E+15
Zr-95	7.0482E-01	3.2808E-08	2.0797E+17	3.9245E+15
Zr-97	3.5232E-01	1.8430E-10	1.1442E+15	3.0467E+15
Nb-95	7.1401E-01	1.8260E-08	1.1575E+17	3.9572E+15
Mo-99	8.3169E+00	1.7341E-08	1.0548E+17	5.1503E+16
Tc-99m	8.1526E+00	1.5504E-09	9.4313E+15	4.7068E+16
Ru-103	8.2049E+00	2.5423E-07	1.4864E+18	4.5822E+16
Ru-105	3.4639E-01	5.1531E-11	2.9555E+14	1.1993E+16
Ru-106	3.4182E+00	1.0217E-06	5.8046E+18	1.8959E+16
Rh-105	4.3580E+00	5.1632E-09	2.9613E+16	2.8360E+16
Sb-127	1.0013E+01	3.7493E-08	1.7779E+17	6.0056E+16
Sb-129	1.9033E+00	3.3847E-10	1.5801E+15	6.9662E+16
Te-127	1.0611E+01	4.0205E-09	1.9065E+16	6.0779E+16
Te-127m	1.5274E+00	1.6193E-07	7.6786E+17	8.4590E+15
Te-129	6.8715E+00	3.2811E-10	1.5317E+15	8.8765E+16
Te-129m	4.9745E+00	1.6513E-07	7.7087E+17	2.7747E+16
Te-131m	1.0101E+01	1.2668E-08	5.8234E+16	7.1661E+16
Te-132	1.2891E+02	4.2461E-07	1.9372E+18	7.8447E+17
I-131	7.2818E+02	5.8736E-06	2.7001E+19	3.6859E+18
I-132	1.6236E+02	1.5729E-08	7.1759E+16	2.0114E+18
I-133	8.8052E+02	7.7729E-07	3.5195E+18	6.1337E+18
I-134	1.1737E-03	4.3999E-14	1.9774E+11	3.9992E+17
I-135	2.2702E+02	6.4645E-08	2.8837E+17	3.6299E+18
Xe-133	3.3457E+05	1.7874E-03	8.0932E+21	4.8043E+20
Xe-135	5.3333E+04	2.0885E-05	9.3163E+19	1.1809E+20
Cs-134	1.4279E+02	1.1036E-04	4.9597E+20	8.1134E+17
Cs-136	3.8236E+01	5.2170E-07	2.3101E+18	2.2233E+17
Cs-137	8.9063E+01	1.0239E-03	4.5009E+21	5.0588E+17
Ba-139	9.4283E-03	5.7641E-13	2.4973E+12	4.1921E+16
Ba-140	7.4400E+01	1.0163E-06	4.3715E+18	4.2224E+17
La-140	1.9668E+01	3.5384E-08	1.5221E+17	4.5890E+16
La-141	3.0705E-02	5.4294E-12	2.3189E+13	1.3802E+15
La-142	2.1929E-04	1.5319E-14	6.4966E+10	4.4524E+14
Ce-141	1.7539E+00	6.1556E-08	2.6291E+17	9.8047E+15
Ce-143	1.2003E+00	1.8075E-09	7.6120E+15	8.3231E+15
Ce-144	1.4204E+00	4.4535E-07	1.8625E+18	7.8802E+15
Pr-143	7.0622E-01	1.0488E-08	4.4166E+16	3.8289E+15
Nd-147	2.7748E-01	3.4300E-09	1.4052E+16	1.5808E+15
Np-239	1.7127E+01	7.3826E-08	1.8602E+17	1.0808E+17
Pu-238	7.1078E-03	4.1518E-07	1.0505E+18	3.9389E+13
Pu-239	4.7601E-04	7.6582E-06	1.9296E+19	2.6344E+12
Pu-240	5.0970E-04	2.2368E-06	5.6127E+18	2.8247E+12
Pu-241	2.4461E-01	2.3746E-06	5.9337E+18	1.3557E+15
Am-241	1.5159E-04	4.4168E-08	1.1037E+17	8.3748E+11
Cm-242	3.7679E-02	1.1369E-08	2.8291E+16	2.0920E+14
Cm-244	4.1184E-03	5.0906E-08	1.2564E+17	2.2825E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 18.0000	Atmosphere	Sump	
Noble gases (atoms)	5.5417E+22	0.0000E+00	
Elemental I (atoms)	6.7098E+18	0.0000E+00	
Organic I (atoms)	2.0752E+17	0.0000E+00	
Aerosols (kg)	1.1951E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.7310E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.9389E-08
Total I (Ci)			1.9981E+03

Deposition Recirculating

Time (h) = 18.0000	Surfaces	Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.9203E+20
Organic I (atoms)	0.0000E+00	5.9391E+18
Aerosols (kg)	0.0000E+00	8.6215E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 18.0000	Leakage Transport
Noble gases (atoms)	1.0397E+23
Elemental I (atoms)	2.0994E+20
Organic I (atoms)	6.4931E+18
Aerosols (kg)	9.1686E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 18.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.7927E+22
Elemental I (atoms)	9.4134E+18	4.9544E+17
Organic I (atoms)	2.9114E+17	1.5323E+16
Aerosols (kg)	4.2264E-03	4.2691E-05

Detailed model information at time (H) = 20.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	8.5981E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	6.6083E+00

EAB Doses:

Time (h) = 20.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 20.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 20.0000	Ci	kg	Atoms	Decay
Co-58	2.5256E-02	7.9427E-10	8.2469E+15	1.7418E+14
Co-60	3.0466E-02	2.6952E-08	2.7052E+17	2.0912E+14
Kr-85	2.7459E+03	6.9990E-03	4.9587E+22	4.3600E+18
Kr-85m	2.6205E+03	3.1843E-07	2.2560E+18	1.6113E+19
Kr-87	2.0945E+00	7.3944E-11	5.1184E+14	2.5730E+18
Kr-88	1.2158E+03	9.6963E-08	6.6355E+17	2.0759E+19
Rb-86	1.0439E+00	1.2829E-08	8.9838E+16	7.4749E+15
Sr-89	3.6853E+01	1.2685E-06	8.5833E+18	2.5466E+17
Sr-90	4.2337E+00	3.1037E-05	2.0768E+20	2.9056E+16
Sr-91	1.1769E+01	3.2466E-09	2.1485E+16	2.0536E+17
Sr-92	3.2127E-01	2.5560E-11	1.6731E+14	8.2644E+16
Y-90	8.1681E-01	1.5013E-09	1.0046E+16	2.2643E+15
Y-91	5.5272E-01	2.2538E-08	1.4915E+17	3.4582E+15
Y-92	2.2759E+00	2.3652E-10	1.5482E+15	6.3160E+16
Y-93	1.5283E-01	4.5808E-11	2.9662E+14	2.5156E+15
Zr-95	5.9268E-01	2.7588E-08	1.7489E+17	4.0896E+15
Zr-97	2.7318E-01	1.4290E-10	8.8718E+14	3.1260E+15
Nb-95	6.0093E-01	1.5368E-08	9.7418E+16	4.1245E+15
Mo-99	6.8544E+00	1.4292E-08	8.6935E+16	5.3432E+16
Tc-99m	6.7773E+00	1.2889E-09	7.8403E+15	4.8867E+16
Ru-103	6.8956E+00	2.1366E-07	1.2492E+18	4.7743E+16
Ru-105	2.1336E-01	3.1740E-11	1.8204E+14	1.2063E+16
Ru-106	2.8765E+00	8.5979E-07	4.8847E+18	1.9760E+16
Rh-105	3.5367E+00	4.1901E-09	2.4032E+16	2.9362E+16
Sb-127	8.3018E+00	3.1087E-08	1.4741E+17	6.2385E+16
Sb-129	1.1622E+00	2.0668E-10	9.6483E+14	7.0045E+16

Te-127	8.8604E+00	3.3573E-09	1.5920E+16	6.3170E+16
Te-127m	1.2857E+00	1.3630E-07	6.4634E+17	8.8168E+15
Te-129	5.2237E+00	2.4943E-10	1.1644E+15	8.9948E+16
Te-129m	4.1802E+00	1.3876E-07	6.4777E+17	2.8911E+16
Te-131m	8.1179E+00	1.0180E-08	4.6800E+16	7.3975E+16
Te-132	1.0659E+02	3.5110E-07	1.6018E+18	8.1441E+17
I-131	6.3411E+02	5.1148E-06	2.3513E+19	3.8611E+18
I-132	1.3470E+02	1.3049E-08	5.9534E+16	2.0448E+18
I-133	7.2246E+02	6.3776E-07	2.8877E+18	6.3395E+18
I-134	2.1175E-04	7.9378E-15	3.5673E+10	3.9992E+17
I-135	1.6144E+02	4.5969E-08	2.0506E+17	3.6795E+18
Xe-133	3.4762E+05	1.8571E-03	8.4089E+21	5.7247E+20
Xe-135	4.8568E+04	1.9018E-05	8.4838E+19	1.3186E+20
Cs-134	1.2017E+02	9.2877E-05	4.1740E+20	8.4479E+17
Cs-136	3.2040E+01	4.3716E-07	1.9358E+18	2.3127E+17
Cs-137	7.4960E+01	8.6179E-04	3.7882E+21	5.2675E+17
Ba-139	2.9025E-03	1.7745E-13	7.6878E+11	4.1922E+16
Ba-140	6.2336E+01	8.5149E-07	3.6627E+18	4.3964E+17
La-140	1.8126E+01	3.2610E-08	1.4027E+17	5.0564E+16
La-141	1.8161E-02	3.2114E-12	1.3716E+13	1.3863E+15
La-142	7.5098E-05	5.2461E-15	2.2248E+10	4.4528E+14
Ce-141	1.4736E+00	5.1719E-08	2.2089E+17	1.0215E+16
Ce-143	9.6872E-01	1.4587E-09	6.1431E+15	8.5987E+15
Ce-144	1.1953E+00	3.7475E-07	1.5672E+18	8.2130E+15
Pr-143	5.9608E-01	8.8519E-09	3.7278E+16	3.9943E+15
Nd-147	2.3232E-01	2.8718E-09	1.1765E+16	1.6457E+15
Np-239	1.4066E+01	6.0630E-08	1.5277E+17	1.1204E+17
Pu-238	5.9824E-03	3.4944E-07	8.8420E+17	4.1054E+13
Pu-239	4.0073E-04	6.4471E-06	1.6245E+19	2.7459E+12
Pu-240	4.2899E-04	1.8826E-06	4.7240E+18	2.9441E+12
Pu-241	2.0588E-01	1.9986E-06	4.9941E+18	1.4130E+15
Am-241	1.2766E-04	3.7196E-08	9.2946E+16	8.7300E+11
Cm-242	3.1702E-02	9.5652E-09	2.3803E+16	2.1803E+14
Cm-244	3.4663E-03	4.2845E-08	1.0574E+17	2.3790E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 20.0000	Atmosphere	Sump	
Noble gases (atoms)	5.8083E+22	0.0000E+00	
Elemental I (atoms)	6.6035E+18	0.0000E+00	
Organic I (atoms)	2.0423E+17	0.0000E+00	
Aerosols (kg)	1.0058E-03	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.4907E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.6588E-08
Total I (Ci)			1.6527E+03

Time (h) = 20.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.1361E+20
Organic I (atoms)	0.0000E+00	6.6066E+18
Aerosols (kg)	0.0000E+00	8.9910E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 20.0000	Leakage Transport
Noble gases (atoms)	1.1622E+23
Elemental I (atoms)	2.3264E+20
Organic I (atoms)	7.1950E+18
Aerosols (kg)	9.5374E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 20.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	5.7397E+22
Elemental I (atoms)	1.0471E+19	5.5113E+17
Organic I (atoms)	3.2386E+17	1.7045E+16
Aerosols (kg)	4.4075E-03	4.4521E-05

Detailed model information at time (H) = 22.0000

Natural deposition - Powers' Model, Compartment 1
Deposition Lambda (1 / Hours)
Noble Elemental Organic Aerosol

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     0.0000E+00 0.0000E+00 0.0000E+00 8.5981E-02
Deposition Net DF
     Noble      Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 7.8517E+00

EAB Doses:

Time (h) =  22.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:

Time (h) =  22.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  0.0000E+00  0.0000E+00  0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) =  22.0000        Ci           kg          Atoms       Decay
Co-58                  2.1240E-02  6.6796E-10  6.9354E+15  1.8009E+14
Co-60                  2.5642E-02  2.2684E-08  2.2768E+17  2.1626E+14
Kr-85                  2.8563E+03  7.2803E-03  5.1580E+22  5.1139E+18
Kr-85m                 2.0004E+03  2.4308E-07  1.7222E+18  1.6731E+19
Kr-87                  7.3242E-01  2.5857E-11  1.7898E+14  2.5733E+18
Kr-88                  7.7626E+02  6.1906E-08  4.2364E+17  2.1023E+19
Rb-86                  8.7589E-01  1.0765E-08  7.5380E+16  7.7192E+15
Sr-89                  3.0982E+01  1.0664E-06  7.2159E+18  2.6329E+17
Sr-90                  3.5633E+00  2.6123E-05  1.7479E+20  3.0048E+16
Sr-91                  8.5606E+00  2.3615E-09  1.5628E+16  2.0793E+17
Sr-92                  1.6212E-01  1.2898E-11  8.4429E+13  8.2704E+16
Y-90                   7.4952E-01  1.3776E-09  9.2181E+15  2.4588E+15
Y-91                   4.6856E-01  1.9106E-08  1.2644E+17  3.5879E+15
Y-92                   1.3694E+00  1.4232E-10  9.3158E+14  6.3609E+16
Y-93                   1.1213E-01  3.3610E-11  2.1764E+14  2.5491E+15
Zr-95                  4.9838E-01  2.3199E-08  1.4706E+17  4.2284E+15
Zr-97                  2.1182E-01  1.1080E-10  6.8790E+14  3.1875E+15
Nb-95                  5.0576E-01  1.2934E-08  8.1990E+16  4.2652E+15
Mo-99                  5.6492E+00  1.1779E-08  7.1649E+16  5.5022E+16
Tc-99m                 5.6246E+00  1.0697E-09  6.5068E+15  5.0362E+16
Ru-103                 5.7952E+00  1.7956E-07  1.0499E+18  4.9358E+16
Ru-105                 1.3141E-01  1.9550E-11  1.1213E+14  1.2106E+16
Ru-106                 2.4207E+00  7.2354E-07  4.1106E+18  2.0433E+16
Rh-105                 2.8682E+00  3.3981E-09  1.9490E+16  3.0176E+16
Sb-127                 6.8832E+00  2.5775E-08  1.2222E+17  6.4316E+16
Sb-129                 7.0967E-01  1.2620E-10  5.8914E+14  7.0279E+16
Te-127                 7.3943E+00  2.8018E-09  1.3286E+16  6.5167E+16
Te-127m                1.0822E+00  1.1473E-07  5.4404E+17  9.1181E+15
Te-129                 4.0300E+00  1.9243E-10  8.9834E+14  9.0849E+16
Te-129m                3.5125E+00  1.1660E-07  5.4432E+17  2.9890E+16
Te-131m                6.5240E+00  8.1815E-09  3.7611E+16  7.5835E+16
Te-132                 8.8137E+01  2.9031E-07  1.3245E+18  8.3917E+17
I-131                  5.5530E+02  4.4792E-06  2.0591E+19  4.0144E+18
I-132                  1.1200E+02  1.0851E-08  4.9504E+16  2.0726E+18
I-133                  5.9611E+02  5.2622E-07  2.3827E+18  6.5091E+18
I-134                  3.8417E-05  1.4401E-15  6.4720E+09  3.9992E+17
I-135                  1.1545E+02  3.2873E-08  1.4664E+17  3.7148E+18
Xe-133                 3.5780E+05  1.9115E-03  8.6552E+21  6.6741E+20
Xe-135                 4.3769E+04  1.7139E-05  7.6456E+19  1.4431E+20
Cs-134                 1.0113E+02  7.8165E-05  3.5128E+20  8.7295E+17
Cs-136                 2.6848E+01  3.6632E-07  1.6221E+18  2.3876E+17
Cs-137                 6.3091E+01  7.2533E-04  3.1884E+21  5.4431E+17
Ba-139                 8.9351E-04  5.4626E-14  2.3667E+11  4.1923E+16
Ba-140                 5.2229E+01  7.1342E-07  3.0688E+18  4.5421E+17
La-140                 1.6526E+01  2.9732E-08  1.2789E+17  5.4859E+16
La-141                 1.0742E-02  1.8995E-12  8.1126E+12  1.3899E+15
La-142                 2.5718E-05  1.7966E-15  7.6192E+09  4.4529E+14
Ce-141                 1.2381E+00  4.3453E-08  1.8559E+17  1.0560E+16
Ce-143                 7.8179E-01  1.1772E-09  4.9577E+15  8.8211E+15
Ce-144                 1.0058E+00  3.1535E-07  1.3188E+18  8.4930E+15
Pr-143                 5.0296E-01  7.4691E-09  3.1454E+16  4.1339E+15
Nd-147                 1.9451E-01  2.4044E-09  9.8499E+15  1.7000E+15
Np-239                 1.1552E+01  4.9794E-08  1.2547E+17  1.1530E+17
Pu-238                 5.0352E-03  2.9412E-07  7.4421E+17  4.2456E+13
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Pu-239	3.3735E-04	5.4275E-06	1.3676E+19	2.8398E+12
Pu-240	3.6106E-04	1.5845E-06	3.9760E+18	3.0446E+12
Pu-241	1.7328E-01	1.6821E-06	4.2033E+18	1.4612E+15
Am-241	1.0751E-04	3.1325E-08	7.8275E+16	9.0292E+11
Cm-242	2.6673E-02	8.0478E-09	2.0027E+16	2.2545E+14
Cm-244	2.9174E-03	3.6060E-08	8.9000E+16	2.4602E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 22.0000	Atmosphere	Sump	
Noble gases (atoms)	6.0314E+22	0.0000E+00	
Elemental I (atoms)	6.5030E+18	0.0000E+00	
Organic I (atoms)	2.0112E+17	0.0000E+00	
Aerosols (kg)	8.4644E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.2920E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.4289E-08
Total I (Ci)			1.3789E+03

Time (h) = 22.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.3486E+20
Organic I (atoms)	0.0000E+00	7.2637E+18
Aerosols (kg)	0.0000E+00	9.3019E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 22.0000	Leakage Transport
Noble gases (atoms)	1.2843E+23
Elemental I (atoms)	2.5498E+20
Organic I (atoms)	7.8859E+18
Aerosols (kg)	9.8479E-02

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 22.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	6.7273E+22
Elemental I (atoms)	1.1513E+19	6.0594E+17
Organic I (atoms)	3.5607E+17	1.8740E+16
Aerosols (kg)	4.5600E-03	4.6060E-05

Detailed model information at time (H) = 24.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	8.0138E+00

EAB Doses:

Time (h) = 24.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 24.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 24.0000	Ci	kg	Atoms	Decay
Co-58	1.9921E-02	6.2647E-10	6.5047E+15	1.8545E+14
Co-60	2.4068E-02	2.1292E-08	2.1371E+17	2.2273E+14
Kr-85	2.9495E+03	7.5179E-03	5.3263E+22	5.8937E+18
Kr-85m	1.5159E+03	1.8421E-07	1.3051E+18	1.7200E+19
Kr-87	2.5426E-01	8.9762E-12	6.2133E+13	2.5734E+18
Kr-88	4.9200E+02	3.9237E-08	2.6851E+17	2.1191E+19
Rb-86	8.1963E-01	1.0073E-08	7.0537E+16	7.9397E+15
Sr-89	2.9049E+01	9.9987E-07	6.7656E+18	2.7110E+17

Sr-90	3.3447E+00	2.4520E-05	1.6407E+20	3.0947E+16
Sr-91	6.9445E+00	1.9157E-09	1.2678E+16	2.0994E+17
Sr-92	9.1241E-02	7.2590E-12	4.7516E+13	8.2736E+16
Y-90	7.6053E-01	1.3979E-09	9.3535E+15	2.6506E+15
Y-91	4.4249E-01	1.8043E-08	1.1940E+17	3.7062E+15
Y-92	9.1088E-01	9.4663E-11	6.1965E+14	6.3898E+16
Y-93	9.1756E-02	2.7502E-11	1.7809E+14	2.5755E+15
Zr-95	4.6739E-01	2.1757E-08	1.3792E+17	4.3540E+15
Zr-97	1.8317E-01	9.5815E-11	5.9485E+14	3.2388E+15
Nb-95	4.7472E-01	1.2140E-08	7.6957E+16	4.3927E+15
Mo-99	5.1925E+00	1.0826E-08	6.5856E+16	5.6431E+16
Tc-99m	5.1989E+00	9.8871E-10	6.0143E+15	5.1697E+16
Ru-103	5.4317E+00	1.6830E-07	9.8401E+17	5.0818E+16
Ru-105	9.0272E-02	1.3429E-11	7.7022E+13	1.2135E+16
Ru-106	2.2718E+00	6.7905E-07	3.8579E+18	2.1044E+16
Rh-105	2.5929E+00	3.0720E-09	1.7619E+16	3.0885E+16
Sb-127	6.3648E+00	2.3834E-08	1.1302E+17	6.6039E+16
Sb-129	4.8328E-01	8.5942E-11	4.0120E+14	7.0432E+16
Te-127	6.8784E+00	2.6063E-09	1.2359E+16	6.6961E+16
Te-127m	1.0159E+00	1.0770E-07	5.1071E+17	9.3909E+15
Te-129	3.5252E+00	1.6833E-10	7.8581E+14	9.1601E+16
Te-129m	3.2917E+00	1.0927E-07	5.1009E+17	3.0775E+16
Te-131m	5.8473E+00	7.3328E-09	3.3709E+16	7.7443E+16
Te-132	8.1277E+01	2.6772E-07	1.2214E+18	8.6120E+17
I-131	5.2726E+02	4.2530E-06	1.9551E+19	4.1561E+18
I-132	1.0175E+02	9.8573E-09	4.4971E+16	2.0971E+18
I-133	5.3330E+02	4.7077E-07	2.1316E+18	6.6569E+18
I-134	7.5571E-06	2.8329E-16	1.2731E+09	3.9992E+17
I-135	8.9513E+01	2.5489E-08	1.1370E+17	3.7415E+18
Xe-133	3.6559E+05	1.9531E-03	8.8435E+21	7.6459E+20
Xe-135	3.9121E+04	1.5319E-05	6.8337E+19	1.5545E+20
Cs-134	9.4922E+01	7.3365E-05	3.2971E+20	8.9845E+17
Cs-136	2.5091E+01	3.4234E-07	1.5159E+18	2.4552E+17
Cs-137	5.9220E+01	6.8084E-04	2.9928E+21	5.6022E+17
Ba-139	3.0677E-04	1.8754E-14	8.1253E+10	4.1923E+16
Ba-140	4.8803E+01	6.6663E-07	2.8675E+18	4.6735E+17
La-140	1.6657E+01	2.9968E-08	1.2891E+17	5.9067E+16
La-141	7.0860E-03	1.2530E-12	5.3515E+12	1.3922E+15
La-142	9.8225E-06	6.8617E-16	2.9100E+09	4.4529E+14
Ce-141	1.1601E+00	4.0716E-08	1.7390E+17	1.0872E+16
Ce-143	7.0365E-01	1.0596E-09	4.4622E+15	9.0141E+15
Ce-144	9.4393E-01	2.9595E-07	1.2377E+18	8.7466E+15
Pr-143	4.7316E-01	7.0266E-09	2.9591E+16	4.2607E+15
Nd-147	1.8162E-01	2.2450E-09	9.1973E+15	1.7489E+15
Np-239	1.0580E+01	4.5607E-08	1.1492E+17	1.1818E+17
Pu-238	4.7264E-03	2.7608E-07	6.9856E+17	4.3725E+13
Pu-239	3.1673E-04	5.0957E-06	1.2840E+19	2.9249E+12
Pu-240	3.3892E-04	1.4874E-06	3.7321E+18	3.1356E+12
Pu-241	1.6265E-01	1.5789E-06	3.9454E+18	1.5049E+15
Am-241	1.0098E-04	2.9421E-08	7.3518E+16	9.3003E+11
Cm-242	2.5028E-02	7.5515E-09	1.8792E+16	2.3218E+14
Cm-244	2.7384E-03	3.3848E-08	8.3541E+16	2.5337E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 24.0000	Atmosphere	Sump	
Noble gases (atoms)	6.2177E+22	0.0000E+00	
Elemental I (atoms)	6.4077E+18	0.0000E+00	
Organic I (atoms)	1.9818E+17	0.0000E+00	
Aerosols (kg)	7.9445E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.2149E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.3359E-08
Total I (Ci)			1.2518E+03

Time (h) = 24.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.5578E+20
Organic I (atoms)	0.0000E+00	7.9108E+18
Aerosols (kg)	0.0000E+00	9.5748E-02

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 24.0000 Leakage Transport

Noble gases (atoms) 1.4062E+23

Elemental I (atoms)	2.7698E+20
Organic I (atoms)	8.5663E+18
Aerosols (kg)	1.0129E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 24.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	7.7490E+22
Elemental I (atoms)	1.2539E+19	6.5993E+17
Organic I (atoms)	3.8779E+17	2.0410E+16
Aerosols (kg)	4.6937E-03	4.7412E-05

Detailed model information at time (H) = 32.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	8.6900E+00

EAB Doses:

Time (h) = 32.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 32.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 32.0000	Ci	kg	Atoms	Decay
Co-58	9.1441E-03	2.8757E-10	2.9858E+15	1.9584E+14
Co-60	1.1083E-02	9.8043E-09	9.8405E+16	2.3530E+14
Kr-85	2.3563E+03	6.0059E-03	4.2551E+22	8.6469E+18
Kr-85m	3.5127E+02	4.2684E-08	3.0241E+17	1.8030E+19
Kr-87	2.5943E-03	9.1587E-14	6.3396E+11	2.5735E+18
Kr-88	5.5783E+01	4.4487E-09	3.0444E+16	2.1399E+19
Rb-86	3.7281E-01	4.5819E-09	3.2084E+16	8.3652E+15
Sr-89	1.3317E+01	4.5837E-07	3.1015E+18	2.8623E+17
Sr-90	1.5403E+00	1.1292E-05	7.5558E+19	3.2694E+16
Sr-91	1.7840E+00	4.9214E-10	3.2568E+15	2.1271E+17
Sr-92	5.4299E-03	4.3200E-13	2.8278E+12	8.2757E+16
Y-90	4.4971E-01	8.2657E-10	5.5308E+15	3.0936E+15
Y-91	2.0698E-01	8.4401E-09	5.5854E+16	3.9390E+15
Y-92	9.9653E-02	1.0356E-11	6.7791E+13	6.4157E+16
Y-93	2.4403E-02	7.3144E-12	4.7364E+13	2.6128E+15
Zr-95	2.1447E-01	9.9833E-09	6.3285E+16	4.5977E+15
Zr-97	6.0757E-02	3.1782E-11	1.9732E+14	3.3209E+15
Nb-95	2.1858E-01	5.5899E-09	3.5435E+16	4.6405E+15
Mo-99	2.1986E+00	4.5840E-09	2.7884E+16	5.9036E+16
Tc-99m	2.2312E+00	4.2433E-10	2.5812E+15	5.4189E+16
Ru-103	2.4868E+00	7.7053E-08	4.5051E+17	5.3647E+16
Ru-105	1.1924E-02	1.7738E-12	1.0174E+13	1.2162E+16
Ru-106	1.0456E+00	3.1253E-07	1.7755E+18	2.2230E+16
Rh-105	1.0242E+00	1.2134E-09	6.9595E+15	3.2144E+16
Sb-127	2.7604E+00	1.0337E-08	4.9015E+16	6.9269E+16
Sb-129	6.1658E-02	1.0965E-11	5.1186E+13	7.0577E+16
Te-127	3.0430E+00	1.1531E-09	5.4676E+15	7.0367E+16
Te-127m	4.6795E-01	4.9610E-08	2.3524E+17	9.9215E+15
Te-129	1.3888E+00	6.6318E-11	3.0959E+14	9.2883E+16
Te-129m	1.5057E+00	4.9981E-08	2.3333E+17	3.2488E+16
Te-131m	2.2384E+00	2.8071E-09	1.2904E+16	8.0240E+16
Te-132	3.4868E+01	1.1485E-07	5.2397E+17	9.0223E+17
I-131	2.4204E+02	1.9524E-06	8.9751E+18	4.4317E+18
I-132	4.2451E+01	4.1126E-09	1.8763E+16	2.1412E+18
I-133	1.9294E+02	1.7032E-07	7.7122E+17	6.9060E+18
I-134	6.3909E-09	2.3957E-19	1.0766E+06	3.9992E+17

I-135	1.8272E+01	5.2031E-09	2.3210E+16	3.7741E+18
Xe-133	2.7975E+05	1.4945E-03	6.7671E+21	1.0989E+21
Xe-135	1.7288E+04	6.7698E-06	3.0199E+19	1.8332E+20
Cs-134	4.3701E+01	3.3776E-05	1.5179E+20	9.4802E+17
Cs-136	1.1353E+01	1.5490E-07	6.8591E+17	2.5851E+17
Cs-137	2.7272E+01	3.1354E-04	1.3782E+21	5.9115E+17
Ba-139	2.5284E-06	1.5458E-16	6.6970E+08	4.1923E+16
Ba-140	2.2071E+01	3.0148E-07	1.2968E+18	4.9262E+17
La-140	9.5733E+00	1.7223E-08	7.4087E+16	6.8620E+16
La-141	7.9593E-04	1.4074E-13	6.0110E+11	1.3942E+15
La-142	1.2399E-07	8.6613E-18	3.6732E+07	4.4530E+14
Ce-141	5.3050E-01	1.8618E-08	7.9519E+16	1.1476E+16
Ce-143	2.7393E-01	4.1249E-10	1.7371E+15	9.3534E+15
Ce-144	4.3435E-01	1.3618E-07	5.6952E+17	9.2394E+15
Pr-143	2.1926E-01	3.2561E-09	1.3713E+16	4.5083E+15
Nd-147	8.1900E-02	1.0124E-09	4.1474E+15	1.8428E+15
Np-239	4.4172E+00	1.9040E-08	4.7977E+16	1.2345E+17
Pu-238	2.1767E-03	1.2714E-07	3.2172E+17	4.6194E+13
Pu-239	1.4598E-04	2.3487E-06	5.9180E+18	3.0904E+12
Pu-240	1.5608E-04	6.8496E-07	1.7187E+18	3.3127E+12
Pu-241	7.4900E-02	7.2710E-07	1.8169E+18	1.5899E+15
Am-241	4.6612E-05	1.3581E-08	3.3936E+16	9.8282E+11
Cm-242	1.1510E-02	3.4727E-09	8.6418E+15	2.4524E+14
Cm-244	1.2611E-03	1.5587E-08	3.8471E+16	2.6768E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 32.0000	Atmosphere	Sump	
Noble gases (atoms)	4.9349E+22	0.0000E+00	
Elemental I (atoms)	3.0371E+18	0.0000E+00	
Organic I (atoms)	9.3931E+16	0.0000E+00	
Aerosols (kg)	3.6575E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.3941E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.8204E-09
Total I (Ci)			4.9571E+02

Time (h) = 32.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.9901E+20
Organic I (atoms)	0.0000E+00	9.2477E+18
Aerosols (kg)	0.0000E+00	1.0122E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 32.0000	Leakage Transport
Noble gases (atoms)	1.6488E+23
Elemental I (atoms)	3.1948E+20
Organic I (atoms)	9.8807E+18
Aerosols (kg)	1.0665E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 32.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.1421E+23
Elemental I (atoms)	1.4658E+19	7.7145E+17
Organic I (atoms)	4.5333E+17	2.3859E+16
Aerosols (kg)	4.9622E-03	5.0123E-05

Detailed model information at time (H) = 40.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	9.4231E+00

EAB Doses:

Time (h) = 40.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 40.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 40.0000	Ci	kg	Atoms	Decay
Co-58	8.4065E-03	2.6437E-10	2.7450E+15	2.0513E+14
Co-60	1.0221E-02	9.0419E-09	9.0753E+16	2.4658E+14
Kr-85	2.0510E+03	5.2278E-03	3.7038E+22	1.0957E+19
Kr-85m	8.8684E+01	1.0776E-08	7.6349E+16	1.8230E+19
Kr-87	2.8841E-05	1.0182E-15	7.0479E+09	2.5735E+18
Kr-88	6.8911E+00	5.4957E-10	3.7609E+15	2.1424E+19
Rb-86	3.3963E-01	4.1741E-09	2.9229E+16	8.7426E+15
Sr-89	1.2226E+01	4.2084E-07	2.8476E+18	2.9977E+17
Sr-90	1.4207E+00	1.0415E-05	6.9689E+19	3.4262E+16
Sr-91	9.1789E-01	2.5321E-10	1.6757E+15	2.1410E+17
Sr-92	6.4720E-04	5.1490E-14	3.3704E+11	8.2759E+16
Y-90	4.9891E-01	9.1701E-10	6.1360E+15	3.5896E+15
Y-91	1.9222E-01	7.8381E-09	5.1871E+16	4.1505E+15
Y-92	2.0629E-02	2.1439E-12	1.4033E+13	6.4210E+16
Y-93	1.2999E-02	3.8961E-12	2.5229E+13	2.6320E+15
Zr-95	1.9710E-01	9.1749E-09	5.8160E+16	4.8157E+15
Zr-97	4.0364E-02	2.1115E-11	1.3109E+14	3.3737E+15
Nb-95	2.0157E-01	5.1548E-09	3.2677E+16	4.8630E+15
Mo-99	1.8644E+00	3.8873E-09	2.3647E+16	6.1185E+16
Tc-99m	1.9031E+00	3.6193E-10	2.2016E+15	5.6266E+16
Ru-103	2.2802E+00	7.0652E-08	4.1309E+17	5.6172E+16
Ru-105	3.1543E-03	4.6925E-13	2.6913E+12	1.2169E+16
Ru-106	9.6378E-01	2.8808E-07	1.6366E+18	2.3295E+16
Rh-105	8.0847E-01	9.5784E-10	5.4935E+15	3.3111E+16
Sb-127	2.3978E+00	8.9787E-09	4.2575E+16	7.1999E+16
Sb-129	1.5755E-02	2.8017E-12	1.3079E+13	7.0613E+16
Te-127	2.6852E+00	1.0175E-09	4.8247E+15	7.3299E+16
Te-127m	4.3164E-01	4.5760E-08	2.1699E+17	1.0398E+16
Te-129	1.2149E+00	5.8011E-11	2.7082E+14	9.3920E+16
Te-129m	1.3793E+00	4.5785E-08	2.1374E+17	3.4017E+16
Te-131m	1.7161E+00	2.1521E-09	9.8935E+15	8.2324E+16
Te-132	2.9959E+01	9.8681E-08	4.5020E+17	9.3653E+17
I-131	2.2275E+02	1.7967E-06	8.2595E+18	4.6783E+18
I-132	3.6403E+01	3.5267E-09	1.6089E+16	2.1775E+18
I-133	1.3995E+02	1.2354E-07	5.5938E+17	7.0812E+18
I-135	7.4779E+00	2.1293E-09	9.4986E+15	3.7869E+18
Xe-133	2.3326E+05	1.2462E-03	5.6425E+21	1.3675E+21
Xe-135	8.3369E+03	3.2646E-06	1.4563E+19	1.9622E+20
Cs-134	4.0295E+01	3.1144E-05	1.3996E+20	9.9252E+17
Cs-136	1.0288E+01	1.4037E-07	6.2158E+17	2.6998E+17
Cs-137	2.5154E+01	2.8918E-04	1.2712E+21	6.1893E+17
Ba-139	4.1738E-08	2.5517E-18	1.1055E+07	4.1923E+16
Ba-140	1.9991E+01	2.7308E-07	1.1746E+18	5.1490E+17
La-140	1.0311E+01	1.8551E-08	7.9796E+16	7.9008E+16
La-141	1.7905E-04	3.1661E-14	1.3522E+11	1.3947E+15
La-142	3.1345E-09	2.1896E-19	9.2862E+05	4.4530E+14
Ce-141	4.8584E-01	1.7051E-08	7.2825E+16	1.2015E+16
Ce-143	2.1357E-01	3.2161E-10	1.3544E+15	9.6105E+15
Ce-144	4.0029E-01	1.2550E-07	5.2486E+17	9.6816E+15
Pr-143	2.0275E-01	3.0109E-09	1.2680E+16	4.7317E+15
Nd-147	7.3967E-02	9.1432E-10	3.7457E+15	1.9254E+15
Np-239	3.6935E+00	1.5921E-08	4.0116E+16	1.2774E+17
Pu-238	2.0077E-03	1.1728E-07	2.9674E+17	4.8411E+13
Pu-239	1.3475E-04	2.1679E-06	5.4626E+18	3.2391E+12
Pu-240	1.4396E-04	6.3177E-07	1.5853E+18	3.4716E+12
Pu-241	6.9081E-02	6.7061E-07	1.6757E+18	1.6662E+15
Am-241	4.3094E-05	1.2556E-08	3.1375E+16	1.0303E+12
Cm-242	1.0601E-02	3.1985E-09	7.9594E+15	2.5696E+14
Cm-244	1.1631E-03	1.4377E-08	3.5483E+16	2.8052E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 40.0000	Atmosphere	Sump
Noble gases (atoms)	4.2695E+22	0.0000E+00
Elemental I (atoms)	2.8957E+18	0.0000E+00

Organic I (atoms)	8.9557E+16	0.0000E+00
Aerosols (kg)	3.3725E-04	0.0000E+00

Dose Effective (Ci/cc)	I-131 (Thyroid)	4.8356E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	5.1420E-09
Total I (Ci)		4.0657E+02

Time (h) = 40.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.3743E+20
Organic I (atoms)	0.0000E+00	1.0436E+19
Aerosols (kg)	0.0000E+00	1.0596E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 40.0000	Leakage Transport
Noble gases (atoms)	1.8897E+23
Elemental I (atoms)	3.5987E+20
Organic I (atoms)	1.1130E+19
Aerosols (kg)	1.1158E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 40.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.4467E+23
Elemental I (atoms)	1.6541E+19	8.7056E+17
Organic I (atoms)	5.1157E+17	2.6925E+16
Aerosols (kg)	5.1941E-03	5.2466E-05

Detailed model information at time (H) = 48.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.0218E+01

EAB Doses:

Time (h) = 48.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 48.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 48.0000	Ci	kg	Atoms	Decay
Co-58	7.7285E-03	2.4305E-10	2.5236E+15	2.1368E+14
Co-60	9.4260E-03	8.3388E-09	8.3695E+16	2.5699E+14
Kr-85	1.8936E+03	4.8264E-03	3.4194E+22	1.3039E+19
Kr-85m	2.3748E+01	2.8857E-09	2.0445E+16	1.8282E+19
Kr-87	3.4007E-07	1.2006E-17	8.3104E+07	2.5735E+18
Kr-88	9.0292E-01	7.2007E-11	4.9277E+14	2.1427E+19
Rb-86	3.0940E-01	3.8026E-09	2.6627E+16	9.0864E+15
Sr-89	1.1225E+01	3.8639E-07	2.6145E+18	3.1219E+17
Sr-90	1.3103E+00	9.6060E-06	6.4276E+19	3.5709E+16
Sr-91	4.7226E-01	1.3028E-10	8.6216E+14	2.1481E+17
Sr-92	7.7141E-05	6.1372E-15	4.0173E+10	8.2759E+16
Y-90	5.3132E-01	9.7658E-10	6.5345E+15	4.1292E+15
Y-91	1.7766E-01	7.2443E-09	4.7941E+16	4.3464E+15
Y-92	4.1441E-03	4.3068E-13	2.8191E+12	6.4221E+16
Y-93	6.9240E-03	2.0753E-12	1.3439E+13	2.6422E+15
Zr-95	1.8114E-01	8.4319E-09	5.3451E+16	5.0161E+15
Zr-97	2.6816E-02	1.4027E-11	8.7087E+13	3.4089E+15
Nb-95	1.8588E-01	4.7535E-09	3.0133E+16	5.0682E+15
Mo-99	1.5811E+00	3.2965E-09	2.0053E+16	6.3008E+16

Tc-99m	1.6179E+00	3.0769E-10	1.8717E+15	5.8035E+16
Ru-103	2.0908E+00	6.4784E-08	3.7877E+17	5.8488E+16
Ru-105	8.3446E-04	1.2414E-13	7.1198E+11	1.2171E+16
Ru-106	8.8838E-01	2.6554E-07	1.5086E+18	2.4276E+16
Rh-105	6.3770E-01	7.5551E-10	4.3332E+15	3.3874E+16
Sb-127	2.0828E+00	7.7991E-09	3.6982E+16	7.4370E+16
Sb-129	4.0258E-03	7.1591E-13	3.3421E+12	7.0622E+16
Te-127	2.3644E+00	8.9590E-10	4.2482E+15	7.5883E+16
Te-127m	3.9809E-01	4.2204E-08	2.0013E+17	1.0838E+16
Te-129	1.0982E+00	5.2440E-11	2.4481E+14	9.4842E+16
Te-129m	1.2635E+00	4.1941E-08	1.9579E+17	3.5417E+16
Te-131m	1.3157E+00	1.6500E-09	7.5853E+15	8.3922E+16
Te-132	2.5741E+01	8.4787E-08	3.8682E+17	9.6600E+17
I-131	2.0527E+02	1.6558E-06	7.6116E+18	4.9055E+18
I-132	3.1299E+01	3.0322E-09	1.3834E+16	2.2088E+18
I-133	1.0165E+02	8.9735E-08	4.0631E+17	7.2084E+18
I-135	3.0646E+00	8.7266E-10	3.8928E+15	3.7921E+18
Xe-133	2.0627E+05	1.1020E-03	4.9897E+21	1.5993E+21
Xe-135	4.2553E+03	1.6663E-06	7.4331E+18	2.0264E+20
Cs-134	3.7154E+01	2.8717E-05	1.2906E+20	1.0336E+18
Cs-136	9.3234E+00	1.2721E-07	5.6329E+17	2.8036E+17
Cs-137	2.3200E+01	2.6672E-04	1.1724E+21	6.4455E+17
Ba-139	6.8899E-10	4.2122E-20	1.8249E+05	4.1923E+16
Ba-140	1.8108E+01	2.4734E-07	1.0640E+18	5.3508E+17
La-140	1.0657E+01	1.9174E-08	8.2476E+16	8.9979E+16
La-141	4.0281E-05	7.1225E-15	3.0421E+10	1.3948E+15
La-142	7.9243E-11	5.5356E-21	2.3476E+04	4.4530E+14
Ce-141	4.4494E-01	1.5616E-08	6.6694E+16	1.2508E+16
Ce-143	1.6652E-01	2.5075E-10	1.0560E+15	9.8110E+15
Ce-144	3.6891E-01	1.1566E-07	4.8371E+17	1.0089E+16
Pr-143	1.8692E-01	2.7757E-09	1.1689E+16	4.9379E+15
Nd-147	6.6803E-02	8.2576E-10	3.3829E+15	1.9999E+15
Np-239	3.0883E+00	1.3312E-08	3.3543E+16	1.3132E+17
Pu-238	1.8519E-03	1.0817E-07	2.7371E+17	5.0456E+13
Pu-239	1.2437E-04	2.0010E-06	5.0418E+18	3.3764E+12
Pu-240	1.3278E-04	5.8272E-07	1.4622E+18	3.6182E+12
Pu-241	6.3714E-02	6.1851E-07	1.5455E+18	1.7365E+15
Am-241	3.9841E-05	1.1608E-08	2.9006E+16	1.0743E+12
Cm-242	9.7637E-03	2.9459E-09	7.3309E+15	2.6775E+14
Cm-244	1.0727E-03	1.3260E-08	3.2726E+16	2.9237E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 48.0000	Atmosphere	Sump	
Noble gases (atoms)	3.9191E+22	0.0000E+00	
Elemental I (atoms)	2.7721E+18	0.0000E+00	
Organic I (atoms)	8.5734E+16	0.0000E+00	
Aerosols (kg)	3.1099E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.3646E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		4.5876E-09
Total I (Ci)			3.4129E+02

Time (h) = 48.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.7412E+20
Organic I (atoms)	0.0000E+00	1.1571E+19
Aerosols (kg)	0.0000E+00	1.1032E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 48.0000	Leakage Transport
Noble gases (atoms)	2.1289E+23
Elemental I (atoms)	3.9846E+20
Organic I (atoms)	1.2323E+19
Aerosols (kg)	1.1613E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 48.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.7185E+23
Elemental I (atoms)	1.8340E+19	9.6524E+17
Organic I (atoms)	5.6720E+17	2.9853E+16
Aerosols (kg)	5.4079E-03	5.4625E-05

Detailed model information at time (H) = 56.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.1080E+01

EAB Doses:

Time (h) = 56.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 56.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 56.0000	Ci	kg	Atoms	Decay
Co-58	7.1051E-03	2.2345E-10	2.3200E+15	2.2154E+14
Co-60	8.6930E-03	7.6903E-09	7.7187E+16	2.6659E+14
Kr-85	1.8120E+03	4.6184E-03	3.2721E+22	1.5004E+19
Kr-85m	6.5912E+00	8.0092E-10	5.6744E+15	1.8296E+19
Kr-87	4.1562E-09	1.4673E-19	1.0157E+06	2.5735E+18
Kr-88	1.2262E-01	9.7791E-12	6.6922E+13	2.1427E+19
Rb-86	2.8187E-01	3.4641E-09	2.4257E+16	9.3997E+15
Sr-89	1.0307E+01	3.5476E-07	2.4005E+18	3.2360E+17
Sr-90	1.2085E+00	8.8598E-06	5.9283E+19	3.7044E+16
Sr-91	2.4299E-01	6.7031E-11	4.4359E+14	2.1517E+17
Sr-92	9.1945E-06	7.3150E-16	4.7883E+09	8.2759E+16
Y-90	5.5024E-01	1.0113E-09	6.7672E+15	4.6964E+15
Y-91	1.6376E-01	6.6777E-09	4.4191E+16	4.5273E+15
Y-92	8.1850E-04	8.5062E-14	5.5680E+11	6.4223E+16
Y-93	3.6882E-03	1.1055E-12	7.1583E+12	2.6477E+15
Zr-95	1.6647E-01	7.7491E-09	4.9122E+16	5.2003E+15
Zr-97	1.7815E-02	9.3190E-12	5.7856E+13	3.4322E+15
Nb-95	1.7140E-01	4.3833E-09	2.7786E+16	5.2574E+15
Mo-99	1.3408E+00	2.7955E-09	1.7005E+16	6.4553E+16
Tc-99m	1.3735E+00	2.6121E-10	1.5889E+15	5.9537E+16
Ru-103	1.9172E+00	5.9403E-08	3.4731E+17	6.0611E+16
Ru-105	2.2075E-04	3.2840E-14	1.8835E+11	1.2172E+16
Ru-106	8.1888E-01	2.4477E-07	1.3906E+18	2.5180E+16
Rh-105	5.0287E-01	5.9578E-10	3.4170E+15	3.4476E+16
Sb-127	1.8091E+00	6.7745E-09	3.2123E+16	7.6430E+16
Sb-129	1.0287E-03	1.8293E-13	8.5398E+11	7.0624E+16
Te-127	2.0797E+00	7.8805E-10	3.7368E+15	7.8157E+16
Te-127m	3.6711E-01	3.8920E-08	1.8455E+17	1.1243E+16
Te-129	1.0023E+00	4.7858E-11	2.2342E+14	9.5680E+16
Te-129m	1.1574E+00	3.8419E-08	1.7935E+17	3.6699E+16
Te-131m	1.0088E+00	1.2651E-09	5.8155E+15	8.5147E+16
Te-132	2.2117E+01	7.2850E-08	3.3236E+17	9.9132E+17
I-131	1.8944E+02	1.5281E-06	7.0247E+18	5.1150E+18
I-132	2.6918E+01	2.6078E-09	1.1897E+16	2.2357E+18
I-133	7.3945E+01	6.5276E-08	2.9556E+17	7.3009E+18
I-135	1.2578E+00	3.5816E-10	1.5977E+15	3.7943E+18
Xe-133	1.8903E+05	1.0099E-03	4.5726E+21	1.8088E+21
Xe-135	2.2436E+03	8.7855E-07	3.9191E+18	2.0598E+20
Cs-134	3.4259E+01	2.6479E-05	1.1900E+20	1.0714E+18
Cs-136	8.4490E+00	1.1528E-07	5.1047E+17	2.8978E+17
Cs-137	2.1398E+01	2.4600E-04	1.0814E+21	6.6818E+17
Ba-140	1.6401E+01	2.2404E-07	9.6370E+17	5.5336E+17
La-140	1.0712E+01	1.9273E-08	8.2901E+16	1.0117E+17
La-141	9.0616E-06	1.6023E-15	6.8435E+09	1.3948E+15
Ce-141	4.0748E-01	1.4301E-08	6.1079E+16	1.2959E+16
Ce-143	1.2983E-01	1.9551E-10	8.2334E+14	9.9673E+15
Ce-144	3.3999E-01	1.0660E-07	4.4579E+17	1.0465E+16
Pr-143	1.7188E-01	2.5525E-09	1.0749E+16	5.1279E+15

Nd-147	6.0332E-02	7.4577E-10	3.0552E+15	2.0672E+15
Np-239	2.5823E+00	1.1131E-08	2.8047E+16	1.3432E+17
Pu-238	1.7081E-03	9.9775E-08	2.5246E+17	5.2342E+13
Pu-239	1.1479E-04	1.8467E-06	4.6532E+18	3.5031E+12
Pu-240	1.2247E-04	5.3747E-07	1.3486E+18	3.7535E+12
Pu-241	5.8764E-02	5.7045E-07	1.4255E+18	1.8014E+15
Am-241	3.6833E-05	1.0732E-08	2.6816E+16	1.1149E+12
Cm-242	8.9928E-03	2.7133E-09	6.7521E+15	2.7768E+14
Cm-244	9.8941E-04	1.2230E-08	3.0184E+16	3.0329E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 56.0000	Atmosphere	Sump	
Noble gases (atoms)	3.7297E+22	0.0000E+00	
Elemental I (atoms)	2.6618E+18	0.0000E+00	
Organic I (atoms)	8.2324E+16	0.0000E+00	
Aerosols (kg)	2.8677E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.9621E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		4.1256E-09
Total I (Ci)			2.9156E+02

Time (h) = 56.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.0930E+20
Organic I (atoms)	0.0000E+00	1.2659E+19
Aerosols (kg)	0.0000E+00	1.1434E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 56.0000	Leakage Transport
Noble gases (atoms)	2.3665E+23
Elemental I (atoms)	4.3545E+20
Organic I (atoms)	1.3468E+19
Aerosols (kg)	1.2033E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 56.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.9729E+23
Elemental I (atoms)	2.0064E+19	1.0560E+18
Organic I (atoms)	6.2053E+17	3.2660E+16
Aerosols (kg)	5.6050E-03	5.6617E-05

Detailed model information at time (H) = 64.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.2014E+01

EAB Doses:

Time (h) = 64.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 64.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 64.0000	Ci	kg	Atoms	Decay
Co-58	6.5320E-03	2.0542E-10	2.1329E+15	2.2877E+14
Co-60	8.0170E-03	7.0923E-09	7.1185E+16	2.7545E+14
Kr-85	1.7693E+03	4.5097E-03	3.1951E+22	1.6907E+19
Kr-85m	1.8668E+00	2.2684E-10	1.6071E+15	1.8300E+19
Kr-87	5.1834E-11	1.8299E-21	1.2667E+04	2.5735E+18

Kr-88	1.6993E-02	1.3552E-12	9.2743E+12	2.1427E+19
Rb-86	2.5678E-01	3.1558E-09	2.2099E+16	9.6850E+15
Sr-89	9.4628E+00	3.2572E-07	2.2040E+18	3.3407E+17
Sr-90	1.1147E+00	8.1717E-06	5.4679E+19	3.8275E+16
Sr-91	1.2502E-01	3.4488E-11	2.2823E+14	2.1536E+17
Sr-92	1.0959E-06	8.7189E-17	5.7072E+08	8.2759E+16
Y-90	5.5841E-01	1.0264E-09	6.8677E+15	5.2783E+15
Y-91	1.5073E-01	6.1463E-09	4.0675E+16	4.6939E+15
Y-92	1.6006E-04	1.6634E-14	1.0888E+11	6.4223E+16
Y-93	1.9646E-03	5.8884E-13	3.8130E+12	2.6506E+15
Zr-95	1.5299E-01	7.1216E-09	4.5145E+16	5.3695E+15
Zr-97	1.1835E-02	6.1911E-12	3.8437E+13	3.4477E+15
Nb-95	1.5805E-01	4.0419E-09	2.5622E+16	5.4319E+15
Mo-99	1.1370E+00	2.3707E-09	1.4421E+16	6.5864E+16
Tc-99m	1.1653E+00	2.2161E-10	1.3481E+15	6.0812E+16
Ru-103	1.7579E+00	5.4469E-08	3.1846E+17	6.2558E+16
Ru-105	5.8399E-05	8.6877E-15	4.9827E+10	1.2172E+16
Ru-106	7.5482E-01	2.2562E-07	1.2818E+18	2.6014E+16
Rh-105	3.9652E-01	4.6978E-10	2.6943E+15	3.4951E+16
Sb-127	1.5715E+00	5.8844E-09	2.7903E+16	7.8219E+16
Sb-129	2.6286E-04	4.6743E-14	2.1821E+11	7.0625E+16
Te-127	1.8287E+00	6.9292E-10	3.2857E+15	8.0158E+16
Te-127m	3.3851E-01	3.5887E-08	1.7017E+17	1.1617E+16
Te-129	9.1714E-01	4.3793E-11	2.0444E+14	9.6446E+16
Te-129m	1.0602E+00	3.5193E-08	1.6429E+17	3.7874E+16
Te-131m	7.7341E-01	9.6991E-10	4.4587E+15	8.6086E+16
Te-132	1.9003E+01	6.2593E-08	2.8556E+17	1.0131E+18
I-131	1.7509E+02	1.4123E-06	6.4926E+18	5.3085E+18
I-132	2.3151E+01	2.2429E-09	1.0233E+16	2.2588E+18
I-133	5.3871E+01	4.7555E-08	2.1532E+17	7.3682E+18
I-135	5.1702E-01	1.4722E-10	6.5673E+14	3.7952E+18
Xe-133	1.7674E+05	9.4421E-04	4.2753E+21	2.0031E+21
Xe-135	1.2031E+03	4.7112E-07	2.1016E+18	2.0775E+20
Cs-134	3.1589E+01	2.4415E-05	1.0972E+20	1.1063E+18
Cs-136	7.6567E+00	1.0447E-07	4.6260E+17	2.9831E+17
Cs-137	1.9736E+01	2.2690E-04	9.9738E+20	6.8997E+17
Ba-140	1.4856E+01	2.0293E-07	8.7289E+17	5.6991E+17
La-140	1.0554E+01	1.8988E-08	8.1678E+16	1.1232E+17
La-141	2.0385E-06	3.6046E-16	1.5395E+09	1.3948E+15
Ce-141	3.7318E-01	1.3097E-08	5.5937E+16	1.3373E+16
Ce-143	1.0123E-01	1.5243E-10	6.4194E+14	1.0089E+16
Ce-144	3.1333E-01	9.8239E-08	4.1084E+17	1.0811E+16
Pr-143	1.5772E-01	2.3422E-09	9.8635E+15	5.3024E+15
Nd-147	5.4488E-02	6.7354E-10	2.7593E+15	2.1281E+15
Np-239	2.1592E+00	9.3072E-09	2.3452E+16	1.3683E+17
Pu-238	1.5755E-03	9.2030E-08	2.3286E+17	5.4082E+13
Pu-239	1.0593E-04	1.7043E-06	4.2943E+18	3.6200E+12
Pu-240	1.1296E-04	4.9573E-07	1.2439E+18	3.8782E+12
Pu-241	5.4198E-02	5.2613E-07	1.3147E+18	1.8613E+15
Am-241	3.4052E-05	9.9214E-09	2.4792E+16	1.1525E+12
Cm-242	8.2827E-03	2.4991E-09	6.2189E+15	2.8684E+14
Cm-244	9.1255E-04	1.1280E-08	2.7839E+16	3.1337E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 64.0000	Atmosphere	Sump	
Noble gases (atoms)	3.6228E+22	0.0000E+00	
Elemental I (atoms)	2.5619E+18	0.0000E+00	
Organic I (atoms)	7.9233E+16	0.0000E+00	
Aerosols (kg)	2.6444E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.6141E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.7350E-09
Total I (Ci)			2.5263E+02

Time (h) = 64.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.4311E+20
Organic I (atoms)	0.0000E+00	1.3705E+19
Aerosols (kg)	0.0000E+00	1.1805E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 64.0000 Leakage Transport

Noble gases (atoms) 2.6026E+23

Elemental I (atoms)	4.7101E+20
Organic I (atoms)	1.4567E+19
Aerosols (kg)	1.2420E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 64.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.2178E+23
Elemental I (atoms)	2.1721E+19	1.1432E+18
Organic I (atoms)	6.7180E+17	3.5358E+16
Aerosols (kg)	5.7868E-03	5.8453E-05

Detailed model information at time (H) = 72.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.3027E+01

EAB Doses:

Time (h) = 72.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 72.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 72.0000	Ci	kg	Atoms	Decay
Co-58	6.0052E-03	1.8885E-10	1.9609E+15	2.3541E+14
Co-60	7.3936E-03	6.5408E-09	6.5649E+16	2.8361E+14
Kr-85	1.7467E+03	4.4520E-03	3.1542E+22	1.8777E+19
Kr-85m	5.3453E-01	6.4952E-11	4.6018E+14	1.8301E+19
Kr-88	2.3809E-03	1.8988E-13	1.2994E+12	2.1427E+19
Rb-86	2.3393E-01	2.8749E-09	2.0132E+16	9.9449E+15
Sr-89	8.6882E+00	2.9905E-07	2.0235E+18	3.4369E+17
Sr-90	1.0281E+00	7.5370E-06	5.0432E+19	3.9410E+16
Sr-91	6.4324E-02	1.7745E-11	1.1743E+14	2.1546E+17
Sr-92	1.3062E-07	1.0392E-17	6.8025E+07	8.2759E+16
Y-90	5.5809E-01	1.0258E-09	6.8638E+15	5.8646E+15
Y-91	1.3862E-01	5.6526E-09	3.7407E+16	4.8472E+15
Y-92	3.1114E-05	3.2335E-15	2.1166E+10	6.4223E+16
Y-93	1.0465E-03	3.1366E-13	2.0311E+12	2.6521E+15
Zr-95	1.4060E-01	6.5449E-09	4.1489E+16	5.5251E+15
Zr-97	7.8628E-03	4.1130E-12	2.5535E+13	3.4580E+15
Nb-95	1.4574E-01	3.7270E-09	2.3626E+16	5.5928E+15
Mo-99	9.6421E-01	2.0104E-09	1.2229E+16	6.6975E+16
Tc-99m	9.8839E-01	1.8797E-10	1.1434E+15	6.1894E+16
Ru-103	1.6119E+00	4.9944E-08	2.9201E+17	6.4344E+16
Ru-105	1.5449E-05	2.2983E-15	1.3181E+10	1.2172E+16
Ru-106	6.9577E-01	2.0797E-07	1.1815E+18	2.6783E+16
Rh-105	3.1265E-01	3.7041E-10	2.1245E+15	3.5325E+16
Sb-127	1.3650E+00	5.1114E-09	2.4237E+16	7.9773E+16
Sb-129	6.7166E-05	1.1944E-14	5.5759E+10	7.0625E+16
Te-127	1.6080E+00	6.0929E-10	2.8892E+15	8.1916E+16
Te-127m	3.1210E-01	3.3087E-08	1.5689E+17	1.1961E+16
Te-129	8.3988E-01	4.0104E-11	1.8722E+14	9.7147E+16
Te-129m	9.7117E-01	3.2238E-08	1.5050E+17	3.8950E+16
Te-131m	5.9297E-01	7.4362E-10	3.4185E+15	8.6806E+16
Te-132	1.6327E+01	5.3781E-08	2.4536E+17	1.0318E+18
I-131	1.6207E+02	1.3073E-06	6.0098E+18	5.4874E+18
I-132	1.9912E+01	1.9291E-09	8.8009E+15	2.2787E+18
I-133	3.9306E+01	3.4698E-08	1.5711E+17	7.4173E+18
I-135	2.1284E-01	6.0607E-11	2.7036E+14	3.7956E+18
Xe-133	1.6704E+05	8.9241E-04	4.0408E+21	2.1859E+21

Xe-135	6.5049E+02	2.5472E-07	1.1363E+18	2.0871E+20
Cs-134	2.9127E+01	2.2512E-05	1.0117E+20	1.1384E+18
Cs-136	6.9387E+00	9.4673E-08	4.1922E+17	3.0604E+17
Cs-137	1.8203E+01	2.0927E-04	9.1991E+20	7.1007E+17
Ba-140	1.3456E+01	1.8380E-07	7.9064E+17	5.8491E+17
La-140	1.0244E+01	1.8430E-08	7.9276E+16	1.2323E+17
La-141	4.5859E-07	8.1090E-17	3.4634E+08	1.3948E+15
Ce-141	3.4176E-01	1.1994E-08	5.1228E+16	1.3752E+16
Ce-143	7.8926E-02	1.1885E-10	5.0051E+14	1.0184E+16
Ce-144	2.8877E-01	9.0537E-08	3.7863E+17	1.1130E+16
Pr-143	1.4447E-01	2.1454E-09	9.0347E+15	5.4624E+15
Nd-147	4.9211E-02	6.0830E-10	2.4920E+15	2.1830E+15
Np-239	1.8054E+00	7.7823E-09	1.9609E+16	1.3892E+17
Pu-238	1.4532E-03	8.4886E-08	2.1479E+17	5.5687E+13
Pu-239	9.7756E-05	1.5727E-06	3.9629E+18	3.7280E+12
Pu-240	1.0419E-04	4.5724E-07	1.1473E+18	3.9933E+12
Pu-241	4.9987E-02	4.8525E-07	1.2126E+18	1.9165E+15
Am-241	3.1481E-05	9.1723E-09	2.2920E+16	1.1872E+12
Cm-242	7.6287E-03	2.3018E-09	5.7279E+15	2.9527E+14
Cm-244	8.4165E-04	1.0403E-08	2.5676E+16	3.2266E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 72.0000	Atmosphere	Sump	
Noble gases (atoms)	3.5584E+22	0.0000E+00	
Elemental I (atoms)	2.4702E+18	0.0000E+00	
Organic I (atoms)	7.6397E+16	0.0000E+00	
Aerosols (kg)	2.4386E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.3106E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.4004E-09
Total I (Ci)			2.2151E+02

Time (h) = 72.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.7569E+20
Organic I (atoms)	0.0000E+00	1.4712E+19
Aerosols (kg)	0.0000E+00	1.2147E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 72.0000	Leakage Transport
Noble gases (atoms)	2.8373E+23
Elemental I (atoms)	5.0526E+20
Organic I (atoms)	1.5627E+19
Aerosols (kg)	1.2777E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 72.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.4571E+23
Elemental I (atoms)	2.3318E+19	1.2273E+18
Organic I (atoms)	7.2118E+17	3.7957E+16
Aerosols (kg)	5.9545E-03	6.0146E-05

Detailed model information at time (H) = 80.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.4126E+01

EAB Doses:

Time (h) = 80.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 80.0000	Whole Body	Thyroid	TEDE

Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 80.0000	Ci	kg	Atoms	Decay
Co-58	5.5208E-03	1.7362E-10	1.8027E+15	2.4152E+14
Co-60	6.8186E-03	6.0321E-09	6.0544E+16	2.9114E+14
Kr-85	1.7343E+03	4.4205E-03	3.1319E+22	2.0630E+19
Kr-85m	1.5394E-01	1.8706E-11	1.3253E+14	1.8302E+19
Kr-88	3.3551E-04	2.6757E-14	1.8311E+11	2.1427E+19
Rb-86	2.1311E-01	2.6191E-09	1.8340E+16	1.0182E+16
Sr-89	7.9769E+00	2.7457E-07	1.8579E+18	3.5252E+17
Sr-90	9.4824E-01	6.9515E-06	4.6515E+19	4.0457E+16
Sr-91	3.3095E-02	9.1298E-12	6.0418E+13	2.1551E+17
Sr-92	1.5569E-08	1.2387E-18	8.1080E+06	8.2759E+16
Y-90	5.5116E-01	1.0130E-09	6.7785E+15	6.4475E+15
Y-91	1.2743E-01	5.1962E-09	3.4387E+16	4.9882E+15
Y-92	6.0263E-06	6.2628E-16	4.0995E+09	6.4223E+16
Y-93	5.5741E-04	1.6707E-13	1.0819E+12	2.6529E+15
Zr-95	1.2922E-01	6.0149E-09	3.8129E+16	5.6680E+15
Zr-97	5.2236E-03	2.7325E-12	1.6964E+13	3.4648E+15
Nb-95	1.3438E-01	3.4365E-09	2.1784E+16	5.7412E+15
Mo-99	8.1767E-01	1.7048E-09	1.0370E+16	6.7917E+16
Tc-99m	8.3825E-01	1.5942E-10	9.6972E+14	6.2811E+16
Ru-103	1.4780E+00	4.5796E-08	2.6776E+17	6.5981E+16
Ru-105	4.0869E-06	6.0799E-16	3.4871E+09	1.2172E+16
Ru-106	6.4134E-01	1.9170E-07	1.0891E+18	2.7491E+16
Rh-105	2.4652E-01	2.9206E-10	1.6751E+15	3.5620E+16
Sb-127	1.1857E+00	4.4398E-09	2.1053E+16	8.1123E+16
Sb-129	1.7163E-05	3.0520E-15	1.4248E+10	7.0625E+16
Te-127	1.4143E+00	5.3588E-10	2.5411E+15	8.3463E+16
Te-127m	2.8772E-01	3.0503E-08	1.4464E+17	1.2279E+16
Te-129	7.6929E-01	3.6734E-11	1.7148E+14	9.7789E+16
Te-129m	8.8962E-01	2.9531E-08	1.3786E+17	3.9936E+16
Te-131m	4.5462E-01	5.7013E-10	2.6209E+15	8.7358E+16
Te-132	1.4029E+01	4.6209E-08	2.1081E+17	1.0478E+18
I-131	1.5025E+02	1.2120E-06	5.5715E+18	5.6533E+18
I-132	1.7127E+01	1.6592E-09	7.5697E+15	2.2958E+18
I-133	2.8723E+01	2.5356E-08	1.1481E+17	7.4531E+18
I-135	8.7758E-02	2.4989E-11	1.1147E+14	3.7957E+18
Xe-133	1.5877E+05	8.4824E-04	3.8407E+21	2.3594E+21
Xe-135	3.5302E+02	1.3824E-07	6.1666E+17	2.0923E+20
Cs-134	2.6857E+01	2.0758E-05	9.3288E+19	1.1681E+18
Cs-136	6.2880E+00	8.5795E-08	3.7990E+17	3.1304E+17
Cs-137	1.6789E+01	1.9302E-04	8.4846E+20	7.2861E+17
Ba-140	1.2188E+01	1.6648E-07	7.1614E+17	5.9849E+17
La-140	9.8284E+00	1.7682E-08	7.6061E+16	1.3376E+17
La-141	1.0317E-07	1.8242E-17	7.7913E+07	1.3948E+15
Ce-141	3.1299E-01	1.0985E-08	4.6915E+16	1.4098E+16
Ce-143	6.1537E-02	9.2665E-11	3.9024E+14	1.0258E+16
Ce-144	2.6613E-01	8.3439E-08	3.4894E+17	1.1424E+16
Pr-143	1.3213E-01	1.9622E-09	8.2632E+15	5.6089E+15
Nd-147	4.4444E-02	5.4938E-10	2.2507E+15	2.2326E+15
Np-239	1.5096E+00	6.5072E-09	1.6396E+16	1.4068E+17
Pu-238	1.3404E-03	7.8297E-08	1.9812E+17	5.7167E+13
Pu-239	9.0207E-05	1.4513E-06	3.6568E+18	3.8275E+12
Pu-240	9.6099E-05	4.2173E-07	1.0582E+18	4.0994E+12
Pu-241	4.6104E-02	4.4755E-07	1.1184E+18	1.9674E+15
Am-241	2.9104E-05	8.4797E-09	2.1189E+16	1.2193E+12
Cm-242	7.0263E-03	2.1200E-09	5.2756E+15	3.0303E+14
Cm-244	7.7627E-04	9.5951E-09	2.3682E+16	3.3123E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 80.0000	Atmosphere	Sump	
Noble gases (atoms)	3.5160E+22	0.0000E+00	
Elemental I (atoms)	2.3851E+18	0.0000E+00	
Organic I (atoms)	7.3767E+16	0.0000E+00	
Aerosols (kg)	2.2488E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.0437E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.1108E-09
Total I (Ci)			1.9619E+02

Deposition Recirculating

Time (h) = 80.0000	Surfaces	Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.0711E+20
Organic I (atoms)	0.0000E+00	1.5684E+19
Aerosols (kg)	0.0000E+00	1.2462E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 80.0000	Leakage Transport
Noble gases (atoms)	3.0706E+23
Elemental I (atoms)	5.3830E+20
Organic I (atoms)	1.6649E+19
Aerosols (kg)	1.3106E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 80.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.6929E+23
Elemental I (atoms)	2.4859E+19	1.3083E+18
Organic I (atoms)	7.6882E+17	4.0464E+16
Aerosols (kg)	6.1091E-03	6.1708E-05

Detailed model information at time (H) = 88.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.5317E+01

EAB Doses:

Time (h) = 88.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 88.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 88.0000	Ci	kg	Atoms	Decay
Co-58	5.0755E-03	1.5962E-10	1.6573E+15	2.4713E+14
Co-60	6.2884E-03	5.5631E-09	5.5836E+16	2.9809E+14
Kr-85	1.7272E+03	4.4024E-03	3.1190E+22	2.2474E+19
Kr-85m	4.4468E-02	5.4035E-12	3.8283E+13	1.8302E+19
Kr-88	4.7422E-05	3.7819E-15	2.5881E+10	2.1427E+19
Rb-86	1.9414E-01	2.3860E-09	1.6708E+16	1.0397E+16
Sr-89	7.3239E+00	2.5209E-07	1.7058E+18	3.6062E+17
Sr-90	8.7459E-01	6.4116E-06	4.2902E+19	4.1423E+16
Sr-91	1.7028E-02	4.6974E-12	3.1086E+13	2.1553E+17
Sr-92	1.8557E-09	1.4764E-19	9.6640E+05	8.2759E+16
Y-90	5.3915E-01	9.9097E-10	6.6308E+15	7.0206E+15
Y-91	1.1711E-01	4.7753E-09	3.1602E+16	5.1177E+15
Y-92	1.1646E-06	1.2104E-16	7.9227E+08	6.4223E+16
Y-93	2.9691E-04	8.8995E-14	5.7628E+11	2.6534E+15
Zr-95	1.1875E-01	5.5279E-09	3.5042E+16	5.7994E+15
Zr-97	3.4703E-03	1.8153E-12	1.1270E+13	3.4694E+15
Nb-95	1.2390E-01	3.1686E-09	2.0086E+16	5.8779E+15
Mo-99	6.9340E-01	1.4457E-09	8.7944E+15	6.8717E+16
Tc-99m	7.1088E-01	1.3519E-10	8.2238E+14	6.3589E+16
Ru-103	1.3552E+00	4.1992E-08	2.4552E+17	6.7482E+16
Ru-105	1.0812E-06	1.6084E-16	9.2248E+08	1.2172E+16
Ru-106	5.9117E-01	1.7670E-07	1.0039E+18	2.8144E+16
Rh-105	1.9437E-01	2.3029E-10	1.3208E+15	3.5853E+16
Sb-127	1.0299E+00	3.8566E-09	1.8287E+16	8.2295E+16
Sb-129	4.3854E-06	7.7986E-16	3.6406E+09	7.0625E+16
Te-127	1.2443E+00	4.7150E-10	2.2358E+15	8.4823E+16

Te-127m	2.6522E-01	2.8117E-08	1.3333E+17	1.2572E+16
Te-129	7.0467E-01	3.3648E-11	1.5708E+14	9.8377E+16
Te-129m	8.1492E-01	2.7051E-08	1.2628E+17	4.0839E+16
Te-131m	3.4855E-01	4.3711E-10	2.0094E+15	8.7781E+16
Te-132	1.2054E+01	3.9703E-08	1.8113E+17	1.0616E+18
I-131	1.3951E+02	1.1253E-06	5.1732E+18	5.8071E+18
I-132	1.4731E+01	1.4271E-09	6.5109E+15	2.3106E+18
I-133	2.1023E+01	1.8558E-08	8.4030E+16	7.4793E+18
I-135	3.6240E-02	1.0319E-11	4.6034E+13	3.7958E+18
Xe-133	1.5136E+05	8.0861E-04	3.6613E+21	2.5245E+21
Xe-135	1.9187E+02	7.5135E-08	3.3516E+17	2.0951E+20
Cs-134	2.4764E+01	1.9140E-05	8.6017E+19	1.1955E+18
Cs-136	5.6983E+00	7.7749E-08	3.4428E+17	3.1939E+17
Cs-137	1.5485E+01	1.7803E-04	7.8256E+20	7.4571E+17
Ba-140	1.1040E+01	1.5080E-07	6.4866E+17	6.1080E+17
La-140	9.3442E+00	1.6811E-08	7.2314E+16	1.4382E+17
La-141	2.3209E-08	4.1038E-18	1.7528E+07	1.3948E+15
Ce-141	2.8664E-01	1.0060E-08	4.2966E+16	1.4416E+16
Ce-143	4.7979E-02	7.2249E-11	3.0426E+14	1.0316E+16
Ce-144	2.4526E-01	7.6897E-08	3.2159E+17	1.1695E+16
Pr-143	1.2069E-01	1.7923E-09	7.5481E+15	5.7428E+15
Nd-147	4.0139E-02	4.9617E-10	2.0327E+15	2.2774E+15
Np-239	1.2623E+00	5.4410E-09	1.3710E+16	1.4214E+17
Pu-238	1.2364E-03	7.2219E-08	1.8274E+17	5.8532E+13
Pu-239	8.3237E-05	1.3391E-06	3.3743E+18	3.9194E+12
Pu-240	8.8636E-05	3.8898E-07	9.7605E+17	4.1973E+12
Pu-241	4.2522E-02	4.1278E-07	1.0315E+18	2.0143E+15
Am-241	2.6906E-05	7.8394E-09	1.9589E+16	1.2489E+12
Cm-242	6.4715E-03	1.9526E-09	4.8590E+15	3.1018E+14
Cm-244	7.1597E-04	8.8497E-09	2.1842E+16	3.3914E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 88.0000	Atmosphere	Sump	
Noble gases (atoms)	3.4852E+22	0.0000E+00	
Elemental I (atoms)	2.3056E+18	0.0000E+00	
Organic I (atoms)	7.1309E+16	0.0000E+00	
Aerosols (kg)	2.0737E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.8075E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.8579E-09
Total I (Ci)			1.7530E+02

Time (h) = 88.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.3747E+20
Organic I (atoms)	0.0000E+00	1.6623E+19
Aerosols (kg)	0.0000E+00	1.2753E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 88.0000	Leakage Transport
Noble gases (atoms)	3.3026E+23
Elemental I (atoms)	5.7023E+20
Organic I (atoms)	1.7636E+19
Aerosols (kg)	1.3410E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 88.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	2.9263E+23
Elemental I (atoms)	2.6347E+19	1.3867E+18
Organic I (atoms)	8.1485E+17	4.2887E+16
Aerosols (kg)	6.2516E-03	6.3148E-05

Detailed model information at time (H) = 96.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.6608E+01

EAB Doses:

Time (h) = 96.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 96.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 96.0000	Ci	kg	Atoms	Decay
Co-58	4.6661E-03	1.4674E-10	1.5236E+15	2.5229E+14
Co-60	5.7994E-03	5.1305E-09	5.1494E+16	3.0449E+14
Kr-85	1.7228E+03	4.3912E-03	3.1111E+22	2.4312E+19
Kr-85m	1.2865E-02	1.5633E-12	1.1076E+13	1.8302E+19
Kr-88	6.7132E-06	5.3538E-16	3.6638E+09	2.1427E+19
Rb-86	1.7686E-01	2.1736E-09	1.5221E+16	1.0594E+16
Sr-89	6.7244E+00	2.3146E-07	1.5661E+18	3.6807E+17
Sr-90	8.0665E-01	5.9136E-06	3.9569E+19	4.2314E+16
Sr-91	8.7611E-03	2.4169E-12	1.5994E+13	2.1555E+17
Sr-92	2.2118E-10	1.7597E-20	1.1519E+05	8.2759E+16
Y-90	5.2332E-01	9.6188E-10	6.4362E+15	7.5793E+15
Y-91	1.0761E-01	4.3880E-09	2.9038E+16	5.2368E+15
Y-92	2.2477E-07	2.3360E-17	1.5291E+08	6.4223E+16
Y-93	1.5816E-04	4.7404E-14	3.0696E+11	2.6536E+15
Zr-95	1.0914E-01	5.0802E-09	3.2204E+16	5.9202E+15
Zr-97	2.3055E-03	1.2060E-12	7.4873E+12	3.4724E+15
Nb-95	1.1424E-01	2.9216E-09	1.8520E+16	6.0041E+15
Mo-99	5.8801E-01	1.2260E-09	7.4578E+15	6.9394E+16
Tc-99m	6.0285E-01	1.1465E-10	6.9740E+14	6.4249E+16
Ru-103	1.2427E+00	3.8504E-08	2.2512E+17	6.8858E+16
Ru-105	2.8602E-07	4.2550E-17	2.4404E+08	1.2172E+16
Ru-106	5.4492E-01	1.6288E-07	9.2535E+17	2.8746E+16
Rh-105	1.5326E-01	1.8157E-10	1.0414E+15	3.6036E+16
Sb-127	8.9460E-01	3.3499E-09	1.5885E+16	8.3314E+16
Sb-129	1.1206E-06	1.9927E-16	9.3027E+08	7.0625E+16
Te-127	1.0954E+00	4.1506E-10	1.9681E+15	8.6021E+16
Te-127m	2.4446E-01	2.5916E-08	1.2289E+17	1.2842E+16
Te-129	6.4549E-01	3.0822E-11	1.4389E+14	9.8916E+16
Te-129m	7.4649E-01	2.4779E-08	1.1568E+17	4.1666E+16
Te-131m	2.6723E-01	3.3513E-10	1.5406E+15	8.8106E+16
Te-132	1.0357E+01	3.4113E-08	1.5563E+17	1.0735E+18
I-131	1.2974E+02	1.0465E-06	4.8109E+18	5.9501E+18
I-132	1.2671E+01	1.2275E-09	5.6002E+15	2.3232E+18
I-133	1.5411E+01	1.3605E-08	6.1600E+16	7.4985E+18
I-135	1.4990E-02	4.2683E-12	1.9040E+13	3.7958E+18
Xe-133	1.4450E+05	7.7199E-04	3.4955E+21	2.6821E+21
Xe-135	1.0433E+02	4.0855E-08	1.8225E+17	2.0966E+20
Cs-134	2.2834E+01	1.7648E-05	7.9313E+19	1.2207E+18
Cs-136	5.1639E+00	7.0458E-08	3.1199E+17	3.2515E+17
Cs-137	1.4282E+01	1.6420E-04	7.2177E+20	7.6148E+17
Ba-140	9.9994E+00	1.3659E-07	5.8753E+17	6.2194E+17
La-140	8.8189E+00	1.5866E-08	6.8249E+16	1.5335E+17
La-141	5.2211E-09	9.2321E-19	3.9430E+06	1.3948E+15
Ce-141	2.6251E-01	9.2130E-09	3.9349E+16	1.4707E+16
Ce-143	3.7409E-02	5.6331E-11	2.3723E+14	1.0361E+16
Ce-144	2.2603E-01	7.0868E-08	2.9637E+17	1.1945E+16
Pr-143	1.1013E-01	1.6355E-09	6.8874E+15	5.8650E+15
Nd-147	3.6252E-02	4.4811E-10	1.8358E+15	2.3179E+15
Np-239	1.0554E+00	4.5495E-09	1.1463E+16	1.4337E+17
Pu-238	1.1404E-03	6.6613E-08	1.6855E+17	5.9791E+13
Pu-239	7.6802E-05	1.2356E-06	3.1134E+18	4.0042E+12
Pu-240	8.1754E-05	3.5878E-07	9.0025E+17	4.2875E+12
Pu-241	3.9218E-02	3.8071E-07	9.5133E+17	2.0576E+15
Am-241	2.4874E-05	7.2473E-09	1.8110E+16	1.2764E+12
Cm-242	5.9605E-03	1.7984E-09	4.4754E+15	3.1677E+14
Cm-244	6.6035E-04	8.1623E-09	2.0145E+16	3.4643E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 96.0000	Atmosphere	Sump	
Noble gases (atoms)	3.4607E+22	0.0000E+00	
Elemental I (atoms)	2.2308E+18	0.0000E+00	
Organic I (atoms)	6.8994E+16	0.0000E+00	
Aerosols (kg)	1.9123E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.5973E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.6353E-09
Total I (Ci)			1.5784E+02

Time (h) = 96.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.6683E+20
Organic I (atoms)	0.0000E+00	1.7531E+19
Aerosols (kg)	0.0000E+00	1.3021E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 96.0000 Leakage Transport

Noble gases (atoms)	3.5333E+23
Elemental I (atoms)	6.0110E+20
Organic I (atoms)	1.8591E+19
Aerosols (kg)	1.3689E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 96.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.1578E+23
Elemental I (atoms)	2.7786E+19	1.4624E+18
Organic I (atoms)	8.5936E+17	4.5230E+16
Aerosols (kg)	6.3831E-03	6.4476E-05

Detailed model information at time (H) = 120.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	2.1174E+01

EAB Doses:

Time (h) = 120.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 120.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 120.0000	Ci	kg	Atoms	Decay
Co-58	3.6257E-03	1.1402E-10	1.1839E+15	2.6541E+14
Co-60	4.5489E-03	4.0242E-09	4.0391E+16	3.2087E+14
Kr-85	1.7156E+03	4.3728E-03	3.0981E+22	2.9806E+19
Kr-85m	3.1262E-04	3.7987E-14	2.6913E+11	1.8302E+19
Kr-88	1.9111E-08	1.5241E-18	1.0430E+07	2.1427E+19
Rb-86	1.3372E-01	1.6434E-09	1.1508E+16	1.1085E+16
Sr-89	5.2044E+00	1.7914E-07	1.2121E+18	3.8693E+17
Sr-90	6.3291E-01	4.6399E-06	3.1047E+19	4.4592E+16
Sr-91	1.1933E-03	3.2918E-13	2.1784E+12	2.1556E+17
Y-90	4.6230E-01	8.4972E-10	5.6857E+15	9.1383E+15
Y-91	8.3459E-02	3.4032E-09	2.2521E+16	5.5390E+15
Y-92	1.6096E-09	1.6728E-19	1.0950E+06	6.4223E+16
Y-93	2.3903E-05	7.1645E-15	4.6393E+10	2.6538E+15
Zr-95	8.4714E-02	3.9433E-09	2.4997E+16	6.2268E+15
Zr-97	6.7600E-04	3.5362E-13	2.1954E+12	3.4766E+15
Nb-95	8.9539E-02	2.2898E-09	1.4515E+16	6.3264E+15

Mo-99	3.5860E-01	7.4768E-10	4.5481E+15	7.0870E+16
Tc-99m	3.6765E-01	6.9918E-11	4.2531E+14	6.5685E+16
Ru-103	9.5803E-01	2.9684E-08	1.7356E+17	7.2338E+16
Ru-105	5.2953E-09	7.8775E-19	4.5180E+06	1.2172E+16
Ru-106	4.2677E-01	1.2756E-07	7.2472E+17	3.0284E+16
Rh-105	7.5126E-02	8.9006E-11	5.1048E+14	3.6385E+16
Sb-127	5.8630E-01	2.1955E-09	1.0411E+16	8.5634E+16
Sb-129	1.8696E-08	3.3246E-18	1.5520E+07	7.0625E+16
Te-127	7.4976E-01	2.8410E-10	1.3471E+15	8.8822E+16
Te-127m	1.9133E-01	2.0284E-08	9.6185E+16	1.3532E+16
Te-129	4.9615E-01	2.3691E-11	1.1060E+14	1.0028E+17
Te-129m	5.7378E-01	1.9046E-08	8.8915E+16	4.3754E+16
Te-131m	1.2043E-01	1.5103E-10	6.9430E+14	8.8692E+16
Te-132	6.5691E+00	2.1638E-08	9.8718E+16	1.1000E+18
I-131	1.0535E+02	8.4977E-07	3.9064E+18	6.3231E+18
I-132	8.0630E+00	7.8114E-10	3.5637E+15	2.3516E+18
I-133	6.1298E+00	5.4111E-09	2.4501E+16	7.5306E+18
I-135	1.0709E-03	3.0493E-13	1.3602E+12	3.7958E+18
Xe-133	1.2615E+05	6.7394E-04	3.0515E+21	3.1139E+21
Xe-135	1.6763E+01	6.5641E-09	2.9281E+16	2.0982E+20
Cs-134	1.7900E+01	1.3835E-05	6.2177E+19	1.2851E+18
Cs-136	3.8431E+00	5.2437E-08	2.3219E+17	3.3937E+17
Cs-137	1.1206E+01	1.2883E-04	5.6631E+20	8.0182E+17
Ba-140	7.4307E+00	1.0150E-07	4.3660E+17	6.4946E+17
La-140	7.1798E+00	1.2917E-08	5.5564E+16	1.7856E+17
La-141	5.9442E-11	1.0511E-20	4.4892E+04	1.3948E+15
Ce-141	2.0163E-01	7.0765E-09	3.0224E+16	1.5441E+16
Ce-143	1.7731E-02	2.6700E-11	1.1244E+14	1.0445E+16
Ce-144	1.7693E-01	5.5472E-08	2.3199E+17	1.2582E+16
Pr-143	8.3256E-02	1.2364E-09	5.2067E+15	6.1707E+15
Nd-147	2.6705E-02	3.3011E-10	1.3523E+15	2.4172E+15
Np-239	6.1701E-01	2.6596E-09	6.7015E+15	1.4596E+17
Pu-238	8.9491E-04	5.2274E-08	1.3227E+17	6.3012E+13
Pu-239	6.0320E-05	9.7046E-07	2.4453E+18	4.2212E+12
Pu-240	6.4149E-05	2.8152E-07	7.0640E+17	4.5184E+12
Pu-241	3.0769E-02	2.9869E-07	7.4637E+17	2.1684E+15
Am-241	1.9653E-05	5.7261E-09	1.4308E+16	1.3468E+12
Cm-242	4.6571E-03	1.4052E-09	3.4967E+15	3.3357E+14
Cm-244	5.1810E-04	6.4040E-09	1.5806E+16	3.6508E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 120.0000	Atmosphere	Sump	
Noble gases (atoms)	3.4033E+22	0.0000E+00	
Elemental I (atoms)	2.0280E+18	0.0000E+00	
Organic I (atoms)	6.2721E+16	0.0000E+00	
Aerosols (kg)	1.4998E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.0878E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.1047E-09
Total I (Ci)			1.1954E+02

Time (h) = 120.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.4943E+20
Organic I (atoms)	0.0000E+00	2.0086E+19
Aerosols (kg)	0.0000E+00	1.3707E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 120.0000	Leakage Transport
Noble gases (atoms)	4.2183E+23
Elemental I (atoms)	6.8796E+20
Organic I (atoms)	2.1277E+19
Aerosols (kg)	1.4405E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 120.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	3.8442E+23
Elemental I (atoms)	3.1835E+19	1.6755E+18
Organic I (atoms)	9.8459E+17	5.1821E+16
Aerosols (kg)	6.7192E-03	6.7872E-05

Detailed model information at time (H) = 144.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	2.6994E+01

EAB Doses:

Time (h) = 144.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 144.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 144.0000	Ci	kg	Atoms	Decay
Co-58	2.8172E-03	8.8597E-11	9.1991E+14	2.7560E+14
Co-60	3.5681E-03	3.1565E-09	3.1682E+16	3.3371E+14
Kr-85	1.7107E+03	4.3603E-03	3.0892E+22	3.5282E+19
Kr-85m	7.6063E-06	9.2427E-16	6.5483E+09	1.8302E+19
Kr-88	5.4473E-11	4.3442E-21	2.9729E+04	2.1427E+19
Rb-86	1.0110E-01	1.2425E-09	8.7003E+15	1.1456E+16
Sr-89	4.0281E+00	1.3865E-07	9.3816E+17	4.0154E+17
Sr-90	4.9659E-01	3.6405E-06	2.4360E+19	4.6379E+16
Sr-91	1.6253E-04	4.4836E-14	2.9671E+11	2.1556E+17
Y-90	3.9401E-01	7.2419E-10	4.8458E+15	1.0491E+16
Y-91	6.4718E-02	2.6390E-09	1.7464E+16	5.7734E+15
Y-93	3.6126E-06	1.0828E-15	7.0116E+09	2.6539E+15
Zr-95	6.5756E-02	3.0608E-09	1.9403E+16	6.4648E+15
Zr-97	1.9821E-04	1.0369E-13	6.4372E+11	3.4779E+15
Nb-95	7.0165E-02	1.7943E-09	1.1375E+16	6.5791E+15
Mo-99	2.1869E-01	4.5596E-10	2.7736E+15	7.1770E+16
Tc-99m	2.2421E-01	4.2639E-11	2.5937E+14	6.6561E+16
Ru-103	7.3858E-01	2.2885E-08	1.3380E+17	7.5021E+16
Ru-105	9.8036E-11	1.4584E-20	8.3646E+04	1.2172E+16
Ru-106	3.3424E-01	9.9907E-08	5.6759E+17	3.1488E+16
Rh-105	3.6826E-02	4.3630E-11	2.5023E+14	3.6555E+16
Sb-127	3.8425E-01	1.4389E-09	6.8228E+15	8.7155E+16
Sb-129	3.1191E-10	5.5467E-20	2.5894E+05	7.0625E+16
Te-127	5.1615E-01	1.9558E-10	9.2740E+14	9.0745E+16
Te-127m	1.4966E-01	1.5866E-08	7.5236E+16	1.4071E+16
Te-129	3.8136E-01	1.8210E-11	8.5011E+13	1.0132E+17
Te-129m	4.4103E-01	1.4640E-08	6.8344E+16	4.5359E+16
Te-131m	5.4276E-02	6.8066E-11	3.1290E+14	8.8956E+16
Te-132	4.1668E+00	1.3725E-08	6.2617E+16	1.1167E+18
I-131	8.6772E+01	6.9992E-07	3.2176E+18	6.6282E+18
I-132	5.1309E+00	4.9707E-10	2.2678E+15	2.3697E+18
I-133	2.4732E+00	2.1833E-09	9.8857E+15	7.5434E+18
I-135	7.7607E-05	2.2099E-14	9.8578E+10	3.7958E+18
Xe-133	1.1025E+05	5.8900E-04	2.6669E+21	3.4912E+21
Xe-135	2.6881E+00	1.0526E-09	4.6956E+15	2.0984E+20
Cs-134	1.4033E+01	1.0846E-05	4.8743E+19	1.3357E+18
Cs-136	2.8602E+00	3.9025E-08	1.7280E+17	3.4995E+17
Cs-137	8.7925E+00	1.0108E-04	4.4434E+20	8.3347E+17
Ba-140	5.5218E+00	7.5426E-08	3.2445E+17	6.6991E+17
La-140	5.6606E+00	1.0184E-08	4.3807E+16	1.9875E+17
Ce-141	1.5488E-01	5.4355E-09	2.3215E+16	1.6005E+16
Ce-143	8.4038E-03	1.2655E-11	5.3293E+13	1.0485E+16
Ce-144	1.3849E-01	4.3421E-08	1.8159E+17	1.3081E+16
Pr-143	6.2617E-02	9.2988E-10	3.9160E+15	6.4011E+15
Nd-147	1.9673E-02	2.4318E-10	9.9622E+14	2.4904E+15
Np-239	3.6070E-01	1.5548E-09	3.9177E+15	1.4748E+17
Pu-238	7.0227E-04	4.1021E-08	1.0380E+17	6.5540E+13
Pu-239	4.7364E-05	7.6202E-07	1.9201E+18	4.3917E+12
Pu-240	5.0336E-05	2.2090E-07	5.5429E+17	4.6996E+12

Pu-241	2.4140E-02	2.3434E-07	5.8557E+17	2.2553E+15
Am-241	1.5527E-05	4.5239E-09	1.1304E+16	1.4025E+12
Cm-242	3.6388E-03	1.0979E-09	2.7321E+15	3.4670E+14
Cm-244	4.0649E-04	5.0244E-09	1.2401E+16	3.7971E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 144.0000	Atmosphere	Sump	
Noble gases (atoms)	3.3559E+22	0.0000E+00	
Elemental I (atoms)	1.8496E+18	0.0000E+00	
Organic I (atoms)	5.7206E+16	0.0000E+00	
Aerosols (kg)	1.1762E-04	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.7111E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.7190E-09
Total I (Ci)			9.4376E+01

Time (h) = 144.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.2465E+20
Organic I (atoms)	0.0000E+00	2.2412E+19
Aerosols (kg)	0.0000E+00	1.4245E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 144.0000	Leakage Transport
Noble gases (atoms)	4.8933E+23
Elemental I (atoms)	7.6706E+20
Organic I (atoms)	2.3723E+19
Aerosols (kg)	1.4966E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 144.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	4.5201E+23
Elemental I (atoms)	3.5522E+19	1.8696E+18
Organic I (atoms)	1.0986E+18	5.7823E+16
Aerosols (kg)	6.9829E-03	7.0534E-05

Detailed model information at time (H) = 168.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	3.4415E+01

EAB Doses:

Time (h) = 168.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 168.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 168.0000	Ci	kg	Atoms	Decay
Co-58	2.1890E-03	6.8842E-11	7.1479E+14	2.8352E+14
Co-60	2.7988E-03	2.4759E-09	2.4851E+16	3.4379E+14
Kr-85	1.7061E+03	4.3485E-03	3.0808E+22	4.0743E+19
Kr-85m	1.8510E-07	2.2493E-17	1.5936E+08	1.8302E+19
Rb-86	7.6433E-02	9.3936E-10	6.5779E+15	1.1736E+16
Sr-89	3.1176E+00	1.0731E-07	7.2611E+17	4.1284E+17
Sr-90	3.8963E-01	2.8564E-06	1.9113E+19	4.7782E+16
Sr-91	2.2137E-05	6.1068E-15	4.0413E+10	2.1556E+17
Y-90	3.2807E-01	6.0300E-10	4.0348E+15	1.1630E+16
Y-91	5.0184E-02	2.0463E-09	1.3542E+16	5.9552E+15

Y-93	5.4598E-07	1.6365E-16	1.0597E+09	2.6539E+15
Zr-95	5.1040E-02	2.3759E-09	1.5061E+16	6.6496E+15
Zr-97	5.8119E-05	3.0402E-14	1.8875E+11	3.4782E+15
Nb-95	5.4973E-02	1.4058E-09	8.9118E+15	6.7770E+15
Mo-99	1.3337E-01	2.7807E-10	1.6915E+15	7.2318E+16
Tc-99m	1.3673E-01	2.6003E-11	1.5818E+14	6.7095E+16
Ru-103	5.6940E-01	1.7643E-08	1.0315E+17	7.7090E+16
Ru-106	2.6178E-01	7.8246E-08	4.4453E+17	3.2431E+16
Rh-105	1.8052E-02	2.1387E-11	1.2266E+14	3.6639E+16
Sb-127	2.5183E-01	9.4300E-10	4.4716E+15	8.8152E+16
Te-127	3.5758E-01	1.3549E-10	6.4249E+14	9.2072E+16
Te-127m	1.1700E-01	1.2404E-08	5.8819E+16	1.4493E+16
Te-129	2.9313E-01	1.3997E-11	6.5343E+13	1.0212E+17
Te-129m	3.3900E-01	1.1253E-08	5.2532E+16	4.6592E+16
Te-131m	2.4461E-02	3.0675E-11	1.4102E+14	8.9075E+16
Te-132	2.6430E+00	8.7058E-09	3.9718E+16	1.1274E+18
I-131	7.2468E+01	5.8454E-07	2.6872E+18	6.8813E+18
I-132	3.2646E+00	3.1627E-10	1.4429E+15	2.3812E+18
I-133	1.0119E+00	8.9323E-10	4.0445E+15	7.5487E+18
I-135	5.7029E-06	1.6239E-15	7.2440E+09	3.7958E+18
Xe-133	9.6364E+04	5.1482E-04	2.3310E+21	3.8209E+21
Xe-135	4.3056E-01	1.6860E-10	7.5210E+14	2.0985E+20
Cs-134	1.1001E+01	8.5026E-06	3.8212E+19	1.3753E+18
Cs-136	2.1286E+00	2.9043E-08	1.2860E+17	3.5783E+17
Cs-137	6.8987E+00	7.9312E-05	3.4863E+20	8.5830E+17
Ba-140	4.1033E+00	5.6050E-08	2.4110E+17	6.8510E+17
La-140	4.3753E+00	7.8716E-09	3.3860E+16	2.1451E+17
Ce-141	1.1896E-01	4.1751E-09	1.7832E+16	1.6438E+16
Ce-143	3.9832E-03	5.9980E-12	2.5259E+13	1.0503E+16
Ce-144	1.0840E-01	3.3988E-08	1.4214E+17	1.3472E+16
Pr-143	4.6942E-02	6.9711E-10	2.9357E+15	6.5742E+15
Nd-147	1.4492E-02	1.7914E-10	7.3387E+14	2.5443E+15
Np-239	2.1087E-01	9.0894E-10	2.2903E+15	1.4837E+17
Pu-238	5.5109E-04	3.2191E-08	8.1452E+16	6.7524E+13
Pu-239	3.7184E-05	5.9824E-07	1.5074E+18	4.5255E+12
Pu-240	3.9497E-05	1.7333E-07	4.3493E+17	4.8418E+12
Pu-241	1.8939E-02	1.8385E-07	4.5942E+17	2.3235E+15
Am-241	1.2266E-05	3.5739E-09	8.9306E+15	1.4465E+12
Cm-242	2.8431E-03	8.5782E-10	2.1347E+15	3.5695E+14
Cm-244	3.1892E-04	3.9421E-09	9.7294E+15	3.9120E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 168.0000	Atmosphere	Sump	
Noble gases (atoms)	3.3139E+22	0.0000E+00	
Elemental I (atoms)	1.6898E+18	0.0000E+00	
Organic I (atoms)	5.2260E+16	0.0000E+00	
Aerosols (kg)	9.2254E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.4255E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.4294E-09
Total I (Ci)			7.6745E+01

Time (h) = 168.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.9332E+20
Organic I (atoms)	0.0000E+00	2.4536E+19
Aerosols (kg)	0.0000E+00	1.4667E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 168.0000	Leakage Transport
Noble gases (atoms)	5.5596E+23
Elemental I (atoms)	8.3926E+20
Organic I (atoms)	2.5957E+19
Aerosols (kg)	1.5406E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 168.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	5.1872E+23
Elemental I (atoms)	3.8888E+19	2.0468E+18
Organic I (atoms)	1.2027E+18	6.3302E+16
Aerosols (kg)	7.1896E-03	7.2623E-05

Detailed model information at time (H) = 192.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	4.3875E+01

EAB Doses:

Time (h) = 192.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 192.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 192.0000	Ci	kg	Atoms	Decay
Co-58	1.7009E-03	5.3491E-11	5.5540E+14	2.8967E+14
Co-60	2.1953E-03	1.9421E-09	1.9492E+16	3.5169E+14
Kr-85	1.7015E+03	4.3368E-03	3.0726E+22	4.6189E+19
Kr-85m	4.5047E-09	5.4739E-19	3.8782E+06	1.8302E+19
Rb-86	5.7788E-02	7.1021E-10	4.9732E+15	1.1948E+16
Sr-89	2.4129E+00	8.3054E-08	5.6198E+17	4.2159E+17
Sr-90	3.0571E-01	2.2412E-06	1.4996E+19	4.8882E+16
Sr-91	3.0151E-06	8.3176E-16	5.5044E+09	2.1556E+17
Y-90	2.6886E-01	4.9417E-10	3.3066E+15	1.2571E+16
Y-91	3.8914E-02	1.5868E-09	1.0501E+16	6.0961E+15
Y-93	8.2517E-08	2.4733E-17	1.6016E+08	2.6539E+15
Zr-95	3.9618E-02	1.8442E-09	1.1690E+16	6.7930E+15
Zr-97	1.7041E-05	8.9143E-15	5.5344E+10	3.4783E+15
Nb-95	4.3063E-02	1.1013E-09	6.9811E+15	6.9321E+15
Mo-99	8.1332E-02	1.6958E-10	1.0315E+15	7.2653E+16
Tc-99m	8.3385E-02	1.5858E-11	9.6463E+13	6.7421E+16
Ru-103	4.3897E-01	1.3601E-08	7.9524E+16	7.8684E+16
Ru-106	2.0502E-01	6.1281E-08	3.4815E+17	3.3170E+16
Rh-105	8.8488E-03	1.0484E-11	6.0128E+13	3.6680E+16
Sb-127	1.6505E-01	6.1803E-10	2.9306E+15	8.8805E+16
Te-127	2.4941E-01	9.4504E-11	4.4812E+14	9.2994E+16
Te-127m	9.1433E-02	9.6933E-09	4.5964E+16	1.4823E+16
Te-129	2.2531E-01	1.0759E-11	5.0226E+13	1.0274E+17
Te-129m	2.6057E-01	8.6494E-09	4.0378E+16	4.7540E+16
Te-131m	1.1024E-02	1.3824E-11	6.3552E+13	8.9128E+16
Te-132	1.6765E+00	5.5221E-09	2.5193E+16	1.1341E+18
I-131	6.1322E+01	4.9463E-07	2.2738E+18	7.0940E+18
I-132	2.0768E+00	2.0120E-10	9.1791E+14	2.3885E+18
I-133	4.1945E-01	3.7027E-10	1.6766E+15	7.5508E+18
I-135	4.2462E-07	1.2091E-16	5.3936E+08	3.7958E+18
Xe-133	8.4226E+04	4.4997E-04	2.0374E+21	4.1091E+21
Xe-135	6.8923E-02	2.6989E-11	1.2039E+14	2.0985E+20
Cs-134	8.6241E+00	6.6655E-06	2.9956E+19	1.4063E+18
Cs-136	1.5842E+00	2.1615E-08	9.5710E+16	3.6369E+17
Cs-137	5.4128E+00	6.2229E-05	2.7354E+20	8.7778E+17
Ba-140	3.0492E+00	4.1651E-08	1.7916E+17	6.9639E+17
La-140	3.3390E+00	6.0072E-09	2.5840E+16	2.2662E+17
Ce-141	9.1375E-02	3.2069E-09	1.3697E+16	1.6770E+16
Ce-143	1.8879E-03	2.8429E-12	1.1972E+13	1.0512E+16
Ce-144	8.4854E-02	2.6604E-08	1.1126E+17	1.3778E+16
Pr-143	3.5121E-02	5.2155E-10	2.1964E+15	6.7038E+15
Nd-147	1.0676E-02	1.3196E-10	5.4062E+14	2.5840E+15
Np-239	1.2327E-01	5.3137E-10	1.3389E+15	1.4889E+17
Pu-238	4.3246E-04	2.5261E-08	6.3919E+16	6.9080E+13
Pu-239	2.9189E-05	4.6960E-07	1.1833E+18	4.6305E+12
Pu-240	3.0992E-05	1.3601E-07	3.4127E+17	4.9534E+12
Pu-241	1.4859E-02	1.4425E-07	3.6044E+17	2.3770E+15
Am-241	9.6902E-06	2.8233E-09	7.0550E+15	1.4813E+12

Cm-242	2.2214E-03	6.7024E-10	1.6679E+15	3.6497E+14
Cm-244	2.5022E-04	3.0929E-09	7.6335E+15	4.0020E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 192.0000	Atmosphere	Sump	
Noble gases (atoms)	3.2763E+22	0.0000E+00	
Elemental I (atoms)	1.5449E+18	0.0000E+00	
Organic I (atoms)	4.7782E+16	0.0000E+00	
Aerosols (kg)	7.2357E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.2047E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.2068E-09
Total I (Ci)			6.3818E+01

Time (h) = 192.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	8.5608E+20
Organic I (atoms)	0.0000E+00	2.6477E+19
Aerosols (kg)	0.0000E+00	1.4997E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 192.0000	Leakage Transport
Noble gases (atoms)	6.2178E+23
Elemental I (atoms)	9.0525E+20
Organic I (atoms)	2.7998E+19
Aerosols (kg)	1.5752E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 192.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	5.8462E+23
Elemental I (atoms)	4.1965E+19	2.2087E+18
Organic I (atoms)	1.2979E+18	6.8309E+16
Aerosols (kg)	7.3518E-03	7.4261E-05

Detailed model information at time (H) = 216.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	5.5934E+01

EAB Doses:

Time (h) = 216.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 216.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 216.0000	Ci	kg	Atoms	Decay
Co-58	1.3216E-03	4.1564E-11	4.3156E+14	2.9445E+14
Co-60	1.7219E-03	1.5233E-09	1.5289E+16	3.5789E+14
Kr-85	1.6969E+03	4.3252E-03	3.0644E+22	5.1621E+19
Kr-85m	1.0963E-10	1.3321E-20	9.4380E+04	1.8302E+19
Rb-86	4.3690E-02	5.3695E-10	3.7600E+15	1.2109E+16
Sr-89	1.8675E+00	6.4281E-08	4.3496E+17	4.2836E+17
Sr-90	2.3986E-01	1.7584E-06	1.1766E+19	4.9746E+16
Sr-91	4.1067E-07	1.1329E-16	7.4971E+08	2.1556E+17
Y-90	2.1788E-01	4.0046E-10	2.6796E+15	1.3339E+16
Y-91	3.0175E-02	1.2304E-09	8.1427E+15	6.2054E+15
Y-93	1.2471E-08	3.7380E-18	2.4205E+07	2.6539E+15
Zr-95	3.0752E-02	1.4314E-09	9.0741E+15	6.9043E+15

Zr-97	4.9967E-06	2.6138E-15	1.6228E+10	3.4784E+15
Nb-95	3.3728E-02	8.6255E-10	5.4678E+15	7.0536E+15
Mo-99	4.9600E-02	1.0342E-10	6.2907E+14	7.2857E+16
Tc-99m	5.0852E-02	9.6709E-12	5.8827E+13	6.7620E+16
Ru-103	3.3842E-01	1.0486E-08	6.1308E+16	7.9914E+16
Ru-106	1.6057E-01	4.7995E-08	2.7267E+17	3.3749E+16
Rh-105	4.3376E-03	5.1390E-12	2.9474E+13	3.6700E+16
Sb-127	1.0817E-01	4.0504E-10	1.9206E+15	8.9234E+16
Te-127	1.7519E-01	6.6383E-11	3.1478E+14	9.3639E+16
Te-127m	7.1425E-02	7.5721E-09	3.5906E+16	1.5081E+16
Te-129	1.7319E-01	8.2697E-12	3.8605E+13	1.0322E+17
Te-129m	2.0028E-01	6.6483E-09	3.1036E+16	4.8269E+16
Te-131m	4.9681E-03	6.2303E-12	2.8641E+13	8.9153E+16
Te-132	1.0634E+00	3.5027E-09	1.5980E+16	1.1384E+18
I-131	5.2520E+01	4.2364E-07	1.9475E+18	7.2752E+18
I-132	1.3208E+00	1.2796E-10	5.8378E+14	2.3932E+18
I-133	1.7599E-01	1.5536E-10	7.0344E+14	7.5517E+18
I-135	3.2000E-08	9.1121E-18	4.0647E+07	3.7958E+18
Xe-133	7.3616E+04	3.9329E-04	1.7808E+21	4.3610E+21
Xe-135	1.1030E-02	4.3192E-12	1.9267E+13	2.0985E+20
Cs-134	6.7608E+00	5.2254E-06	2.3484E+19	1.4307E+18
Cs-136	1.1790E+00	1.6086E-08	7.1230E+16	3.6805E+17
Cs-137	4.2470E+00	4.8826E-05	2.1463E+20	8.9307E+17
Ba-140	2.2659E+00	3.0952E-08	1.3314E+17	7.0479E+17
La-140	2.5267E+00	4.5459E-09	1.9554E+16	2.3582E+17
Ce-141	7.0186E-02	2.4632E-09	1.0521E+16	1.7026E+16
Ce-143	8.9482E-04	1.3475E-12	5.6745E+12	1.0517E+16
Ce-144	6.6419E-02	2.0824E-08	8.7089E+16	1.4017E+16
Pr-143	2.6243E-02	3.8971E-10	1.6412E+15	6.8007E+15
Nd-147	7.8644E-03	9.7213E-11	3.9825E+14	2.6133E+15
Np-239	7.2065E-02	3.1064E-10	7.8272E+14	1.4919E+17
Pu-238	3.3937E-04	1.9823E-08	5.0159E+16	7.0302E+13
Pu-239	2.2910E-05	3.6858E-07	9.2873E+17	4.7130E+12
Pu-240	2.4318E-05	1.0672E-07	2.6779E+17	5.0409E+12
Pu-241	1.1658E-02	1.1317E-07	2.8279E+17	2.4189E+15
Am-241	7.6547E-06	2.2303E-09	5.5731E+15	1.5087E+12
Cm-242	1.7356E-03	5.2368E-10	1.3032E+15	3.7123E+14
Cm-244	1.9632E-04	2.4266E-09	5.9891E+15	4.0727E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 216.0000	Atmosphere	Sump	
Noble gases (atoms)	3.2425E+22	0.0000E+00	
Elemental I (atoms)	1.4131E+18	0.0000E+00	
Organic I (atoms)	4.3705E+16	0.0000E+00	
Aerosols (kg)	5.6753E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.0311E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.0323E-09
Total I (Ci)			5.4017E+01

Time (h) = 216.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	9.1347E+20
Organic I (atoms)	0.0000E+00	2.8252E+19
Aerosols (kg)	0.0000E+00	1.5257E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 216.0000	Leakage Transport
Noble gases (atoms)	6.8689E+23
Elemental I (atoms)	9.6560E+20
Organic I (atoms)	2.9864E+19
Aerosols (kg)	1.6022E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 216.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	6.4982E+23
Elemental I (atoms)	4.4778E+19	2.3567E+18
Organic I (atoms)	1.3849E+18	7.2889E+16
Aerosols (kg)	7.4790E-03	7.5546E-05

Detailed model information at time (H) = 240.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	7.1309E+01

EAB Doses:

Time (h) = 240.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 240.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 240.0000	Ci	kg	Atoms	Decay
Co-58	1.0269E-03	3.2296E-11	3.3533E+14	2.9817E+14
Co-60	1.3507E-03	1.1949E-09	1.1993E+16	3.6275E+14
Kr-85	1.6924E+03	4.3137E-03	3.0562E+22	5.7038E+19
Rb-86	3.3032E-02	4.0596E-10	2.8427E+15	1.2230E+16
Sr-89	1.4454E+00	4.9752E-08	3.3664E+17	4.3360E+17
Sr-90	1.8820E-01	1.3797E-06	9.2319E+18	5.0423E+16
Sr-91	5.5934E-08	1.5430E-17	1.0211E+08	2.1556E+17
Y-90	1.7514E-01	3.2191E-10	2.1540E+15	1.3958E+16
Y-91	2.3398E-02	9.5410E-10	6.3140E+15	6.2901E+15
Y-93	1.8848E-09	5.6495E-19	3.6583E+06	2.6539E+15
Zr-95	2.3870E-02	1.1111E-09	7.0434E+15	6.9907E+15
Zr-97	1.4651E-06	7.6641E-16	4.7581E+09	3.4784E+15
Nb-95	2.6413E-02	6.7546E-10	4.2818E+15	7.1487E+15
Mo-99	3.0248E-02	6.3067E-11	3.8364E+14	7.2982E+16
Tc-99m	3.1012E-02	5.8977E-12	3.5876E+13	6.7741E+16
Ru-103	2.6090E-01	8.0840E-09	4.7265E+16	8.0861E+16
Ru-106	1.2576E-01	3.7589E-08	2.1355E+17	3.4202E+16
Rh-105	2.1262E-03	2.5191E-12	1.4448E+13	3.6710E+16
Sb-127	7.0891E-02	2.6546E-10	1.2588E+15	8.9514E+16
Te-127	1.2397E-01	4.6974E-11	2.2274E+14	9.4094E+16
Te-127m	5.5778E-02	5.9133E-09	2.8040E+16	1.5282E+16
Te-129	1.3312E-01	6.3564E-12	2.9674E+13	1.0358E+17
Te-129m	1.5395E-01	5.1102E-09	2.3856E+16	4.8829E+16
Te-131m	2.2390E-03	2.8078E-12	1.2908E+13	8.9163E+16
Te-132	6.7451E-01	2.2218E-09	1.0136E+16	1.1411E+18
I-131	4.5473E+01	3.6680E-07	1.6862E+18	7.4312E+18
I-132	8.3980E-01	8.1359E-11	3.7118E+14	2.3962E+18
I-133	7.4647E-02	6.5895E-11	2.9837E+14	7.5521E+18
I-135	2.4379E-09	6.9420E-19	3.0967E+06	3.7958E+18
Xe-133	6.4343E+04	3.4374E-04	1.5564E+21	4.5812E+21
Xe-135	1.7650E-03	6.9115E-13	3.0831E+12	2.0985E+20
Cs-134	5.3001E+00	4.0964E-06	1.8410E+19	1.4498E+18
Cs-136	8.7742E-01	1.1972E-08	5.3011E+16	3.7130E+17
Cs-137	3.3322E+00	3.8310E-05	1.6840E+20	9.0507E+17
Ba-140	1.6838E+00	2.3001E-08	9.8938E+16	7.1102E+17
La-140	1.9013E+00	3.4206E-09	1.4714E+16	2.4276E+17
Ce-141	5.3910E-02	1.8920E-09	8.0809E+15	1.7222E+16
Ce-143	4.2412E-04	6.3866E-13	2.6896E+12	1.0519E+16
Ce-144	5.1990E-02	1.6300E-08	6.8169E+16	1.4205E+16
Pr-143	1.9593E-02	2.9096E-10	1.2253E+15	6.8731E+15
Nd-147	5.7934E-03	7.1613E-11	2.9338E+14	2.6348E+15
Np-239	4.2129E-02	1.8160E-10	4.5758E+14	1.4937E+17
Pu-238	2.6631E-04	1.5556E-08	3.9361E+16	7.1260E+13
Pu-239	1.7980E-05	2.8928E-07	7.2889E+17	4.7777E+12
Pu-240	1.9082E-05	8.3740E-08	2.1012E+17	5.1096E+12
Pu-241	9.1463E-03	8.8788E-08	2.2186E+17	2.4519E+15
Am-241	6.0465E-06	1.7617E-09	4.4022E+15	1.5304E+12
Cm-242	1.3561E-03	4.0917E-10	1.0182E+15	3.7612E+14
Cm-244	1.5403E-04	1.9039E-09	4.6989E+15	4.1281E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 240.0000	Atmosphere	Sump	
Noble gases (atoms)	3.2118E+22	0.0000E+00	
Elemental I (atoms)	1.2928E+18	0.0000E+00	
Organic I (atoms)	3.9984E+16	0.0000E+00	
Aerosols (kg)	4.4515E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.9250E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.9314E-10
Total I (Ci)			4.6388E+01

Time (h) = 240.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	9.6597E+20
Organic I (atoms)	0.0000E+00	2.9875E+19
Aerosols (kg)	0.0000E+00	1.5460E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 240.0000	Leakage Transport
Noble gases (atoms)	7.5136E+23
Elemental I (atoms)	1.0208E+21
Organic I (atoms)	3.1571E+19
Aerosols (kg)	1.6235E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 240.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	7.1436E+23
Elemental I (atoms)	4.7352E+19	2.4922E+18
Organic I (atoms)	1.4645E+18	7.7078E+16
Aerosols (kg)	7.5788E-03	7.6554E-05

Detailed model information at time (H) = 288.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.1589E+02

EAB Doses:

Time (h) = 288.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 288.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 288.0000	Ci	kg	Atoms	Decay
Co-58	6.2003E-04	1.9499E-11	2.0246E+14	3.0330E+14
Co-60	8.3100E-04	7.3515E-10	7.3786E+15	3.6956E+14
Kr-85	1.6834E+03	4.2906E-03	3.0399E+22	6.7829E+19
Rb-86	1.8882E-02	2.3205E-10	1.6250E+15	1.2391E+16
Sr-89	8.6583E-01	2.9802E-08	2.0166E+17	4.4079E+17
Sr-90	1.1586E-01	8.4936E-07	5.6833E+18	5.1372E+16
Sr-91	1.0377E-09	2.8625E-19	1.8943E+06	2.1556E+17
Y-90	1.1135E-01	2.0465E-10	1.3694E+15	1.4850E+16
Y-91	1.4069E-02	5.7368E-10	3.7965E+15	6.4068E+15
Y-93	4.3053E-11	1.2904E-20	8.3561E+04	2.6539E+15
Zr-95	1.4382E-02	6.6944E-10	4.2436E+15	7.1098E+15
Zr-97	1.2596E-07	6.5892E-17	4.0908E+08	3.4784E+15
Nb-95	1.6190E-02	4.1404E-10	2.6246E+15	7.2816E+15
Mo-99	1.1249E-02	2.3455E-11	1.4268E+14	7.3104E+16
Tc-99m	1.1533E-02	2.1934E-12	1.3342E+13	6.7860E+16

Ru-103	1.5507E-01	4.8047E-09	2.8092E+16	8.2155E+16
Ru-106	7.7137E-02	2.3056E-08	1.3099E+17	3.4834E+16
Rh-105	5.1091E-04	6.0530E-13	3.4716E+12	3.6717E+16
Sb-127	3.0449E-02	1.1402E-10	5.4067E+14	8.9819E+16
Te-127	6.3486E-02	2.4056E-11	1.1407E+14	9.4648E+16
Te-127m	3.3992E-02	3.6036E-09	1.7088E+16	1.5562E+16
Te-129	7.8648E-02	3.7554E-12	1.7532E+13	1.0408E+17
Te-129m	9.0953E-02	3.0191E-09	1.4094E+16	4.9590E+16
Te-131m	4.5474E-04	5.7028E-13	2.6216E+12	8.9171E+16
Te-132	2.7138E-01	8.9390E-10	4.0782E+15	1.1440E+18
I-131	3.5034E+01	2.8259E-07	1.2991E+18	7.6862E+18
I-132	3.3919E-01	3.2861E-11	1.4992E+14	2.3992E+18
I-133	1.3802E-02	1.2184E-11	5.5167E+13	7.5523E+18
I-135	1.4542E-11	4.1410E-21	1.8472E+04	3.7958E+18
Xe-133	4.9152E+04	2.6259E-04	1.1890E+21	4.9418E+21
Xe-135	4.5186E-05	1.7694E-14	7.8931E+10	2.0985E+20
Cs-134	3.2572E+00	2.5175E-06	1.1314E+19	1.4765E+18
Cs-136	4.8598E-01	6.6308E-09	2.9361E+16	3.7551E+17
Cs-137	2.0514E+00	2.3584E-05	1.0367E+20	9.2186E+17
Ba-140	9.2985E-01	1.2701E-08	5.4635E+16	7.1910E+17
La-140	1.0654E+00	1.9168E-09	8.2450E+15	2.5188E+17
Ce-141	3.1806E-02	1.1163E-09	4.7676E+15	1.7488E+16
Ce-143	9.5278E-05	1.4347E-13	6.0421E+11	1.0520E+16
Ce-144	3.1854E-02	9.9873E-09	4.1767E+16	1.4466E+16
Pr-143	1.0907E-02	1.6197E-10	6.8210E+14	6.9674E+15
Nd-147	3.1439E-03	3.8862E-11	1.5921E+14	2.6624E+15
Np-239	1.4398E-02	6.2062E-11	1.5638E+14	1.4953E+17
Pu-238	1.6400E-04	9.5795E-09	2.4239E+16	7.2603E+13
Pu-239	1.1074E-05	1.7816E-07	4.4890E+17	4.8683E+12
Pu-240	1.1748E-05	5.1559E-08	1.2937E+17	5.2058E+12
Pu-241	5.6299E-03	5.4652E-08	1.3657E+17	2.4980E+15
Am-241	3.7722E-06	1.0991E-09	2.7464E+15	1.5611E+12
Cm-242	8.2787E-04	2.4979E-10	6.2159E+14	3.8293E+14
Cm-244	9.4815E-05	1.1720E-09	2.8925E+15	4.2058E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 288.0000	Atmosphere	Sump	
Noble gases (atoms)	3.1588E+22	0.0000E+00	
Elemental I (atoms)	1.0824E+18	0.0000E+00	
Organic I (atoms)	3.3476E+16	0.0000E+00	
Aerosols (kg)	2.7388E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.8742E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.8765E-10
Total I (Ci)			3.5387E+01

Time (h) = 288.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.0580E+21
Organic I (atoms)	0.0000E+00	3.2720E+19
Aerosols (kg)	0.0000E+00	1.5745E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 288.0000	Leakage Transport
Noble gases (atoms)	8.7859E+23
Elemental I (atoms)	1.1175E+21
Organic I (atoms)	3.4563E+19
Aerosols (kg)	1.6532E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 288.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	8.4176E+23
Elemental I (atoms)	5.1861E+19	2.7295E+18
Organic I (atoms)	1.6039E+18	8.4418E+16
Aerosols (kg)	7.7184E-03	7.7964E-05

Detailed model information at time (H) = 336.0000

Natural deposition - Powers' Model, Compartment 1
Deposition Lambda (1 / Hours)
Noble Elemental Organic Aerosol

0.0000E+00 0.0000E+00 0.0000E+00 1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.8835E+02

EAB Doses:

Time (h) = 336.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 336.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 336.0000	Ci	kg	Atoms	Decay
Co-58	3.7435E-04	1.1773E-11	1.2224E+14	3.0640E+14
Co-60	5.1128E-04	4.5230E-10	4.5397E+15	3.7375E+14
Kr-85	1.6744E+03	4.2677E-03	3.0236E+22	7.8563E+19
Rb-86	1.0793E-02	1.3265E-10	9.2885E+14	1.2483E+16
Sr-89	5.1865E-01	1.7852E-08	1.2080E+17	4.4510E+17
Sr-90	7.1325E-02	5.2288E-07	3.4987E+18	5.1956E+16
Sr-91	1.9250E-11	5.3103E-21	3.5142E+04	2.1556E+17
Y-90	6.9836E-02	1.2836E-10	8.5890E+14	1.5413E+16
Y-91	8.4594E-03	3.4495E-10	2.2828E+15	6.4770E+15
Zr-95	8.6649E-03	4.0334E-10	2.5568E+15	7.1816E+15
Zr-97	1.0830E-08	5.6650E-18	3.5171E+07	3.4784E+15
Nb-95	9.9182E-03	2.5364E-10	1.6079E+15	7.3629E+15
Mo-99	4.1838E-03	8.7232E-12	5.3063E+13	7.3149E+16
Tc-99m	4.2894E-03	8.1575E-13	4.9622E+12	6.7904E+16
Ru-103	9.2163E-02	2.8557E-09	1.6696E+16	8.2925E+16
Ru-106	4.7314E-02	1.4142E-08	8.0346E+16	3.5223E+16
Rh-105	1.2276E-04	1.4545E-13	8.3418E+11	3.6719E+16
Sb-127	1.3079E-02	4.8975E-11	2.3223E+14	8.9949E+16
Te-127	3.3493E-02	1.2691E-11	6.0179E+13	9.4935E+16
Te-127m	2.0700E-02	2.1945E-09	1.0406E+16	1.5732E+16
Te-129	4.6466E-02	2.2188E-12	1.0358E+13	1.0437E+17
Te-129m	5.3736E-02	1.7837E-09	8.3271E+15	5.0040E+16
Te-131m	9.2360E-05	1.1583E-13	5.3246E+11	8.9172E+16
Te-132	1.0919E-01	3.5965E-10	1.6408E+15	1.1451E+18
I-131	2.7759E+01	2.2391E-07	1.0293E+18	7.8855E+18
I-132	1.3685E-01	1.3258E-11	6.0485E+13	2.4005E+18
I-133	2.6246E-03	2.3169E-12	1.0491E+13	7.5523E+18
Xe-133	3.7548E+04	2.0060E-04	9.0828E+20	5.2173E+21
Xe-135	1.1568E-06	4.5297E-16	2.0206E+09	2.0985E+20
Cs-134	2.0018E+00	1.5472E-06	6.9532E+18	1.4929E+18
Cs-136	2.6917E-01	3.6726E-09	1.6262E+16	3.7785E+17
Cs-137	1.2629E+00	1.4519E-05	6.3821E+19	9.3220E+17
Ba-140	5.1348E-01	7.0139E-09	3.0170E+16	7.2356E+17
La-140	5.9250E-01	1.0660E-09	4.5853E+15	2.5697E+17
Ce-141	1.8765E-02	6.5859E-10	2.8128E+15	1.7646E+16
Ce-143	2.1404E-05	3.2231E-14	1.3574E+11	1.0520E+16
Ce-144	1.9517E-02	6.1192E-09	2.5591E+16	1.4626E+16
Pr-143	6.0663E-03	9.0086E-11	3.7938E+14	7.0199E+15
Nd-147	1.7061E-03	2.1089E-11	8.6396E+13	2.6774E+15
Np-239	4.9205E-03	2.1210E-11	5.3443E+13	1.4959E+17
Pu-238	1.0099E-04	5.8991E-09	1.4926E+16	7.3429E+13
Pu-239	6.8190E-06	1.0971E-07	2.7643E+17	4.9242E+12
Pu-240	7.2335E-06	3.1745E-08	7.9654E+16	5.2650E+12
Pu-241	3.4654E-03	3.3640E-08	8.4061E+16	2.5263E+15
Am-241	2.3530E-06	6.8556E-10	1.7131E+15	1.5802E+12
Cm-242	5.0539E-04	1.5249E-10	3.7947E+14	3.8708E+14
Cm-244	5.8365E-05	7.2142E-10	1.7805E+15	4.2536E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 336.0000	Atmosphere	Sump
Noble gases (atoms)	3.1145E+22	0.0000E+00
Elemental I (atoms)	9.0634E+17	0.0000E+00
Organic I (atoms)	2.8031E+16	0.0000E+00
Aerosols (kg)	1.6852E-05	0.0000E+00

Dose Effective (Ci/cc)	I-131 (Thyroid)	5.4464E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	5.4473E-10
Total I (Ci)		2.7899E+01

Time (h) = 336.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.1350E+21
Organic I (atoms)	0.0000E+00	3.5102E+19
Aerosols (kg)	0.0000E+00	1.5920E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 336.0000 Leakage Transport

Noble gases (atoms)	1.0039E+24
Elemental I (atoms)	1.1985E+21
Organic I (atoms)	3.7068E+19
Aerosols (kg)	1.6715E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 336.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	9.6721E+23
Elemental I (atoms)	5.5636E+19	2.9282E+18
Organic I (atoms)	1.7207E+18	9.0564E+16
Aerosols (kg)	7.8043E-03	7.8832E-05

Detailed model information at time (H) = 384.0000

Natural deposition - Powers' Model, Compartment 1
Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	3.0609E+02

EAB Doses:

Time (h) = 384.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 384.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 384.0000	Ci	kg	Atoms	Decay
Co-58	2.2602E-04	7.1079E-12	7.3801E+13	3.0827E+14
Co-60	3.1456E-04	2.7828E-10	2.7931E+15	3.7632E+14
Kr-85	1.6654E+03	4.2449E-03	3.0075E+22	8.9239E+19
Rb-86	6.1694E-03	7.5822E-11	5.3094E+14	1.2535E+16
Sr-89	3.1069E-01	1.0694E-08	7.2361E+16	4.4768E+17
Sr-90	4.3909E-02	3.2190E-07	2.1539E+18	5.2315E+16
Y-90	4.3465E-02	7.9889E-11	5.3456E+14	1.5765E+16
Y-91	5.0865E-03	2.0741E-10	1.3726E+15	6.5191E+15
Zr-95	5.2206E-03	2.4301E-10	1.5405E+15	7.2249E+15
Zr-97	9.3108E-10	4.8705E-19	3.0238E+06	3.4784E+15
Nb-95	6.0726E-03	1.5530E-10	9.8444E+14	7.4128E+15
Mo-99	1.5560E-03	3.2442E-12	1.9735E+13	7.3166E+16
Tc-99m	1.5953E-03	3.0338E-13	1.8455E+12	6.7921E+16
Ru-103	5.4777E-02	1.6972E-09	9.9234E+15	8.3382E+16
Ru-106	2.9022E-02	8.6747E-09	4.9283E+16	3.5461E+16
Rh-105	2.9499E-05	3.4949E-14	2.0044E+11	3.6720E+16
Sb-127	5.6177E-03	2.1036E-11	9.9748E+13	9.0006E+16
Te-127	1.8170E-02	6.8849E-12	3.2647E+13	9.5089E+16
Te-127m	1.2599E-02	1.3357E-09	6.3337E+15	1.5836E+16
Te-129	2.7453E-02	1.3109E-12	6.1196E+12	1.0454E+17
Te-129m	3.1748E-02	1.0539E-09	4.9197E+15	5.0306E+16

Te-131m	1.8759E-05	2.3525E-14	1.0814E+11	8.9172E+16
Te-132	4.3930E-02	1.4470E-10	6.6016E+14	1.1455E+18
I-131	2.2428E+01	1.8091E-07	8.3165E+17	8.0451E+18
I-132	5.5164E-02	5.3443E-12	2.4382E+13	2.4010E+18
I-133	5.0891E-04	4.4925E-13	2.0342E+12	7.5523E+18
Xe-133	2.8683E+04	1.5324E-04	6.9384E+20	5.4277E+21
Xe-135	2.9613E-08	1.1596E-17	5.1728E+07	2.0985E+20
Cs-134	1.2302E+00	9.5084E-07	4.2732E+18	1.5030E+18
Cs-136	1.4908E-01	2.0341E-09	9.0073E+15	3.7914E+17
Cs-137	7.7745E-01	8.9381E-06	3.9289E+19	9.3857E+17
Ba-140	2.8355E-01	3.8732E-09	1.6661E+16	7.2602E+17
La-140	3.2831E-01	5.9067E-10	2.5408E+15	2.5980E+17
Ce-141	1.1071E-02	3.8856E-10	1.6595E+15	1.7738E+16
Ce-143	4.8084E-06	7.2407E-15	3.0493E+10	1.0520E+16
Ce-144	1.1958E-02	3.7493E-09	1.5680E+16	1.4724E+16
Pr-143	3.3728E-03	5.0087E-11	2.1093E+14	7.0491E+15
Nd-147	9.2584E-04	1.1444E-11	4.6884E+13	2.6855E+15
Np-239	1.6816E-03	7.2486E-12	1.8265E+13	1.4961E+17
Pu-238	6.2190E-05	3.6327E-09	9.1918E+15	7.3938E+13
Pu-239	4.1988E-06	6.7552E-08	1.7021E+17	4.9585E+12
Pu-240	4.4537E-06	1.9545E-08	4.9043E+16	5.3014E+12
Pu-241	2.1331E-03	2.0707E-08	5.1742E+16	2.5438E+15
Am-241	1.4674E-06	4.2755E-10	1.0684E+15	1.5921E+12
Cm-242	3.0853E-04	9.3091E-11	2.3166E+14	3.8962E+14
Cm-244	3.5928E-05	4.4409E-10	1.0960E+15	4.2830E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 384.0000	Atmosphere	Sump	
Noble gases (atoms)	3.0769E+22	0.0000E+00	
Elemental I (atoms)	7.5897E+17	0.0000E+00	
Organic I (atoms)	2.3473E+16	0.0000E+00	
Aerosols (kg)	1.0369E-05	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.4004E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		4.4007E-10
Total I (Ci)			2.2484E+01

Time (h) = 384.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.1995E+21
Organic I (atoms)	0.0000E+00	3.7097E+19
Aerosols (kg)	0.0000E+00	1.6028E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 384.0000	Leakage Transport
Noble gases (atoms)	1.1275E+24
Elemental I (atoms)	1.2663E+21
Organic I (atoms)	3.9165E+19
Aerosols (kg)	1.6827E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 384.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.0910E+24
Elemental I (atoms)	5.8798E+19	3.0946E+18
Organic I (atoms)	1.8185E+18	9.5710E+16
Aerosols (kg)	7.8572E-03	7.9366E-05

Detailed model information at time (H) = 432.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	4.9741E+02

EAB Doses:

Time (h) = 432.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 432.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 432.0000	Ci	kg	Atoms	Decay
Co-58	1.3646E-04	4.2914E-12	4.4558E+13	3.0940E+14
Co-60	1.9354E-04	1.7121E-10	1.7185E+15	3.7791E+14
Kr-85	1.6565E+03	4.2223E-03	2.9914E+22	9.9858E+19
Rb-86	3.5265E-03	4.3341E-11	3.0349E+14	1.2565E+16
Sr-89	1.8611E-01	6.4060E-09	4.3346E+16	4.4923E+17
Sr-90	2.7031E-02	1.9816E-07	1.3260E+18	5.2537E+16
Y-90	2.6931E-02	4.9499E-11	3.3121E+14	1.5984E+16
Y-91	3.0584E-03	1.2471E-10	8.2530E+14	6.5445E+15
Zr-95	3.1454E-03	1.4641E-10	9.2813E+14	7.2509E+15
Zr-97	8.0049E-11	4.1874E-20	2.5997E+05	3.4784E+15
Nb-95	3.7161E-03	9.5032E-11	6.0242E+14	7.4433E+15
Mo-99	5.7868E-04	1.2066E-12	7.3395E+12	7.3172E+16
Tc-99m	5.9329E-04	1.1283E-13	6.8635E+11	6.7927E+16
Ru-103	3.2556E-02	1.0088E-09	5.8979E+15	8.3653E+16
Ru-106	1.7802E-02	5.3209E-09	3.0229E+16	3.5607E+16
Rh-105	7.0881E-06	8.3977E-15	4.8164E+10	3.6720E+16
Sb-127	2.4129E-03	9.0354E-12	4.2844E+13	9.0030E+16
Te-127	1.0105E-02	3.8288E-12	1.8156E+13	9.5173E+16
Te-127m	7.6658E-03	8.1270E-10	3.8537E+15	1.5899E+16
Te-129	1.6219E-02	7.7448E-13	3.6155E+12	1.0464E+17
Te-129m	1.8757E-02	6.2263E-10	2.9066E+15	5.0463E+16
Te-131m	3.8100E-06	4.7780E-15	2.1965E+10	8.9172E+16
Te-132	1.7675E-02	5.8219E-11	2.6561E+14	1.1457E+18
I-131	1.8358E+01	1.4808E-07	6.8073E+17	8.1749E+18
I-132	2.2222E-02	2.1529E-12	9.8219E+12	2.4012E+18
I-133	9.9971E-05	8.8250E-14	3.9959E+11	7.5523E+18
Xe-133	2.1911E+04	1.1706E-04	5.3003E+20	5.5885E+21
Xe-135	7.5807E-10	2.9685E-19	1.3242E+06	2.0985E+20
Cs-134	7.5605E-01	5.8435E-07	2.6262E+18	1.5092E+18
Cs-136	8.2573E-02	1.1267E-09	4.9889E+15	3.7986E+17
Cs-137	4.7861E-01	5.5025E-06	2.4187E+19	9.4249E+17
Ba-140	1.5658E-01	2.1388E-09	9.2003E+15	7.2738E+17
La-140	1.8160E-01	3.2672E-10	1.4054E+15	2.6136E+17
Ce-141	6.5320E-03	2.2924E-10	9.7911E+14	1.7793E+16
Ce-143	1.0802E-06	1.6266E-15	6.8502E+09	1.0520E+16
Ce-144	7.3269E-03	2.2972E-09	9.6069E+15	1.4785E+16
Pr-143	1.8750E-03	2.7844E-11	1.1726E+14	7.0653E+15
Nd-147	5.0242E-04	6.2105E-12	2.5443E+13	2.6899E+15
Np-239	5.7470E-04	2.4773E-12	6.2420E+12	1.4962E+17
Pu-238	3.8297E-05	2.2370E-09	5.6603E+15	7.4252E+13
Pu-239	2.5853E-06	4.1594E-08	1.0480E+17	4.9797E+12
Pu-240	2.7421E-06	1.2034E-08	3.0196E+16	5.3239E+12
Pu-241	1.3130E-03	1.2746E-08	3.1849E+16	2.5545E+15
Am-241	9.1502E-07	2.6660E-10	6.6619E+14	1.5996E+12
Cm-242	1.8835E-04	5.6830E-11	1.4142E+14	3.9117E+14
Cm-244	2.2116E-05	2.7337E-10	6.7469E+14	4.3011E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 432.0000	Atmosphere	Sump	
Noble gases (atoms)	3.0444E+22	0.0000E+00	
Elemental I (atoms)	6.3557E+17	0.0000E+00	
Organic I (atoms)	1.9657E+16	0.0000E+00	
Aerosols (kg)	6.3808E-06	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.6017E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.6019E-10
Total I (Ci)			1.8380E+01

Time (h) = 432.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.2535E+21
Organic I (atoms)	0.0000E+00	3.8767E+19
Aerosols (kg)	0.0000E+00	1.6095E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 432.0000 Leakage Transport

Noble gases (atoms)	1.2498E+24
Elemental I (atoms)	1.3231E+21
Organic I (atoms)	4.0922E+19
Aerosols (kg)	1.6897E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

	Pathway	
Time (h) = 432.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.2134E+24
Elemental I (atoms)	6.1445E+19	3.2340E+18
Organic I (atoms)	1.9004E+18	1.0002E+17
Aerosols (kg)	7.8897E-03	7.9694E-05

Detailed model information at time (H) = 480.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	8.0830E+02

EAB Doses:

Time (h) = 480.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 480.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 480.0000	Ci	kg	Atoms	Decay
Co-58	8.2388E-05	2.5910E-12	2.6902E+13	3.1008E+14
Co-60	1.1907E-04	1.0534E-10	1.0573E+15	3.7888E+14
Kr-85	1.6477E+03	4.1997E-03	2.9755E+22	1.1042E+20
Rb-86	2.0158E-03	2.4774E-11	1.7348E+14	1.2583E+16
Sr-89	1.1148E-01	3.8374E-09	2.5965E+16	4.5016E+17
Sr-90	1.6641E-02	1.2199E-07	8.1629E+17	5.2673E+16
Y-90	1.6642E-02	3.0589E-11	2.0468E+14	1.6119E+16
Y-91	1.8390E-03	7.4986E-11	4.9624E+14	6.5597E+15
Zr-95	1.8951E-03	8.8214E-11	5.5920E+14	7.2666E+15
Zr-97	6.8822E-12	3.6001E-21	2.2351E+04	3.4784E+15
Nb-95	2.2729E-03	5.8125E-11	3.6846E+14	7.4620E+15
Mo-99	2.1522E-04	4.4873E-13	2.7296E+12	7.3175E+16
Tc-99m	2.2065E-04	4.1963E-14	2.5526E+11	6.7929E+16
Ru-103	1.9350E-02	5.9955E-10	3.5054E+15	8.3815E+16
Ru-106	1.0919E-02	3.2638E-09	1.8542E+16	3.5696E+16
Rh-105	1.7032E-06	2.0178E-15	1.1573E+10	3.6720E+16
Sb-127	1.0364E-03	3.8809E-12	1.8403E+13	9.0040E+16
Te-127	5.7385E-03	2.1744E-12	1.0311E+13	9.5220E+16
Te-127m	4.6630E-03	4.9435E-10	2.3441E+15	1.5938E+16
Te-129	9.5825E-03	4.5757E-13	2.1361E+12	1.0470E+17
Te-129m	1.1082E-02	3.6786E-10	1.7173E+15	5.0556E+16
Te-131m	7.7383E-07	9.7043E-16	4.4611E+09	8.9172E+16
Te-132	7.1113E-03	2.3424E-11	1.0686E+14	1.1458E+18
I-131	1.5154E+01	1.2223E-07	5.6191E+17	8.2816E+18
I-132	8.9481E-03	8.6688E-13	3.9549E+12	2.4013E+18
I-133	1.9805E-05	1.7483E-14	7.9161E+10	7.5523E+18
Xe-133	1.6738E+04	8.9422E-05	4.0490E+20	5.7113E+21
Xe-135	1.9406E-11	7.5992E-21	3.3899E+04	2.0985E+20
Cs-134	4.6464E-01	3.5912E-07	1.6139E+18	1.5130E+18
Cs-136	4.5735E-02	6.2402E-10	2.7632E+15	3.8025E+17
Cs-137	2.9464E-01	3.3874E-06	1.4890E+19	9.4490E+17

Ba-140	8.6467E-02	1.1811E-09	5.0805E+15	7.2813E+17
La-140	1.0037E-01	1.8057E-10	7.7672E+14	2.6223E+17
Ce-141	3.8538E-03	1.3525E-10	5.7766E+14	1.7825E+16
Ce-143	2.4267E-07	3.6542E-16	1.5389E+09	1.0520E+16
Ce-144	4.4892E-03	1.4075E-09	5.8862E+15	1.4821E+16
Pr-143	1.0423E-03	1.5478E-11	6.5183E+13	7.0743E+15
Nd-147	2.7265E-04	3.3703E-12	1.3807E+13	2.6923E+15
Np-239	1.9641E-04	8.4662E-13	2.1332E+12	1.4962E+17
Pu-238	2.3583E-05	1.3776E-09	3.4856E+15	7.4445E+13
Pu-239	1.5918E-06	2.5610E-08	6.4530E+16	4.9927E+12
Pu-240	1.6883E-06	7.4093E-09	1.8592E+16	5.3377E+12
Pu-241	8.0818E-04	7.8454E-09	1.9604E+16	2.5612E+15
Am-241	5.7047E-07	1.6621E-10	4.1533E+14	1.6042E+12
Cm-242	1.1498E-04	3.4693E-11	8.6334E+13	3.9212E+14
Cm-244	1.3614E-05	1.6827E-10	4.1532E+14	4.3122E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 480.0000	Atmosphere	Sump	
Noble gases (atoms)	3.0159E+22	0.0000E+00	
Elemental I (atoms)	5.3223E+17	0.0000E+00	
Organic I (atoms)	1.6461E+16	0.0000E+00	
Aerosols (kg)	3.9265E-06	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.9731E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.9731E-10
Total I (Ci)			1.5163E+01

Time (h) = 480.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.2987E+21
Organic I (atoms)	0.0000E+00	4.0166E+19
Aerosols (kg)	0.0000E+00	1.6135E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 480.0000	Leakage Transport
Noble gases (atoms)	1.3709E+24
Elemental I (atoms)	1.3707E+21
Organic I (atoms)	4.2392E+19
Aerosols (kg)	1.6939E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 480.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.3346E+24
Elemental I (atoms)	6.3662E+19	3.3506E+18
Organic I (atoms)	1.9689E+18	1.0363E+17
Aerosols (kg)	7.9097E-03	7.9897E-05

Detailed model information at time (H) = 528.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	1.3135E+03

EAB Doses:

Time (h) = 528.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 528.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 528.0000	Ci	kg	Atoms	Decay
Co-58	4.9743E-05	1.5643E-12	1.6242E+13	3.1049E+14
Co-60	7.3261E-05	6.4811E-11	6.5050E+14	3.7948E+14
Kr-85	1.6389E+03	4.1773E-03	2.9596E+22	1.2093E+20
Rb-86	1.1523E-03	1.4161E-11	9.9164E+13	1.2592E+16
Sr-89	6.6782E-02	2.2987E-09	1.5554E+16	4.5071E+17
Sr-90	1.0244E-02	7.5101E-08	5.0252E+17	5.2757E+16
Y-90	1.0268E-02	1.8874E-11	1.2629E+14	1.6203E+16
Y-91	1.1057E-03	4.5088E-11	2.9838E+14	6.5689E+15
Zr-95	1.1418E-03	5.3149E-11	3.3692E+14	7.2761E+15
Nb-95	1.3895E-03	3.5534E-11	2.2525E+14	7.4734E+15
Mo-99	8.0041E-05	1.6689E-13	1.0152E+12	7.3176E+16
Tc-99m	8.2062E-05	1.5606E-14	9.4933E+10	6.7930E+16
Ru-103	1.1500E-02	3.5634E-10	2.0834E+15	8.3911E+16
Ru-106	6.6976E-03	2.0019E-09	1.1374E+16	3.5751E+16
Rh-105	4.0925E-07	4.8486E-16	2.7809E+09	3.6720E+16
Sb-127	4.4516E-04	1.6669E-12	7.9044E+12	9.0045E+16
Te-127	3.3149E-03	1.2561E-12	5.9561E+12	9.5247E+16
Te-127m	2.8359E-03	3.0065E-10	1.4257E+15	1.5961E+16
Te-129	5.6615E-03	2.7034E-13	1.2620E+12	1.0474E+17
Te-129m	6.5473E-03	2.1733E-10	1.0146E+15	5.0611E+16
Te-131m	1.5717E-07	1.9710E-16	9.0607E+08	8.9172E+16
Te-132	2.8611E-03	9.4243E-12	4.2996E+13	1.1458E+18
I-131	1.2576E+01	1.0144E-07	4.6634E+17	8.3700E+18
I-132	3.6020E-03	3.4896E-13	1.5920E+12	2.4013E+18
I-133	3.9446E-06	3.4821E-15	1.5767E+10	7.5523E+18
Xe-133	1.2786E+04	6.8310E-05	3.0930E+20	5.8051E+21
Cs-134	2.8555E-01	2.2070E-07	9.9187E+17	1.5153E+18
Cs-136	2.5331E-02	3.4563E-10	1.5304E+15	3.8047E+17
Cs-137	1.8139E-01	2.0854E-06	9.1667E+18	9.4638E+17
Ba-140	4.7749E-02	6.5223E-10	2.8056E+15	7.2855E+17
La-140	5.5445E-02	9.9753E-11	4.2909E+14	2.6270E+17
Ce-141	2.2737E-03	7.9797E-11	3.4081E+14	1.7844E+16
Ce-143	5.4516E-08	8.2092E-17	3.4571E+08	1.0520E+16
Ce-144	2.7505E-03	8.6237E-10	3.6065E+15	1.4844E+16
Pr-143	5.7938E-04	8.6039E-12	3.6233E+13	7.0794E+15
Nd-147	1.4796E-04	1.8289E-12	7.4926E+12	2.6936E+15
Np-239	6.7123E-05	2.8934E-13	7.2905E+11	1.4962E+17
Pu-238	1.4523E-05	8.4830E-10	2.1465E+15	7.4564E+13
Pu-239	9.8009E-07	1.5768E-08	3.9731E+16	5.0007E+12
Pu-240	1.0395E-06	4.5619E-09	1.1447E+16	5.3462E+12
Pu-241	4.9746E-04	4.8291E-09	1.2067E+16	2.5652E+15
Am-241	3.5560E-07	1.0361E-10	2.5890E+14	1.6071E+12
Cm-242	7.0195E-05	2.1179E-11	5.2705E+13	3.9269E+14
Cm-244	8.3803E-06	1.0358E-10	2.5566E+14	4.3191E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 528.0000	Atmosphere	Sump	
Noble gases (atoms)	2.9905E+22	0.0000E+00	
Elemental I (atoms)	4.4570E+17	0.0000E+00	
Organic I (atoms)	1.3785E+16	0.0000E+00	
Aerosols (kg)	2.4164E-06	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.4674E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.4674E-10
Total I (Ci)			1.2580E+01

Time (h) = 528.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.3366E+21
Organic I (atoms)	0.0000E+00	4.1337E+19
Aerosols (kg)	0.0000E+00	1.6161E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 528.0000	Leakage Transport
Noble gases (atoms)	1.4908E+24
Elemental I (atoms)	1.4105E+21
Organic I (atoms)	4.3624E+19
Aerosols (kg)	1.6966E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Pathway

Time (h) = 528.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.4548E+24
Elemental I (atoms)	6.5519E+19	3.4484E+18
Organic I (atoms)	2.0264E+18	1.0665E+17
Aerosols (kg)	7.9220E-03	8.0021E-05

Detailed model information at time (H) = 576.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	2.1343E+03

EAB Doses:

Time (h) = 576.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 576.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 576.0000	Ci	kg	Atoms	Decay
Co-58	3.0033E-05	9.4448E-13	9.8065E+12	3.1074E+14
Co-60	4.5074E-05	3.9875E-11	4.0022E+14	3.7985E+14
Kr-85	1.6301E+03	4.1550E-03	2.9438E+22	1.3138E+20
Rb-86	6.5865E-04	8.0947E-12	5.6683E+13	1.2598E+16
Sr-89	4.0004E-02	1.3770E-09	9.3172E+15	4.5104E+17
Sr-90	6.3066E-03	4.6234E-08	3.0936E+17	5.2808E+16
Y-90	6.3299E-03	1.1635E-11	7.7850E+13	1.6254E+16
Y-91	6.6485E-04	2.7110E-11	1.7941E+14	6.5744E+15
Zr-95	6.8793E-04	3.2022E-11	2.0299E+14	7.2818E+15
Nb-95	8.4905E-04	2.1713E-11	1.3764E+14	7.4804E+15
Mo-99	2.9768E-05	6.2067E-14	3.7755E+11	7.3176E+16
Tc-99m	3.0519E-05	5.8041E-15	3.5306E+10	6.7930E+16
Ru-103	6.8353E-03	2.1179E-10	1.2383E+15	8.3968E+16
Ru-106	4.1082E-03	1.2280E-09	6.9763E+15	3.5785E+16
Rh-105	9.8337E-08	1.1651E-16	6.6820E+08	3.6720E+16
Sb-127	1.9121E-04	7.1600E-13	3.3951E+12	9.0046E+16
Te-127	1.9406E-03	7.3533E-13	3.4868E+12	9.5263E+16
Te-127m	1.7245E-03	1.8283E-10	8.6694E+14	1.5975E+16
Te-129	3.3449E-03	1.5972E-13	7.4561E+11	1.0476E+17
Te-129m	3.8682E-03	1.2840E-10	5.9943E+14	5.0643E+16
Te-131m	3.1921E-08	4.0032E-17	1.8403E+08	8.9172E+16
Te-132	1.1511E-03	3.7917E-12	1.7299E+13	1.1458E+18
I-131	1.0473E+01	8.4475E-08	3.8834E+17	8.4434E+18
I-132	1.4497E-03	1.4044E-13	6.4074E+11	2.4013E+18
I-133	7.8832E-07	6.9590E-16	3.1510E+09	7.5523E+18
Xe-133	9.7676E+03	5.2183E-05	2.3628E+20	5.8768E+21
Cs-134	1.7549E-01	1.3564E-07	6.0957E+17	1.5167E+18
Cs-136	1.4030E-02	1.9143E-10	8.4767E+14	3.8060E+17
Cs-137	1.1167E-01	1.2838E-06	5.6432E+18	9.4730E+17
Ba-140	2.6368E-02	3.6017E-10	1.5493E+15	7.2878E+17
La-140	3.0624E-02	5.5096E-11	2.3700E+14	2.6297E+17
Ce-141	1.3414E-03	4.7079E-11	2.0108E+14	1.7856E+16
Ce-143	1.2247E-08	1.8442E-17	7.7664E+07	1.0520E+16
Ce-144	1.6853E-03	5.2838E-10	2.2097E+15	1.4858E+16
Pr-143	3.2206E-04	4.7826E-12	2.0141E+13	7.0821E+15
Nd-147	8.0293E-05	9.9251E-13	4.0660E+12	2.6943E+15
Np-239	2.2940E-05	9.8882E-14	2.4916E+11	1.4962E+17
Pu-238	8.9430E-06	5.2238E-10	1.3218E+15	7.4637E+13
Pu-239	6.0344E-07	9.7085E-09	2.4463E+16	5.0057E+12
Pu-240	6.4002E-07	2.8088E-09	7.0478E+15	5.3515E+12
Pu-241	3.0621E-04	2.9725E-09	7.4277E+15	2.5677E+15
Am-241	2.2163E-07	6.4575E-11	1.6136E+14	1.6089E+12
Cm-242	4.2852E-05	1.2930E-11	3.2175E+13	3.9305E+14

Cm-244	5.1586E-06	6.3763E-11	1.5737E+14	4.3233E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 576.0000	Atmosphere	Sump	
Noble gases (atoms)	2.9674E+22	0.0000E+00	
Elemental I (atoms)	3.7324E+17	0.0000E+00	
Organic I (atoms)	1.1544E+16	0.0000E+00	
Aerosols (kg)	1.4870E-06	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.0547E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.0547E-10
Total I (Ci)			1.0474E+01

Time (h) = 576.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.3683E+21
Organic I (atoms)	0.0000E+00	4.2318E+19
Aerosols (kg)	0.0000E+00	1.6176E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 576.0000	Leakage Transport
Noble gases (atoms)	1.6098E+24
Elemental I (atoms)	1.4439E+21
Organic I (atoms)	4.4656E+19
Aerosols (kg)	1.6982E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 576.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.5739E+24
Elemental I (atoms)	6.7073E+19	3.5302E+18
Organic I (atoms)	2.0744E+18	1.0918E+17
Aerosols (kg)	7.9296E-03	8.0098E-05

Detailed model information at time (H) = 624.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	3.4680E+03

EAB Doses:

Time (h) = 624.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 624.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 624.0000	Ci	kg	Atoms	Decay
Co-58	1.8132E-05	5.7024E-13	5.9208E+12	3.1089E+14
Co-60	2.7732E-05	2.4533E-11	2.4624E+14	3.8008E+14
Kr-85	1.6214E+03	4.1328E-03	2.9280E+22	1.4177E+20
Rb-86	3.7649E-04	4.6271E-12	3.2401E+13	1.2601E+16
Sr-89	2.3963E-02	8.2484E-10	5.5812E+15	4.5124E+17
Sr-90	3.8824E-03	2.8462E-08	1.9045E+17	5.2840E+16
Y-90	3.8999E-03	7.1681E-12	4.7964E+13	1.6286E+16
Y-91	3.9976E-04	1.6301E-11	1.0788E+14	6.5777E+15
Zr-95	4.1448E-04	1.9294E-11	1.2230E+14	7.2852E+15
Nb-95	5.1859E-04	1.3262E-11	8.4070E+13	7.4846E+15
Mo-99	1.1071E-05	2.3083E-14	1.4041E+11	7.3176E+16
Tc-99m	1.1350E-05	2.1586E-15	1.3131E+10	6.7930E+16
Ru-103	4.0625E-03	1.2588E-10	7.3597E+14	8.4002E+16

Ru-106	2.5199E-03	7.5321E-10	4.2792E+15	3.5806E+16
Rh-105	2.3629E-08	2.7995E-17	1.6056E+08	3.6720E+16
Sb-127	8.2129E-05	3.0754E-13	1.4583E+12	9.0047E+16
Te-127	1.1477E-03	4.3488E-13	2.0621E+12	9.5272E+16
Te-127m	1.0486E-03	1.1117E-10	5.2714E+14	1.5984E+16
Te-129	1.9762E-03	9.4363E-14	4.4052E+11	1.0477E+17
Te-129m	2.2854E-03	7.5862E-11	3.5415E+14	5.0662E+16
Te-131m	6.4834E-09	8.1306E-18	3.7377E+07	8.9172E+16
Te-132	4.6315E-04	1.5256E-12	6.9600E+12	1.1458E+18
I-131	8.7396E+00	7.0495E-08	3.2407E+17	8.5047E+18
I-132	5.8338E-04	5.6517E-14	2.5784E+11	2.4013E+18
I-133	1.5788E-07	1.3937E-16	6.3106E+08	7.5523E+18
Xe-133	7.4616E+03	3.9863E-05	1.8050E+20	5.9315E+21
Cs-134	1.0785E-01	8.3358E-08	3.7462E+17	1.5176E+18
Cs-136	7.7709E-03	1.0603E-10	4.6950E+14	3.8066E+17
Cs-137	6.8744E-02	7.9032E-07	3.4740E+18	9.4786E+17
Ba-140	1.4561E-02	1.9889E-10	8.5554E+14	7.2890E+17
La-140	1.6913E-02	3.0428E-11	1.3089E+14	2.6311E+17
Ce-141	7.9143E-04	2.7776E-11	1.1863E+14	1.7862E+16
Ce-143	2.7513E-09	4.1430E-18	1.7447E+07	1.0520E+16
Ce-144	1.0326E-03	3.2374E-10	1.3539E+15	1.4866E+16
Pr-143	1.7902E-04	2.6585E-12	1.1196E+13	7.0837E+15
Nd-147	4.3572E-05	5.3860E-13	2.2065E+12	2.6947E+15
Np-239	7.8398E-06	3.3793E-14	8.5150E+10	1.4962E+17
Pu-238	5.5071E-06	3.2168E-10	8.1395E+14	7.4682E+13
Pu-239	3.7154E-07	5.9775E-09	1.5062E+16	5.0087E+12
Pu-240	3.9406E-07	1.7294E-09	4.3393E+15	5.3547E+12
Pu-241	1.8848E-04	1.8297E-09	4.5720E+15	2.5693E+15
Am-241	1.3811E-07	4.0240E-11	1.0055E+14	1.6100E+12
Cm-242	2.6160E-05	7.8932E-12	1.9642E+13	3.9326E+14
Cm-244	3.1755E-06	3.9251E-11	9.6874E+13	4.3259E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 624.0000	Atmosphere	Sump	
Noble gases (atoms)	2.9461E+22	0.0000E+00	
Elemental I (atoms)	3.1256E+17	0.0000E+00	
Organic I (atoms)	9.6669E+15	0.0000E+00	
Aerosols (kg)	9.1516E-07	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.7146E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.7146E-10
Total I (Ci)			8.7402E+00

Time (h) = 624.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.3949E+21
Organic I (atoms)	0.0000E+00	4.3140E+19
Aerosols (kg)	0.0000E+00	1.6186E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 624.0000	Leakage Transport
Noble gases (atoms)	1.7280E+24
Elemental I (atoms)	1.4718E+21
Organic I (atoms)	4.5519E+19
Aerosols (kg)	1.6992E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 624.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.6922E+24
Elemental I (atoms)	6.8375E+19	3.5987E+18
Organic I (atoms)	2.1147E+18	1.1130E+17
Aerosols (kg)	7.9343E-03	8.0145E-05

Detailed model information at time (H) = 672.0000

Natural deposition - Powers' Model, Compartment 1

Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol

1.0000E+00 1.0000E+00 1.0000E+00 5.6351E+03

EAB Doses:

Time (h) = 672.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 672.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 672.0000	Ci	kg	Atoms	Decay
Co-58	1.0948E-05	3.4429E-13	3.5747E+12	3.1098E+14
Co-60	1.7062E-05	1.5094E-11	1.5150E+14	3.8022E+14
Kr-85	1.6128E+03	4.1107E-03	2.9124E+22	1.5211E+20
Rb-86	2.1521E-04	2.6449E-12	1.8521E+13	1.2603E+16
Sr-89	1.4355E-02	4.9410E-10	3.3433E+15	4.5136E+17
Sr-90	2.3901E-03	1.7522E-08	1.1724E+17	5.2860E+16
Y-90	2.4020E-03	4.4149E-12	2.9541E+13	1.6305E+16
Y-91	2.4037E-04	9.8015E-12	6.4864E+13	6.5797E+15
Zr-95	2.4972E-04	1.1624E-11	7.3688E+13	7.2873E+15
Nb-95	3.1661E-04	8.0969E-12	5.1327E+13	7.4872E+15
Mo-99	4.1174E-06	8.5848E-15	5.2221E+10	7.3176E+16
Tc-99m	4.2213E-06	8.0280E-16	4.8834E+09	6.7930E+16
Ru-103	2.4145E-03	7.4814E-11	4.3742E+14	8.4022E+16
Ru-106	1.5457E-03	4.6200E-10	2.6248E+15	3.5818E+16
Rh-105	5.6777E-09	6.7267E-18	3.8580E+07	3.6720E+16
Sb-127	3.5276E-05	1.3210E-13	6.2637E+11	9.0048E+16
Te-127	6.8394E-04	2.5916E-13	1.2289E+12	9.5278E+16
Te-127m	6.3756E-04	6.7591E-11	3.2051E+14	1.5989E+16
Te-129	1.1675E-03	5.5751E-14	2.6026E+11	1.0478E+17
Te-129m	1.3502E-03	4.4820E-11	2.0924E+14	5.0674E+16
Te-131m	1.3168E-09	1.6514E-18	7.5914E+06	8.9172E+16
Te-132	1.8634E-04	6.1379E-13	2.8003E+12	1.1458E+18
I-131	7.3029E+00	5.8906E-08	2.7079E+17	8.5558E+18
I-132	2.3475E-04	2.2742E-14	1.0375E+11	2.4013E+18
I-133	3.1662E-08	2.7950E-17	1.2655E+08	7.5523E+18
Xe-133	5.7000E+03	3.0451E-05	1.3788E+20	5.9733E+21
Cs-134	6.6281E-02	5.1229E-08	2.3023E+17	1.5182E+18
Cs-136	4.3041E-03	5.8726E-11	2.6004E+14	3.8070E+17
Cs-137	4.2320E-02	4.8654E-07	2.1387E+18	9.4821E+17
Ba-140	8.0406E-03	1.0983E-10	4.7244E+14	7.2897E+17
La-140	9.3399E-03	1.6803E-11	7.2281E+13	2.6319E+17
Ce-141	4.6694E-04	1.6388E-11	6.9991E+13	1.7866E+16
Ce-143	6.1807E-10	9.3071E-19	3.9195E+06	1.0520E+16
Ce-144	6.3265E-04	1.9836E-10	8.2953E+14	1.4871E+16
Pr-143	9.9510E-05	1.4778E-12	6.2232E+12	7.0846E+15
Nd-147	2.3645E-05	2.9228E-13	1.1974E+12	2.6949E+15
Np-239	2.6793E-06	1.1549E-14	2.9101E+10	1.4962E+17
Pu-238	3.3912E-06	1.9809E-10	5.0123E+14	7.4710E+13
Pu-239	2.2876E-07	3.6803E-09	9.2734E+15	5.0106E+12
Pu-240	2.4262E-07	1.0648E-09	2.6717E+15	5.3567E+12
Pu-241	1.1602E-04	1.1262E-09	2.8142E+15	2.5702E+15
Am-241	8.6053E-08	2.5073E-11	6.2652E+13	1.6107E+12
Cm-242	1.5970E-05	4.8186E-12	1.1991E+13	3.9339E+14
Cm-244	1.9547E-06	2.4162E-11	5.9633E+13	4.3275E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 672.0000	Atmosphere	Sump	
Noble gases (atoms)	2.9262E+22	0.0000E+00	
Elemental I (atoms)	2.6175E+17	0.0000E+00	
Organic I (atoms)	8.0953E+15	0.0000E+00	
Aerosols (kg)	5.6322E-07	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.4328E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.4328E-10
Total I (Ci)			7.3031E+00

Time (h) = 672.0000	Deposition Surfaces	Recirculating Filter

Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.4171E+21
Organic I (atoms)	0.0000E+00	4.3828E+19
Aerosols (kg)	0.0000E+00	1.6191E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:
Time (h) = 672.0000 Leakage Transport

Noble gases (atoms)	1.8453E+24
Elemental I (atoms)	1.4952E+21
Organic I (atoms)	4.6243E+19
Aerosols (kg)	1.6998E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 672.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.8096E+24
Elemental I (atoms)	6.9466E+19	3.6561E+18
Organic I (atoms)	2.1484E+18	1.1307E+17
Aerosols (kg)	7.9372E-03	8.0174E-05

Detailed model information at time (H) = 720.0000

Natural deposition - Powers' Model, Compartment 1
Deposition Lambda (1 / Hours)

Noble	Elemental	Organic	Aerosol
0.0000E+00	0.0000E+00	0.0000E+00	1.0000E-02

Deposition Net DF

Noble	Elemental	Organic	Aerosol
1.0000E+00	1.0000E+00	1.0000E+00	9.1562E+03

EAB Doses:

Time (h) = 720.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 720.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 720.0000	Ci	kg	Atoms	Decay
Co-58	6.6097E-06	2.0787E-13	2.1583E+12	3.1103E+14
Co-60	1.0498E-05	9.2868E-12	9.3210E+13	3.8031E+14
Kr-85	1.6042E+03	4.0888E-03	2.8969E+22	1.6239E+20
Rb-86	1.2302E-04	1.5119E-12	1.0587E+13	1.2604E+16
Sr-89	8.5988E-03	2.9598E-10	2.0027E+15	4.5143E+17
Sr-90	1.4714E-03	1.0787E-08	7.2177E+16	5.2872E+16
Y-90	1.4791E-03	2.7187E-12	1.8191E+13	1.6317E+16
Y-91	1.4453E-04	5.8934E-12	3.9001E+13	6.5809E+15
Zr-95	1.5046E-04	7.0037E-12	4.4397E+13	7.2885E+15
Nb-95	1.9323E-04	4.9414E-12	3.1324E+13	7.4888E+15
Mo-99	1.5313E-06	3.1928E-15	1.9421E+10	7.3176E+16
Tc-99m	1.5700E-06	2.9857E-16	1.8162E+09	6.7930E+16
Ru-103	1.4351E-03	4.4466E-11	2.5998E+14	8.4034E+16
Ru-106	9.4809E-04	2.8339E-10	1.6100E+15	3.5826E+16
Rh-105	1.3643E-09	1.6163E-18	9.2703E+06	3.6720E+16
Sb-127	1.5152E-05	5.6738E-14	2.6904E+11	9.0048E+16
Te-127	4.0987E-04	1.5531E-13	7.3644E+11	9.5281E+16
Te-127m	3.8762E-04	4.1094E-11	1.9486E+14	1.5992E+16
Te-129	6.8980E-04	3.2938E-14	1.5377E+11	1.0479E+17
Te-129m	7.9773E-04	2.6480E-11	1.2362E+14	5.0680E+16
Te-131m	2.6745E-10	3.3540E-19	1.5418E+06	8.9172E+16
Te-132	7.4973E-05	2.4695E-13	1.1267E+12	1.1458E+18
I-131	6.1074E+00	4.9263E-08	2.2647E+17	8.5985E+18
I-132	9.4454E-05	9.1506E-15	4.1747E+10	2.4013E+18
I-133	6.3547E-09	5.6097E-18	2.5400E+07	7.5523E+18
Xe-133	4.3542E+03	2.3262E-05	1.0533E+20	6.0053E+21
Cs-134	4.0734E-02	3.1483E-08	1.4149E+17	1.5185E+18

Cs-136	2.3839E-03	3.2527E-11	1.4403E+14	3.8072E+17
Cs-137	2.6053E-02	2.9952E-07	1.3166E+18	9.4842E+17
Ba-140	4.4402E-03	6.0651E-11	2.6089E+14	7.2901E+17
La-140	5.1577E-03	9.2794E-12	3.9916E+13	2.6324E+17
Ce-141	2.7549E-04	9.6684E-12	4.1294E+13	1.7868E+16
Ce-143	1.3885E-10	2.0908E-19	8.8051E+05	1.0520E+16
Ce-144	3.8763E-04	1.2153E-10	5.0825E+14	1.4875E+16
Pr-143	5.5314E-05	8.2143E-13	3.4593E+12	7.0850E+15
Nd-147	1.2832E-05	1.5861E-13	6.4979E+11	2.6950E+15
Np-239	9.1566E-07	3.9470E-15	9.9453E+09	1.4962E+17
Pu-238	2.0883E-06	1.2198E-10	3.0865E+14	7.4727E+13
Pu-239	1.4085E-07	2.2660E-09	5.7096E+15	5.0118E+12
Pu-240	1.4938E-07	6.5557E-10	1.6450E+15	5.3579E+12
Pu-241	7.1412E-05	6.9324E-10	1.7323E+15	2.5708E+15
Am-241	5.3609E-08	1.5620E-11	3.9031E+13	1.6112E+12
Cm-242	9.7495E-06	2.9417E-12	7.3203E+12	3.9347E+14
Cm-244	1.2033E-06	1.4873E-11	3.6708E+13	4.3285E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 720.0000	Atmosphere	Sump	
Noble gases (atoms)	2.9074E+22	0.0000E+00	
Elemental I (atoms)	2.1919E+17	0.0000E+00	
Organic I (atoms)	6.7792E+15	0.0000E+00	
Aerosols (kg)	3.4663E-07	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.1982E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1982E-10
Total I (Ci)			6.1075E+00

Time (h) = 720.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.4357E+21
Organic I (atoms)	0.0000E+00	4.4404E+19
Aerosols (kg)	0.0000E+00	1.6195E-01

Primary Containment to Reactor Enclosure Transport Group Inventory:

Time (h) = 720.0000	Leakage Transport
Noble gases (atoms)	1.9618E+24
Elemental I (atoms)	1.5148E+21
Organic I (atoms)	4.6849E+19
Aerosols (kg)	1.7001E-01

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 720.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	1.9263E+24
Elemental I (atoms)	7.0379E+19	3.7041E+18
Organic I (atoms)	2.1767E+18	1.1456E+17
Aerosols (kg)	7.9389E-03	8.0192E-05

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I-131 Summary

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Time (hr)	Primary Containment I-131 (Curies)	Reactor Enclosure I-131 (Curies)	Environment I-131 (Curies)
0.000	5.2650E+03	3.0468E-04	5.4764E-09
0.017	1.5822E+05	2.7511E-01	1.5302E-04
0.258	2.4368E+06	5.6640E+01	6.2315E-03
0.500	4.6970E+06	1.8650E+02	6.5141E-03
0.742	8.4227E+06	3.9593E+02	7.1997E-03
1.038	1.2954E+07	7.5822E+02	8.8961E-03
1.335	1.7436E+07	1.1894E+03	1.1788E-02
1.631	2.1871E+07	1.6591E+03	1.6033E-02
1.928	2.6069E+07	2.1467E+03	2.1720E-02
2.000	2.7031E+07	2.2646E+03	2.3325E-02
2.300	2.6322E+07	2.6258E+03	3.0795E-02
2.600	2.5632E+07	2.8045E+03	3.9086E-02
2.900	2.4962E+07	2.8769E+03	4.7779E-02
3.200	2.4309E+07	2.8875E+03	5.6626E-02

3.500	2.3675E+07	2.8626E+03	6.5487E-02
3.800	2.3059E+07	2.8177E+03	7.4277E-02
4.100	2.2287E+07	2.7574E+03	8.2947E-02
4.400	2.1543E+07	2.6852E+03	9.1456E-02
4.700	2.0826E+07	2.6073E+03	9.9780E-02
5.000	2.0134E+07	2.5275E+03	1.0791E-01
5.300	1.9466E+07	2.4476E+03	1.1583E-01
5.600	1.8822E+07	2.3689E+03	1.2356E-01
5.900	1.8201E+07	2.2919E+03	1.3109E-01
6.200	1.7602E+07	2.2172E+03	1.3843E-01
6.500	1.7024E+07	2.1447E+03	1.4559E-01
6.800	1.6467E+07	2.0746E+03	1.5256E-01
7.100	1.5929E+07	2.0069E+03	1.5936E-01
7.400	1.5411E+07	1.9415E+03	1.6599E-01
7.700	1.4911E+07	1.8784E+03	1.7246E-01
8.000	1.4428E+07	1.8175E+03	1.7877E-01
8.300	1.3963E+07	1.7588E+03	1.8494E-01
8.600	1.3514E+07	1.7021E+03	1.9095E-01
8.900	1.3081E+07	1.6474E+03	1.9683E-01
9.200	1.2663E+07	1.5946E+03	2.0256E-01
9.500	1.2260E+07	1.5438E+03	2.0817E-01
9.800	1.1872E+07	1.4947E+03	2.1365E-01
10.100	1.1497E+07	1.4473E+03	2.1901E-01
10.400	1.1136E+07	1.4017E+03	2.2425E-01
24.000	4.3960E+06	5.2726E+02	3.9157E-01
96.000	2.1534E+06	1.2974E+02	6.7413E-01
720.000	9.9576E+04	6.1074E+00	1.3356E+00

Time (hr)	SGTS Node I-131 (Curies)
0.000	1.6592E-10
0.017	1.5273E-07
0.258	3.7807E-07
0.500	1.2463E-06
0.742	2.6489E-06
1.038	5.0795E-06
1.335	7.9783E-06
1.631	1.1142E-05
1.928	1.4435E-05
2.000	1.5235E-05
2.300	1.7715E-05
2.600	1.8991E-05
2.900	1.9560E-05
3.200	1.9718E-05
3.500	1.9638E-05
3.800	1.9421E-05
4.100	1.9104E-05
4.400	1.8712E-05
4.700	1.8283E-05
5.000	1.7840E-05
5.300	1.7395E-05
5.600	1.6955E-05
5.900	1.6524E-05
6.200	1.6105E-05
6.500	1.5699E-05
6.800	1.5306E-05
7.100	1.4925E-05
7.400	1.4558E-05
7.700	1.4203E-05
8.000	1.3861E-05
8.300	1.3530E-05
8.600	1.3211E-05
8.900	1.2903E-05
9.200	1.2606E-05
9.500	1.2319E-05
9.800	1.2042E-05
10.100	1.1775E-05
10.400	1.1517E-05
24.000	6.4729E-06
96.000	2.0800E-06
720.000	1.6935E-07

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Cumulative Dose Summary

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Time (hr)	EAB Thyroid (rem)	EAB TEDE (rem)	LPZ Thyroid (rem)	LPZ TEDE (rem)
0.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.017	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.258	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.500	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.742	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
1.038	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
1.335	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
1.631	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
1.928	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.300	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.600	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.900	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3.200	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3.500	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3.800	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
4.100	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
4.400	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
4.700	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
5.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
5.300	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
5.600	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
5.900	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
6.200	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
6.500	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
6.800	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7.100	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7.400	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7.700	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
8.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
8.300	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
8.600	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
8.900	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
9.200	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
9.500	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
9.800	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
10.100	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
10.400	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
24.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
96.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
720.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

##

Worst Two-Hour Doses

##

EAB

Time (hr)	Whole Body (rem)	Thyroid (rem)	TEDE (rem)
0.0	0.0000E+00	0.0000E+00	0.0000E+00

```
 ######################################################################
    RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 12:38:43
 ######################################################################

 ######################################################################
                        File information
 ######################################################################

 Plant file           = P:\Users\Nuc\Exelon EOC\Discipline Files\Process\AST\Limerick
AST\LGS LOCA\RADTRAD\Rev 2 Final DBA Runs\LGS LOCA ECCS Leak - New Design Basis - RE
Loading (Full RE Volume).psf
 Inventory file       = P:\Users\Nuc\Exelon EOC\Discipline Files\Process\AST\Limerick
AST\LGS LOCA\RADTRAD\Limerick AST ECCS Source Terms.nif
 Release file         = c:\program files\radtrad3-03\defaults\bwr_dba.rft
 Dose Conversion file = c:\program files\radtrad3-03\defaults\fgr11&12.inp


     #####    ####   #####    #  #     #  #####   #    #  #####
     #    #  #       #        #  ##    #  #    #  #    #    #
     #    #  #       #        #  # #   #  #    #  #    #    #
     #####    ####   ####     #  #  #  #  #####   #    #    #
     #            #  #        #  #   # #  #       #    #    #
     #            #  #        #  #    ##  #       #    #    #
     #        ####   #        #  #     #  #        ####     #


 Radtrad 3.03 4/15/2001
 ECCS Leak, 15.5 minute SC Drawdown - Reactor Enclosure Loading
 Nuclide Inventory File:
 P:\Users\Nuc\Exelon EOC\Discipline Files\Process\AST\Limerick AST\LGS
LOCA\RADTRAD\Limerick AST ECCS Source Terms.nif
 Plant Power Level:
  3.5270E+03
 Compartments:
   4
 Compartment 1:
 ECCS Fluid
   3
  9.5989E+05
   0
   0
   0
   0
   0
 Compartment 2:
 Reactor Enclosure
   3
  1.8000E+06
   0
   0
   1
   0
   0
 Compartment 3:
 Environment
   2
  0.0000E+00
   0
   0
   0
   0
   0
 Compartment 4:
 SGTS Node
   3
  1.0000E+00
   0
   0
   0
   0
```

```
  0
Pathways:
  3
Pathway 1:
ECCS Fluid to Reactor Enclosure
  1
  2
  2
Pathway 2:
Reactor Enclosure to SGTS Node
  2
  4
  2
Pathway 3:
SGTS Node to  Environment
  4
  3
  2
End of Plant Model File
Scenario Description Name:

Plant Model Filename:

Source Term:
  1
  1   1.0000E+00
c:\program files\radtrad3-03\defaults\fgr11&12.inp
c:\program files\radtrad3-03\defaults\bwr_dba.rft
  0.0000E+00
  0
  0.0000E+00   9.7000E-01   3.0000E-02   1.0000E+00
Overlying Pool:
  0
  0.0000E+00
  0
  0
  0
  0
Compartments:
  4
Compartment 1:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 2:
  1
  1
  0
  0
  0
  0
  1
  5.1000E+04
  4
  0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   0.0000E+00   0.0000E+00   0.0000E+00
  2.5830E-01   9.9000E+01   9.5000E+01   9.5000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
Compartment 3:
  0
  1
  0
  0
  0
  0
  0
```

```
  0
  0
Compartment 4:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Pathways:
  3
Pathway 1:
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   5.0000E+00   9.0000E+01   9.0000E+01   9.0000E+01
  2.4000E+01   5.0000E+00   9.0000E+01   9.0000E+01   9.0000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 2:
  0
  0
  0
  0
  0
  1
 10
  0.0000E+00   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  5.8300E-02   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  1.0000E-01   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  1.4170E-01   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  1.8330E-01   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  2.2500E-01   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  2.5830E-01   2.5000E+03   9.9000E+01   9.5000E+01   9.5000E+01
  2.6670E-01   2.5000E+03   9.9000E+01   9.5000E+01   9.5000E+01
  3.9580E-01   2.5000E+03   9.9000E+01   9.5000E+01   9.5000E+01
  0
  0
  0
  0
  0
  0
Pathway 3:
  0
  0
  0
  0
  0
  1
 10
  0.0000E+00   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  5.8300E-02   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  1.0000E-01   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  1.4170E-01   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  1.8330E-01   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  2.2500E-01   3.0000E+03   0.0000E+00   0.0000E+00   0.0000E+00
  2.5830E-01   2.5000E+03   9.9000E+01   9.9000E+01   9.9000E+01
  2.6670E-01   2.5000E+03   9.9000E+01   9.9000E+01   9.9000E+01
  3.9580E-01   2.5000E+03   9.9000E+01   9.9000E+01   9.9000E+01
  0
```

```
  0
  0
  0
  0
  0
Dose Locations:
  2
Location 1:
EAB
  3
  1
  2
  0.0000E+00   0.0000E+00
  8.0000E+00   0.0000E+00
  1
  2
  0.0000E+00   3.5000E-04
  8.0000E+00   0.0000E+00
  0
Location 2:
LPZ
  3
  1
  5
  0.0000E+00   0.0000E+00
  8.0000E+00   0.0000E+00
  2.4000E+01   0.0000E+00
  9.6000E+01   0.0000E+00
  7.2000E+02   0.0000E+00
  1
  4
  0.0000E+00   3.5000E-04
  8.0000E+00   1.8000E-04
  2.4000E+01   2.3000E-04
  7.2000E+02   0.0000E+00
  0
Effective Volume Location:
  0
Simulation Parameters:
  9
  0.0000E+00   1.6670E-03
  1.6700E-02   2.5000E-02
  2.5830E-01   1.4833E-01
  2.0000E+00   1.0000E+00
  8.0000E+00   2.0000E+00
  2.4000E+01   8.0000E+00
  9.6000E+01   2.4000E+01
  2.4000E+02   4.8000E+01
  7.2000E+02   0.0000E+00
Output Filename:
P:\Users\Nuc\Exelon EOC\Discipline Files\Process\AST\Limerick AST\LGS
LOCA\RADTRAD\Rev 2 Final DBA Runs\LGS LOCA ECCS Leak - New Design Basis - RE Loading
(Full RE Volume).o0
  1
  2
  1
  1
  1
End of Scenario File
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 12:38:43
#######################################################################

#######################################################################
                        Plant Description
#######################################################################

Number of Nuclides =  60

Inventory Power =   1.0000E+00 MWth
Plant Power Level =   3.5270E+03 MWth

Number of compartments    =   4

Compartment information

Compartment number  1  (Source term fraction =   1.0000E+00
)
Name: ECCS Fluid
Compartment volume =   9.5989E+05 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  1
   Exit Pathway Number    1: ECCS Fluid to Reactor Enclosure

Compartment number  2
Name: Reactor Enclosure
Compartment volume =   1.8000E+06 (Cubic feet)
Compartment type is Normal
Removal devices within compartment:
     Filter(s)
Pathways into and out of compartment  2
   Inlet Pathway Number   1: ECCS Fluid to Reactor Enclosure
   Exit Pathway Number    2: Reactor Enclosure to SGTS Node

Compartment number  3
Name: Environment
Compartment type is Environment
Pathways into and out of compartment  3
   Inlet Pathway Number   3: SGTS Node to  Environment

Compartment number  4
Name: SGTS Node
Compartment volume =   1.0000E+00 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  4
   Inlet Pathway Number   2: Reactor Enclosure to SGTS Node
   Exit Pathway Number    3: SGTS Node to  Environment

Total number of pathways =   3
```

```
#####################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 12:38:43
#####################################################################
```

```
 ####   #    #  #####  #####   #    #  #####
#    #  #    #    #    #    #  #    #    #
#    #  #    #    #    #    #  #    #    #
#    #  #    #    #    #####   #    #    #
#    #  #    #    #    #       #    #    #
#    #  #    #    #    #       #    #    #
 ####    ####     #    #        ####     #
```

```
#####################################################################
            Dose, Detailed model and Detailed Inventory Output
#####################################################################
```

Detailed model information at time (H) = 0.0017

EAB Doses:

Time (h) = 0.0017	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0017	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0017	Ci	kg	Atoms	Decay
I-131	4.1152E-04	3.3194E-12	1.5259E+13	4.7382E+07
I-132	5.9408E-04	5.7554E-14	2.6258E+11	6.8413E+07
I-133	8.5086E-04	7.5111E-13	3.4010E+12	9.7970E+07
I-134	9.4294E-04	3.5347E-14	1.5885E+11	1.0861E+08
I-135	7.9503E-04	2.2638E-13	1.0099E+12	9.1544E+07

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0017	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.9489E+13	0.0000E+00	
Organic I (atoms)	6.0275E+11	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.1392E-14
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.4569E-14
Total I (Ci)			3.5944E-03

Time (h) = 0.0017	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0017	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7541E+14	1.9490E+13
Organic I (atoms)	5.4251E+12	6.0279E+11
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Pathway

Time (h) = 0.0017	Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.0830E+09
Organic I (atoms)	0.0000E+00	3.3494E+07
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0033

EAB Doses:

Time (h) = 0.0033	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0033	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0033	Ci	kg	Atoms	Decay
I-131	1.6460E-03	1.3277E-11	6.1033E+13	4.1286E+08
I-132	2.3750E-03	2.3009E-13	1.0497E+12	5.9590E+08
I-133	3.4031E-03	3.0041E-12	1.3602E+13	8.5363E+08
I-134	3.7666E-03	1.4119E-13	6.3454E+11	9.4551E+08
I-135	3.1794E-03	9.0532E-13	4.0385E+12	7.9757E+08

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0033	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	7.7948E+13	0.0000E+00	
Organic I (atoms)	2.4108E+12	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.5563E-14
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.8269E-14
Total I (Ci)			1.4370E-02

Time (h) = 0.0033	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0033	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.0164E+14	7.7960E+13
Organic I (atoms)	2.1700E+13	2.4111E+12
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0033	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	8.6632E+09
Organic I (atoms)	0.0000E+00	2.6793E+08
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0050

EAB Doses:

Time (h) = 0.0050	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0050	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0050	Ci	kg	Atoms	Decay
I-131	3.7032E-03	2.9871E-11	1.3732E+14	1.2351E+09
I-132	5.3408E-03	5.1741E-13	2.3605E+12	1.7821E+09
I-133	7.6561E-03	6.7585E-12	3.0602E+13	2.5537E+09
I-134	8.4632E-03	3.1725E-13	1.4258E+12	2.8259E+09
I-135	7.1519E-03	2.0365E-12	9.0846E+12	2.3858E+09

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0050	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.7537E+14	0.0000E+00	
Organic I (atoms)	5.4237E+12	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.0251E-13
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.3109E-13
Total I (Ci)			3.2315E-02

Time (h) = 0.0050	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0050	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.5786E+15	1.7541E+14
Organic I (atoms)	4.8824E+13	5.4249E+12
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0050	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.9236E+10
Organic I (atoms)	0.0000E+00	9.0421E+08
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0067

EAB Doses:

Time (h) = 0.0067	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0067	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0067	Ci	kg	Atoms	Decay
I-131	6.5830E-03	5.3100E-11	2.4410E+14	2.6969E+09
I-132	9.4894E-03	9.1933E-13	4.1942E+12	3.8897E+09
I-133	1.3609E-02	1.2014E-11	5.4397E+13	5.5756E+09
I-134	1.5025E-02	5.6322E-13	2.5312E+12	6.1644E+09
I-135	1.2712E-02	3.6196E-12	1.6147E+13	5.2085E+09

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0067	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00

Elemental I (atoms)	3.1173E+14	0.0000E+00	
Organic I (atoms)	9.6412E+12	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.8222E-13
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.3301E-13
Total I (Ci)			5.7418E-02

Time (h) = 0.0067	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0067	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.8064E+15	3.1182E+14
Organic I (atoms)	8.6796E+13	9.6440E+12
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0067	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.9296E+10
Organic I (atoms)	0.0000E+00	2.1432E+09
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0083

EAB Doses:

Time (h) = 0.0083	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0083	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0083	Ci	kg	Atoms	Decay
I-131	1.0285E-02	8.2963E-11	3.8139E+14	4.9807E+09
I-132	1.4819E-02	1.4356E-12	6.5498E+12	7.1810E+09
I-133	2.1262E-02	1.8769E-11	8.4986E+13	1.0297E+10
I-134	2.3444E-02	8.7883E-13	3.9496E+12	1.1373E+10
I-135	1.9857E-02	5.6544E-12	2.5223E+13	9.6181E+09

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0083	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	4.8703E+14	0.0000E+00	
Organic I (atoms)	1.5063E+13	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.8469E-13
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.6404E-13
Total I (Ci)			8.9668E-02

Time (h) = 0.0083	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0083	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.3849E+15	4.8721E+14
Organic I (atoms)	1.3562E+14	1.5068E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0083	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.3533E+11
Organic I (atoms)	0.0000E+00	4.1856E+09
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0100

EAB Doses:

Time (h) = 0.0100	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0100	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0100	Ci	kg	Atoms	Decay
I-131	1.4810E-02	1.1946E-10	5.4916E+14	8.2692E+09
I-132	2.1327E-02	2.0662E-12	9.4264E+12	1.1918E+10
I-133	3.0614E-02	2.7025E-11	1.2237E+14	1.7095E+10
I-134	3.3713E-02	1.2638E-12	5.6796E+12	1.8864E+10
I-135	2.8588E-02	8.1404E-12	3.6313E+13	1.5966E+10

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0100	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	7.0126E+14	0.0000E+00	
Organic I (atoms)	2.1688E+13	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.0992E-13
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.2414E-13
Total I (Ci)			1.2905E-01

Time (h) = 0.0100	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0100	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.3141E+15	7.0156E+14
Organic I (atoms)	1.9528E+14	2.1698E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0100	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.3384E+11
Organic I (atoms)	0.0000E+00	7.2321E+09
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0117

EAB Doses:

Time (h) = 0.0117	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0117	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0117	Ci	kg	Atoms	Decay
I-131	2.0157E-02	1.6259E-10	7.4743E+14	1.2745E+10
I-132	2.9013E-02	2.8107E-12	1.2823E+13	1.8362E+10
I-133	4.1665E-02	3.6780E-11	1.6654E+14	2.6346E+10
I-134	4.5825E-02	1.7178E-12	7.7199E+12	2.9046E+10
I-135	3.8902E-02	1.1077E-11	4.9415E+13	2.4605E+10

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0117	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	9.5440E+14	0.0000E+00	
Organic I (atoms)	2.9518E+13	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.5791E-13
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.1332E-13
Total I (Ci)			1.7556E-01

Time (h) = 0.0117	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0117	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	8.5939E+15	9.5488E+14
Organic I (atoms)	2.6579E+14	2.9532E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0117	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.7130E+11
Organic I (atoms)	0.0000E+00	1.1484E+10
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0133

EAB Doses:

Time (h) = 0.0133	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0133	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0133	Ci	kg	Atoms	Decay
I-131	2.6326E-02	2.1235E-10	9.7617E+14	1.8590E+10
I-132	3.7873E-02	3.6691E-12	1.6739E+13	2.6773E+10
I-133	5.4413E-02	4.8034E-11	2.1749E+14	3.8429E+10
I-134	5.9770E-02	2.2405E-12	1.0069E+13	4.2327E+10
I-135	5.0800E-02	1.4465E-11	6.4527E+13	3.5886E+10

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0133	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.2464E+15	0.0000E+00	
Organic I (atoms)	3.8550E+13	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.2863E-13
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.3156E-13
Total I (Ci)			2.2918E-01

Time (h) = 0.0133	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0133	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1224E+16	1.2472E+15
Organic I (atoms)	3.4715E+14	3.8572E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0133	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.5421E+11
Organic I (atoms)	0.0000E+00	1.7140E+10
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0150

EAB Doses:

Time (h) = 0.0150	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0150	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0150	Ci	kg	Atoms	Decay
I-131	3.3316E-02	2.6874E-10	1.2354E+15	2.5988E+10
I-132	4.7906E-02	4.6411E-12	2.1174E+13	3.7413E+10
I-133	6.8859E-02	6.0786E-11	2.7523E+14	5.3719E+10
I-134	7.5543E-02	2.8318E-12	1.2726E+13	5.9112E+10
I-135	6.4278E-02	1.8303E-11	8.1648E+13	5.0160E+10

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0150	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.5774E+15	0.0000E+00	
Organic I (atoms)	4.8785E+13	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.2209E-13
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1788E-12
Total I (Ci)			2.8990E-01

Time (h) = 0.0150	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0150	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.4206E+16	1.5784E+15
Organic I (atoms)	4.3935E+14	4.8816E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0150	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.8904E+11
Organic I (atoms)	0.0000E+00	2.4403E+10
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0167

EAB Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0167	Ci	kg	Atoms	Decay
I-131	4.1129E-02	3.3175E-10	1.5251E+15	3.5121E+10
I-132	5.9111E-02	5.7266E-12	2.6126E+13	5.0542E+10
I-133	8.5001E-02	7.5036E-11	3.3976E+14	7.2593E+10
I-134	9.3135E-02	3.4912E-12	1.5690E+13	7.9805E+10
I-135	7.9338E-02	2.2591E-11	1.0078E+14	6.7778E+10

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0167	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.9472E+15	0.0000E+00
Organic I (atoms)	6.0223E+13	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00
Dose Effective (Ci/cc)	I-131 (Thyroid)	1.1383E-12
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	1.4552E-12
Total I (Ci)		3.5771E-01

Time (h) = 0.0167	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0167	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7537E+16	1.9486E+15
Organic I (atoms)	5.4239E+14	6.0265E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0167	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.0823E+12
Organic I (atoms)	0.0000E+00	3.3472E+10
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0167

EAB Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0167	Ci	kg	Atoms	Decay
I-131	4.1277E-02	3.3295E-10	1.5306E+15	3.5286E+10
I-132	5.9323E-02	5.7472E-12	2.6220E+13	5.0779E+10
I-133	8.5307E-02	7.5306E-11	3.4098E+14	7.2934E+10
I-134	9.3468E-02	3.5037E-12	1.5746E+13	8.0179E+10
I-135	7.9623E-02	2.2673E-11	1.0114E+14	6.8096E+10

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0167	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.9542E+15	0.0000E+00	
Organic I (atoms)	6.0440E+13	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.1424E-12
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.4604E-12
Total I (Ci)			3.5900E-01

Time (h) = 0.0167	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0167	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7600E+16	1.9556E+15
Organic I (atoms)	5.4434E+14	6.0483E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0167	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.0881E+12
Organic I (atoms)	0.0000E+00	3.3653E+10
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0250

EAB Doses:

Time (h) = 0.0250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0250	Ci	kg	Atoms	Decay
I-131	9.2474E-02	7.4591E-10	3.4290E+15	1.3752E+11
I-132	1.3258E-01	1.2844E-11	5.8596E+13	1.9753E+11
I-133	1.9107E-01	1.6867E-10	7.6372E+14	2.8420E+11
I-134	2.0804E-01	7.7985E-12	3.5047E+13	3.1093E+11
I-135	1.7823E-01	5.0752E-11	2.2640E+14	2.6523E+11

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0250	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	4.3774E+15	0.0000E+00	
Organic I (atoms)	1.3538E+14	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.5590E-12
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.2706E-12
Total I (Ci)			8.0239E-01

Time (h) = 0.0250	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0250	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.9440E+16	4.3822E+15
Organic I (atoms)	1.2198E+15	1.3553E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0250	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.6494E+12
Organic I (atoms)	0.0000E+00	1.1287E+11
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0500

EAB Doses:

Time (h) = 0.0500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0500	Ci	kg	Atoms	Decay
I-131	3.6956E-01	2.9809E-09	1.3703E+16	1.3682E+12
I-132	5.2588E-01	5.0947E-11	2.3243E+14	1.9553E+12
I-133	7.6301E-01	6.7355E-10	3.0498E+15	2.8261E+12
I-134	8.1518E-01	3.0558E-11	1.3733E+14	3.0525E+12
I-135	7.1047E-01	2.0231E-10	9.0246E+14	2.6342E+12

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0500	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.7485E+16	0.0000E+00	
Organic I (atoms)	5.4076E+14	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.0223E-11
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.3056E-11
Total I (Ci)			3.1841E+00

Time (h) = 0.0500	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0500	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.5773E+17	1.7525E+16
Organic I (atoms)	4.8782E+15	5.4202E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0500	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.9170E+13
Organic I (atoms)	0.0000E+00	9.0218E+11
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0583

EAB Doses:

Time (h) = 0.0583	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0583	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0583	Ci	kg	Atoms	Decay
I-131	5.0228E-01	4.0514E-09	1.8625E+16	1.9235E+12
I-132	7.1298E-01	6.9073E-11	3.1513E+14	2.7446E+12
I-133	1.0368E+00	9.1522E-10	4.1441E+15	3.9724E+12
I-134	1.1007E+00	4.1262E-11	1.8544E+14	4.2734E+12
I-135	9.6482E-01	2.7473E-10	1.2255E+15	3.7013E+12

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0583	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.3760E+16	0.0000E+00	
Organic I (atoms)	7.3485E+14	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.3893E-11
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.7739E-11
Total I (Ci)			4.3176E+00

Time (h) = 0.0583	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00

Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0583	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.1440E+17	2.3822E+16
Organic I (atoms)	6.6310E+15	7.3677E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0583	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.6222E+13
Organic I (atoms)	0.0000E+00	1.4296E+12
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.0750

EAB Doses:

Time (h) = 0.0750	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.0750	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.0750	Ci	kg	Atoms	Decay
I-131	8.3073E-01	6.7008E-09	3.0804E+16	3.7715E+12
I-132	1.1734E+00	1.1368E-10	5.1861E+14	5.3612E+12
I-133	1.7139E+00	1.5130E-09	6.8506E+15	7.7860E+12
I-134	1.7968E+00	6.7353E-11	3.0269E+14	8.2967E+12
I-135	1.5930E+00	4.5362E-10	2.0235E+15	7.2481E+12

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0750	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	3.9284E+16	0.0000E+00	
Organic I (atoms)	1.2150E+15	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.2972E-11
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.9318E-11
Total I (Ci)			7.1078E+00

Time (h) = 0.0750	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.0750	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.5473E+17	3.9414E+16
Organic I (atoms)	1.0971E+16	1.2190E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.0750	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00

Elemental I (atoms)	0.0000E+00	9.8337E+13
Organic I (atoms)	0.0000E+00	3.0414E+12
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.1000

EAB Doses:

Time (h) = 0.1000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.1000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.1000	Ci	kg	Atoms	Decay
I-131	1.4755E+00	1.1902E-08	5.4712E+16	8.6851E+12
I-132	2.0686E+00	2.0041E-10	9.1429E+14	1.2276E+13
I-133	3.0419E+00	2.6852E-09	1.2159E+16	1.7920E+13
I-134	3.1291E+00	1.1730E-10	5.2715E+14	1.8820E+13
I-135	2.8223E+00	8.0365E-10	3.5850E+15	1.6659E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	6.9740E+16	0.0000E+00	
Organic I (atoms)	2.1569E+15	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.0788E-11
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.2017E-11
Total I (Ci)			1.2537E+01

Time (h) = 0.1000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.3040E+17	7.0045E+16
Organic I (atoms)	1.9497E+16	2.1663E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.1000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.3286E+14
Organic I (atoms)	0.0000E+00	7.2019E+12
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.1250

EAB Doses:

Time (h) = 0.1250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.1250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.1250	Ci	kg	Atoms	Decay
I-131	2.3033E+00	1.8579E-08	8.5408E+16	1.6355E+13
I-132	3.2053E+00	3.1052E-10	1.4167E+15	2.2990E+13
I-133	4.7450E+00	4.1887E-09	1.8966E+16	3.3727E+13
I-134	4.7895E+00	1.7954E-10	8.0687E+14	3.4928E+13
I-135	4.3946E+00	1.2514E-09	5.5822E+15	3.1312E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1250	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.0881E+17	0.0000E+00	
Organic I (atoms)	3.3654E+15	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.3649E-11
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.1117E-11
Total I (Ci)			1.9438E+01

Time (h) = 0.1250	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1250	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	9.8464E+17	1.0940E+17
Organic I (atoms)	3.0453E+16	3.3836E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.1250	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.5433E+14
Organic I (atoms)	0.0000E+00	1.4051E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.1417

EAB Doses:

Time (h) = 0.1417	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.1417	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.1417	Ci	kg	Atoms	Decay
I-131	2.9581E+00	2.3860E-08	1.0969E+17	2.2936E+13
I-132	4.0960E+00	3.9681E-10	1.8104E+15	3.2124E+13
I-133	6.0908E+00	5.3767E-09	2.4345E+16	4.7279E+13
I-134	6.0707E+00	2.2756E-10	1.0227E+15	4.8521E+13
I-135	5.6343E+00	1.6044E-09	7.1568E+15	4.3856E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1417	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3970E+17	0.0000E+00
Organic I (atoms)	4.3206E+15	0.0000E+00

Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.1723E-11
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.0410E-10
Total I (Ci)			2.4850E+01

Time (h) = 0.1417	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1417	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.2650E+18	1.4055E+17
Organic I (atoms)	3.9122E+16	4.3469E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.1417	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.6135E+14
Organic I (atoms)	0.0000E+00	2.0454E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.1500

EAB Doses:

Time (h) = 0.1500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.1500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.1500	Ci	kg	Atoms	Decay
I-131	3.3137E+00	2.6729E-08	1.2287E+17	2.6599E+13
I-132	4.5771E+00	4.4343E-10	2.0230E+15	3.7190E+13
I-133	6.8214E+00	6.0217E-09	2.7266E+16	5.4822E+13
I-134	6.7563E+00	2.5327E-10	1.1382E+15	5.6015E+13
I-135	6.3065E+00	1.7958E-09	8.0106E+15	5.0831E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1500	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.5647E+17	0.0000E+00	
Organic I (atoms)	4.8394E+15	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.1538E-11
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1658E-10
Total I (Ci)			2.7775E+01

Time (h) = 0.1500	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1500	Pathway Filtered	Transported

Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.4173E+18	1.5748E+17
Organic I (atoms)	4.3833E+16	4.8704E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.1500	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.8421E+14
Organic I (atoms)	0.0000E+00	2.4254E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.1750

EAB Doses:

Time (h) = 0.1750	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.1750	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.1750	Ci	kg	Atoms	Decay
I-131	4.5062E+00	3.6348E-08	1.6709E+17	4.1606E+13
I-132	6.1781E+00	5.9853E-10	2.7306E+15	5.7841E+13
I-133	9.2692E+00	8.1825E-09	3.7050E+16	8.5701E+13
I-134	9.0086E+00	3.3769E-10	1.5176E+15	8.6312E+13
I-135	8.5542E+00	2.4358E-09	1.0866E+16	7.9354E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1750	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.1268E+17	0.0000E+00	
Organic I (atoms)	6.5777E+15	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.2443E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.5837E-10
Total I (Ci)			3.7516E+01

Time (h) = 0.1750	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1750	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.9284E+18	2.1426E+17
Organic I (atoms)	5.9640E+16	6.6267E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.1750	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.2440E+15
Organic I (atoms)	0.0000E+00	3.8474E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.1833

EAB Doses:

Time (h) = 0.1833	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.1833	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.1833	Ci	kg	Atoms	Decay
I-131	4.9422E+00	3.9865E-08	1.8326E+17	4.7070E+13
I-132	6.7592E+00	6.5482E-10	2.9875E+15	6.5323E+13
I-133	1.0164E+01	8.9721E-09	4.0625E+16	9.6939E+13
I-134	9.8160E+00	3.6796E-10	1.6537E+15	9.7200E+13
I-135	9.3741E+00	2.6693E-09	1.1907E+16	8.9722E+13

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1833	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.3322E+17	0.0000E+00	
Organic I (atoms)	7.2130E+15	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.3646E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.7363E-10
Total I (Ci)			4.1055E+01

Time (h) = 0.1833	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.1833	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.1153E+18	2.3503E+17
Organic I (atoms)	6.5422E+16	7.2691E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.1833	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.4290E+15
Organic I (atoms)	0.0000E+00	4.4196E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.2000

EAB Doses:

Time (h) = 0.2000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.2000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.2000	Ci	kg	Atoms	Decay
I-131	5.8802E+00	4.7431E-08	2.1804E+17	6.0150E+13

I-132	8.0021E+00	7.7523E-10	3.5368E+15	8.3168E+13
I-133	1.2087E+01	1.0670E-08	4.8311E+16	1.2383E+14
I-134	1.1526E+01	4.3208E-10	1.9418E+15	1.2301E+14
I-135	1.1134E+01	3.1705E-09	1.4143E+16	1.1451E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.7739E+17	0.0000E+00	
Organic I (atoms)	8.5792E+15	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.6232E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.0644E-10
Total I (Ci)			4.8630E+01

Time (h) = 0.2000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.5176E+18	2.7974E+17
Organic I (atoms)	7.7865E+16	8.6517E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.2000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.8549E+15
Organic I (atoms)	0.0000E+00	5.7369E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.2250

EAB Doses:

Time (h) = 0.2250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.2250	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.2250	Ci	kg	Atoms	Decay
I-131	7.4353E+00	5.9974E-08	2.7570E+17	8.4911E+13
I-132	1.0043E+01	9.7298E-10	4.4390E+15	1.1674E+14
I-133	1.5272E+01	1.3481E-08	6.1042E+16	1.7471E+14
I-134	1.4291E+01	5.3570E-10	2.4075E+15	1.7107E+14
I-135	1.4043E+01	3.9988E-09	1.7838E+16	1.6134E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2250	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	3.5059E+17	0.0000E+00	
Organic I (atoms)	1.0843E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.0518E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		2.6077E-10
Total I (Ci)			6.1084E+01

Deposition Recirculating

Time (h) = 0.2250	Surfaces	Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2250	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.1852E+18	3.5391E+17
Organic I (atoms)	9.8512E+16	1.0946E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.2250	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.6384E+15
Organic I (atoms)	0.0000E+00	8.1599E+13
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.2500

EAB Doses:

Time (h) = 0.2500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.2500	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.2500	Ci	kg	Atoms	Decay
I-131	9.1709E+00	7.3974E-08	3.4006E+17	1.1545E+14
I-132	1.2296E+01	1.1912E-09	5.4345E+15	1.5784E+14
I-133	1.8822E+01	1.6616E-08	7.5235E+16	2.3741E+14
I-134	1.7283E+01	6.4787E-10	2.9116E+15	2.2920E+14
I-135	1.7278E+01	4.9198E-09	2.1946E+16	2.1895E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2500	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	4.3222E+17	0.0000E+00	
Organic I (atoms)	1.3368E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.5298E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.2132E-10
Total I (Ci)			7.4850E+01

Time (h) = 0.2500	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2500	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.9309E+18	4.3677E+17
Organic I (atoms)	1.2157E+17	1.3508E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.2500	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.6154E+15
Organic I (atoms)	0.0000E+00	1.1182E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.2583

EAB Doses:

Time (h) = 0.2583	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.2583	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.2583	Ci	kg	Atoms	Decay
I-131	9.7869E+00	7.8943E-08	3.6290E+17	1.2627E+14
I-132	1.3089E+01	1.2681E-09	5.7853E+15	1.7233E+14
I-133	2.0082E+01	1.7728E-08	8.0269E+16	2.5962E+14
I-134	1.8324E+01	6.8689E-10	3.0870E+15	2.4952E+14
I-135	1.8423E+01	5.2458E-09	2.3401E+16	2.3932E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2583	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.6118E+17	0.0000E+00
Organic I (atoms)	1.4263E+16	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00
Dose Effective (Ci/cc)	I-131 (Thyroid)	2.6994E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	3.4279E-10
Total I (Ci)		7.9705E+01

Time (h) = 0.2583	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	0.0000E+00
Organic I (atoms)	0.0000E+00	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2583	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.1957E+18	4.6618E+17
Organic I (atoms)	1.2976E+17	1.4418E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.2583	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.9861E+15
Organic I (atoms)	0.0000E+00	1.2328E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.2667

EAB Doses:

Time (h) = 0.2667	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.2667	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.2667	Ci	kg	Atoms	Decay
I-131	1.0296E+01	8.3048E-08	3.8178E+17	1.3779E+14
I-132	1.3736E+01	1.3307E-09	6.0709E+15	1.8772E+14
I-133	2.1121E+01	1.8645E-08	8.4422E+16	2.8325E+14
I-134	1.9150E+01	7.1785E-10	3.2261E+15	2.7102E+14
I-135	1.9364E+01	5.5139E-09	2.4597E+16	2.6100E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2667	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	4.8509E+17	0.0000E+00	
Organic I (atoms)	1.5003E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		2.8395E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.6049E-10
Total I (Ci)			8.3666E+01

Time (h) = 0.2667	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.4184E+15
Organic I (atoms)	0.0000E+00	1.9851E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2667	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.4724E+18	4.9693E+17
Organic I (atoms)	1.3832E+17	1.5369E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.2667	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.1463E+14	4.0027E+15
Organic I (atoms)	9.7308E+12	1.2379E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.2967

EAB Doses:

Time (h) = 0.2967	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.2967	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.2967	Ci	kg	Atoms	Decay
I-131	1.2219E+01	9.8564E-08	4.5311E+17	1.8656E+14
I-132	1.6157E+01	1.5653E-09	7.1412E+15	2.5248E+14
I-133	2.5045E+01	2.2109E-08	1.0011E+17	3.8325E+14
I-134	2.2198E+01	8.3211E-10	3.7396E+15	3.6066E+14
I-135	2.2912E+01	6.5243E-09	2.9104E+16	3.5258E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2967	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	5.7540E+17	0.0000E+00	
Organic I (atoms)	1.7796E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.3686E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		4.2733E-10
Total I (Ci)			9.8532E+01

Time (h) = 0.2967	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.2052E+16
Organic I (atoms)	0.0000E+00	9.9129E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.2967	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.5312E+18	6.1458E+17
Organic I (atoms)	1.7107E+17	1.9008E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.2967	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.5712E+15	4.0688E+15
Organic I (atoms)	4.8593E+13	1.2584E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.3958

EAB Doses:

Time (h) = 0.3958	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.3958	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.3958	Ci	kg	Atoms	Decay
I-131	1.9703E+01	1.5893E-07	7.3060E+17	4.4679E+14
I-132	2.5294E+01	2.4505E-09	1.1180E+16	5.9155E+14
I-133	4.0264E+01	3.5543E-08	1.6094E+17	9.1583E+14
I-134	3.3106E+01	1.2410E-09	5.5772E+15	8.1543E+14
I-135	3.6576E+01	1.0415E-08	4.6459E+16	8.3810E+14

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.3958	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	9.2611E+17	0.0000E+00	
Organic I (atoms)	2.8643E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.4242E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.8638E-10
Total I (Ci)			1.5494E+02

Time (h) = 0.3958	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.5135E+17
Organic I (atoms)	0.0000E+00	4.6810E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.3958	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	9.8351E+18	1.0928E+18
Organic I (atoms)	3.0418E+17	3.3798E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.3958	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.4193E+15	4.3766E+15
Organic I (atoms)	2.2946E+14	1.3536E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.4450

EAB Doses:

Time (h) = 0.4450	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.4450	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.4450	Ci	kg	Atoms	Decay
I-131	2.3992E+01	1.9352E-07	8.8963E+17	6.0400E+14
I-132	3.0352E+01	2.9405E-09	1.3415E+16	7.9190E+14
I-133	4.8957E+01	4.3217E-08	1.9568E+17	1.2369E+15
I-134	3.8781E+01	1.4537E-09	6.5333E+15	1.0745E+15
I-135	4.4316E+01	1.2619E-08	5.6291E+16	1.1292E+15

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.4450	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.1267E+18	0.0000E+00	
Organic I (atoms)	3.4847E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.6005E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.3422E-10
Total I (Ci)			1.8640E+02

Time (h) = 0.4450	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.3283E+17
Organic I (atoms)	0.0000E+00	7.2009E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.4450	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.2422E+19	1.3803E+18
Organic I (atoms)	3.8420E+17	4.2688E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.4450	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1413E+16	4.5868E+15
Organic I (atoms)	3.5298E+14	1.4186E+14

Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.5000

EAB Doses:

Time (h) = 0.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.5000	Ci	kg	Atoms	Decay
I-131	2.9190E+01	2.3545E-07	1.0824E+18	8.1791E+14
I-132	3.6329E+01	3.5195E-09	1.6057E+16	1.0603E+15
I-133	5.9467E+01	5.2495E-08	2.3770E+17	1.6730E+15
I-134	4.5185E+01	1.6938E-09	7.6122E+15	1.4129E+15
I-135	5.3619E+01	1.5268E-08	6.8108E+16	1.5232E+15

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.5000	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3695E+18	0.0000E+00
Organic I (atoms)	4.2356E+16	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00
Dose Effective (Ci/cc)	I-131 (Thyroid)	8.0248E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	1.0129E-09
Total I (Ci)		2.2379E+02

Time (h) = 0.5000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.4364E+17
Organic I (atoms)	0.0000E+00	1.0628E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.5000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.5671E+19	1.7412E+18
Organic I (atoms)	4.8466E+17	5.3851E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.5000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.6845E+16	4.8727E+15
Organic I (atoms)	5.2098E+14	1.5070E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.5933

EAB Doses:

Time (h) = 0.5933	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.5933	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.5933	Ci	kg	Atoms	Decay
I-131	3.9692E+01	3.2016E-07	1.4718E+18	1.3114E+15
I-132	4.8045E+01	4.6546E-09	2.1235E+16	1.6660E+15
I-133	8.0637E+01	7.1184E-08	3.2231E+17	2.6769E+15
I-134	5.7090E+01	2.1401E-09	9.6177E+15	2.1494E+15
I-135	7.2223E+01	2.0565E-08	9.1739E+16	2.4254E+15

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.5933	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.8592E+18	0.0000E+00	
Organic I (atoms)	5.7501E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.0898E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.3726E-09
Total I (Ci)			2.9769E+02

Time (h) = 0.5933	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.8563E+17
Organic I (atoms)	0.0000E+00	1.8112E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 0.5933	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.2401E+19	2.4890E+18
Organic I (atoms)	6.9283E+17	7.6981E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.5933	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.8707E+16	5.4970E+15
Organic I (atoms)	8.8785E+14	1.7001E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 0.7416

EAB Doses:

Time (h) = 0.7416	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 0.7416	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 0.7416	Ci	kg	Atoms	Decay
I-131	6.1214E+01	4.9376E-07	2.2698E+18	2.4198E+15
I-132	7.0895E+01	6.8682E-09	3.1334E+16	2.9777E+15
I-133	1.2381E+02	1.0930E-07	4.9489E+17	4.9237E+15
I-134	7.8344E+01	2.9368E-09	1.3198E+16	3.6516E+15
I-135	1.0972E+02	3.1244E-08	1.3937E+17	4.4268E+15

Reactor Enclosure Transport Group Inventory:

Time (h) = 0.7416	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.8602E+18	0.0000E+00	
Organic I (atoms)	8.8459E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.6774E-09

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Dose Effective (Ci/cc) I-131 (ICRP2 Thyroid)   2.1057E-09
Total I (Ci)                                   4.4399E+02

                        Deposition Recirculating
Time (h) =    0.7416     Surfaces     Filter
Noble gases (atoms)     0.0000E+00  0.0000E+00
Elemental I (atoms)     0.0000E+00  1.1464E+18
Organic I (atoms)       0.0000E+00  3.5456E+16
Aerosols (kg)           0.0000E+00  0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

                         Pathway
Time (h) =    0.7416     Filtered   Transported
Noble gases (atoms)     0.0000E+00  0.0000E+00
Elemental I (atoms)     3.6789E+19  4.0877E+18
Organic I (atoms)       1.1378E+18  1.2642E+17
Aerosols (kg)           0.0000E+00  0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

                         Pathway
Time (h) =    0.7416     Filtered   Transported
Noble gases (atoms)     0.0000E+00  0.0000E+00
Elemental I (atoms)     5.6196E+16  6.9438E+15
Organic I (atoms)       1.7380E+15  2.1476E+14
Aerosols (kg)           0.0000E+00  0.0000E+00

Detailed model information at time (H) =    0.8900

EAB Doses:

Time (h) =    0.8900    Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   0.0000E+00  0.0000E+00  0.0000E+00

LPZ Doses:

Time (h) =    0.8900    Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   0.0000E+00  0.0000E+00  0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) =    0.8900       Ci           kg          Atoms       Decay
I-131                   8.7487E+01  7.0568E-07  3.2441E+18  4.0285E+15
I-132                   9.6944E+01  9.3919E-09  4.2848E+16  4.7993E+15
I-133                   1.7617E+02  1.5552E-07  7.0418E+17  8.1702E+15
I-134                   9.9631E+01  3.7347E-09  1.6784E+16  5.5921E+15
I-135                   1.5448E+02  4.3988E-08  1.9622E+17  7.2883E+15

Reactor Enclosure Transport Group Inventory:
Time (h) =    0.8900    Atmosphere     Sump
Noble gases (atoms)     0.0000E+00  0.0000E+00
Elemental I (atoms)     4.0780E+18  0.0000E+00
Organic I (atoms)       1.2612E+17  0.0000E+00
Aerosols (kg)           0.0000E+00  0.0000E+00
Dose Effective (Ci/cc) I-131 (Thyroid)         2.3928E-09
Dose Effective (Ci/cc) I-131 (ICRP2 Thyroid)   2.9944E-09
Total I (Ci)                                   6.1471E+02

                        Deposition Recirculating
Time (h) =    0.8900     Surfaces     Filter
Noble gases (atoms)     0.0000E+00  0.0000E+00
Elemental I (atoms)     0.0000E+00  1.9743E+18
Organic I (atoms)       0.0000E+00  6.1061E+16
Aerosols (kg)           0.0000E+00  0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

                         Pathway
Time (h) =    0.8900     Filtered   Transported
Noble gases (atoms)     0.0000E+00  0.0000E+00
Elemental I (atoms)     5.5686E+19  6.1873E+18
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Organic I (atoms)	1.7222E+18	1.9136E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 0.8900	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	9.6780E+16	9.0798E+15
Organic I (atoms)	2.9932E+15	2.8082E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 1.0383

EAB Doses:

Time (h) = 1.0383	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.0383	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.0383	Ci	kg	Atoms	Decay
I-131	1.1744E+02	9.4729E-07	4.3547E+18	6.2145E+15
I-132	1.2451E+02	1.2063E-08	5.5033E+16	7.1678E+15
I-133	2.3545E+02	2.0785E-07	9.4112E+17	1.2562E+16
I-134	1.1901E+02	4.4610E-09	2.0048E+16	7.9390E+15
I-135	2.0428E+02	5.8167E-08	2.5948E+17	1.1119E+16

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.0383	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	5.4615E+18	0.0000E+00	
Organic I (atoms)	1.6891E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.2059E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		4.0001E-09
Total I (Ci)			8.0069E+02

Time (h) = 1.0383	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.1149E+18
Organic I (atoms)	0.0000E+00	9.6338E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 1.0383	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.9065E+19	8.7850E+18
Organic I (atoms)	2.4453E+18	2.7170E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.0383	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.5269E+17	1.2023E+16
Organic I (atoms)	4.7225E+15	3.7183E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 1.1866

EAB Doses:

Time (h) = 1.1866	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.1866	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.1866	Ci	kg	Atoms	Decay
I-131	1.5024E+02	1.2119E-06	5.5711E+18	9.0374E+15
I-132	1.5241E+02	1.4765E-08	6.7362E+16	1.0095E+16
I-133	2.9989E+02	2.6473E-07	1.1987E+18	1.8209E+16
I-134	1.3547E+02	5.0782E-09	2.2822E+16	1.0636E+16
I-135	2.5744E+02	7.3305E-08	3.2700E+17	1.5992E+16

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.1866	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	6.9713E+18	0.0000E+00	
Organic I (atoms)	2.1561E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.0937E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.0936E-09
Total I (Ci)			9.9545E+02

Time (h) = 1.1866	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.6031E+18
Organic I (atoms)	0.0000E+00	1.4236E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 1.1866	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0690E+20	1.1878E+19
Organic I (atoms)	3.3063E+18	3.6737E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.1866	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.2564E+17	1.5862E+16
Organic I (atoms)	6.9786E+15	4.9058E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 1.3350

EAB Doses:

Time (h) = 1.3350	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.3350	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.3350	Ci	kg	Atoms	Decay
I-131	1.8525E+02	1.4942E-06	6.8691E+18	1.2543E+16
I-132	1.7980E+02	1.7419E-08	7.9468E+16	1.3572E+16
I-133	3.6814E+02	3.2498E-07	1.4715E+18	2.5191E+16

I-134	1.4863E+02	5.5714E-09	2.5039E+16	1.3617E+16
I-135	3.1268E+02	8.9036E-08	3.9718E+17	2.1953E+16

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.3350	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	8.5769E+18	0.0000E+00	
Organic I (atoms)	2.6527E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.0382E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.2522E-09
Total I (Ci)			1.1945E+03

Time (h) = 1.3350	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.4651E+18
Organic I (atoms)	0.0000E+00	1.9995E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 1.3350	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.3918E+20	1.5464E+19
Organic I (atoms)	4.3045E+18	4.7827E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.3350	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.1692E+17	2.0666E+16
Organic I (atoms)	9.8016E+15	6.3916E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 1.4833

EAB Doses:

Time (h) = 1.4833	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.4833	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.4833	Ci	kg	Atoms	Decay
I-131	2.2195E+02	1.7903E-06	8.2301E+18	1.6768E+16
I-132	2.0612E+02	1.9968E-08	9.1100E+16	1.7582E+16
I-133	4.3914E+02	3.8765E-07	1.7553E+18	3.3568E+16
I-134	1.5845E+02	5.9398E-09	2.6694E+16	1.6814E+16
I-135	3.6905E+02	1.0509E-07	4.6878E+17	2.9030E+16

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.4833	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.0255E+19	0.0000E+00	
Organic I (atoms)	3.1716E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.0254E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.4586E-09
Total I (Ci)			1.3947E+03

Time (h) = 1.4833	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00

Elemental I (atoms)	0.0000E+00	8.7212E+18
Organic I (atoms)	0.0000E+00	2.6973E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 1.4833	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7587E+20	1.9541E+19
Organic I (atoms)	5.4391E+18	6.0435E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.4833	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.2751E+17	2.6487E+16
Organic I (atoms)	1.3222E+16	8.1917E+14
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 1.6316

EAB Doses:

Time (h) = 1.6316	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.6316	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.6316	Ci	kg	Atoms	Decay
I-131	2.5997E+02	2.0969E-06	9.6398E+18	2.1738E+16
I-132	2.3099E+02	2.2378E-08	1.0209E+17	2.2097E+16
I-133	5.1209E+02	4.5205E-07	2.0469E+18	4.3380E+16
I-134	1.6514E+02	6.1906E-09	2.7821E+16	2.0161E+16
I-135	4.2582E+02	1.2125E-07	5.4089E+17	3.7232E+16

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.6316	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.1987E+19	0.0000E+00	
Organic I (atoms)	3.7072E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.0448E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.6995E-09
Total I (Ci)			1.5940E+03

Time (h) = 1.6316	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.1386E+19
Organic I (atoms)	0.0000E+00	3.5215E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 1.6316	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.1694E+20	2.4105E+19
Organic I (atoms)	6.7096E+18	7.4551E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Pathway

Time (h) = 1.6316	Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.5815E+17	3.3362E+16
Organic I (atoms)	1.7262E+16	1.0318E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 1.7800

EAB Doses:

Time (h) = 1.7800	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.7800	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.7800	Ci	kg	Atoms	Decay
I-131	2.9899E+02	2.4117E-06	1.1087E+19	2.7476E+16
I-132	2.5418E+02	2.4625E-08	1.1235E+17	2.7083E+16
I-133	5.8637E+02	5.1762E-07	2.3438E+18	5.4657E+16
I-134	1.6900E+02	6.3353E-09	2.8472E+16	2.3599E+16
I-135	4.8244E+02	1.3737E-07	6.1280E+17	4.6559E+16

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.7800	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.3759E+19	0.0000E+00	
Organic I (atoms)	4.2553E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.0880E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.9647E-09
Total I (Ci)			1.7910E+03

Time (h) = 1.7800	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.4471E+19
Organic I (atoms)	0.0000E+00	4.4757E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 1.7800	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.6240E+20	2.9155E+19
Organic I (atoms)	8.1153E+18	9.0170E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.7800	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.0938E+17	4.1322E+16
Organic I (atoms)	2.1940E+16	1.2780E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 1.9283

EAB Doses:

Time (h) = 1.9283	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 1.9283	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 1.9283	Ci	kg	Atoms	Decay
I-131	3.3879E+02	2.7327E-06	1.2562E+19	3.3997E+16
I-132	2.7557E+02	2.6697E-08	1.2180E+17	3.2504E+16
I-133	6.6149E+02	5.8394E-07	2.6440E+18	6.7417E+16
I-134	1.7040E+02	6.3875E-09	2.8706E+16	2.7076E+16
I-135	5.3850E+02	1.5334E-07	6.8402E+17	5.7002E+16

Reactor Enclosure Transport Group Inventory:

Time (h) = 1.9283	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.5560E+19	0.0000E+00	
Organic I (atoms)	4.8123E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.1484E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1247E-08
Total I (Ci)			1.9847E+03

Time (h) = 1.9283	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.7985E+19
Organic I (atoms)	0.0000E+00	5.5624E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 1.9283	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.1220E+20	3.4688E+19
Organic I (atoms)	9.6556E+18	1.0728E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 1.9283	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	8.8162E+17	5.0387E+16
Organic I (atoms)	2.7267E+16	1.5584E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 2.0000

EAB Doses:

Time (h) = 2.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 2.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 2.0000	Ci	kg	Atoms	Decay
I-131	3.5825E+02	2.8897E-06	1.3284E+19	3.7419E+16
I-132	2.8524E+02	2.7634E-08	1.2607E+17	3.5259E+16
I-133	6.9800E+02	6.1617E-07	2.7899E+18	7.4092E+16
I-134	1.7030E+02	6.3838E-09	2.8689E+16	2.8750E+16
I-135	5.6531E+02	1.6097E-07	7.1807E+17	6.2422E+16

Reactor Enclosure Transport Group Inventory:

Time (h) = 2.0000	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00

Elemental I (atoms)	1.6438E+19	0.0000E+00	
Organic I (atoms)	5.0841E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.6658E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1870E-08
Total I (Ci)			2.0771E+03

Time (h) = 2.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.9839E+19
Organic I (atoms)	0.0000E+00	6.1357E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 2.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.3782E+20	3.7536E+19
Organic I (atoms)	1.0448E+19	1.1609E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 2.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	9.7250E+17	5.5170E+16
Organic I (atoms)	3.0077E+16	1.7063E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 3.0000

EAB Doses:

Time (h) = 3.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 3.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 3.0000	Ci	kg	Atoms	Decay
I-131	4.8800E+02	3.9363E-06	1.8095E+19	9.7006E+16
I-132	2.8849E+02	2.7948E-08	1.2751E+17	7.6034E+16
I-133	9.2294E+02	8.1474E-07	3.6891E+18	1.8841E+17
I-134	1.0559E+02	3.9581E-09	1.7788E+16	4.8031E+16
I-135	6.9589E+02	1.9815E-07	8.8393E+17	1.5165E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 3.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.2129E+19	0.0000E+00	
Organic I (atoms)	6.8441E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.3019E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.5789E-08
Total I (Ci)			2.5009E+03

Time (h) = 3.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.2336E+19
Organic I (atoms)	0.0000E+00	1.6187E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 3.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.9943E+20	7.7714E+19
Organic I (atoms)	2.1632E+19	2.4035E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 3.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.5655E+18	1.3901E+17
Organic I (atoms)	7.9346E+16	4.2994E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 4.0000

EAB Doses:

Time (h) = 4.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 4.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 4.0000	Ci	kg	Atoms	Decay
I-131	5.1001E+02	4.1138E-06	1.8911E+19	1.6406E+17
I-132	2.2385E+02	2.1687E-08	9.8939E+16	1.1028E+17
I-133	9.3631E+02	8.2654E-07	3.7425E+18	3.1335E+17
I-134	5.0230E+01	1.8829E-09	8.4620E+15	5.8049E+16
I-135	6.5723E+02	1.8715E-07	8.3483E+17	2.4256E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 4.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.2888E+19	0.0000E+00	
Organic I (atoms)	7.0788E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.3464E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.6164E-08
Total I (Ci)			2.3776E+03

Time (h) = 4.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	8.8950E+19
Organic I (atoms)	0.0000E+00	2.7510E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 4.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0556E+21	1.1729E+20
Organic I (atoms)	3.2649E+19	3.6276E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 4.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.3603E+18	2.3347E+17
Organic I (atoms)	1.3485E+17	7.2209E+15
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 5.0000

EAB Doses:

Time (h) = 5.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 5.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 5.0000	Ci	kg	Atoms	Decay
I-131	5.1238E+02	4.1329E-06	1.8999E+19	2.3226E+17
I-132	1.6698E+02	1.6177E-08	7.3801E+16	1.3617E+17
I-133	9.1311E+02	8.0606E-07	3.6498E+18	4.3671E+17
I-134	2.2970E+01	8.6104E-10	3.8696E+15	6.2698E+16
I-135	5.9669E+02	1.6991E-07	7.5793E+17	3.2614E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 5.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.2780E+19	0.0000E+00	
Organic I (atoms)	7.0454E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.3393E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.5941E-08
Total I (Ci)			2.2121E+03

Time (h) = 5.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.2589E+20
Organic I (atoms)	0.0000E+00	3.8935E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 5.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.4070E+21	1.5633E+20
Organic I (atoms)	4.3514E+19	4.8349E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 5.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.1711E+18	3.2878E+17
Organic I (atoms)	1.9086E+17	1.0169E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 6.0000

EAB Doses:

Time (h) = 6.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 6.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 6.0000	Ci	kg	Atoms	Decay
I-131	5.1118E+02	4.1232E-06	1.8955E+19	3.0044E+17
I-132	1.2368E+02	1.1982E-08	5.4666E+16	1.5539E+17
I-133	8.8428E+02	7.8061E-07	3.5345E+18	5.5644E+17
I-134	1.0431E+01	3.9101E-10	1.7572E+15	6.4814E+16
I-135	5.3796E+02	1.5318E-07	6.8333E+17	4.0166E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 6.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.2532E+19	0.0000E+00	
Organic I (atoms)	6.9687E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.3237E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.5635E-08
Total I (Ci)			2.0675E+03

Time (h) = 6.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.6251E+20
Organic I (atoms)	0.0000E+00	5.0260E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 6.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7538E+21	1.9486E+20
Organic I (atoms)	5.4240E+19	6.0267E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 6.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.9661E+18	4.2325E+17
Organic I (atoms)	2.4637E+17	1.3090E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 7.0000

EAB Doses:

Time (h) = 7.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 7.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 7.0000	Ci	kg	Atoms	Decay
I-131	5.0933E+02	4.1083E-06	1.8886E+19	3.6841E+17
I-132	9.1499E+01	8.8644E-09	4.0441E+16	1.6961E+17
I-133	8.5528E+02	7.5501E-07	3.4186E+18	6.7228E+17
I-134	4.7307E+00	1.7733E-10	7.9696E+14	6.5774E+16
I-135	4.8439E+02	1.3793E-07	6.1529E+17	4.6969E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 7.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.2273E+19	0.0000E+00	
Organic I (atoms)	6.8884E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.3072E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.5335E-08
Total I (Ci)			1.9452E+03

Time (h) = 7.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.9871E+20
Organic I (atoms)	0.0000E+00	6.1456E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 7.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.0964E+21	2.3293E+20
Organic I (atoms)	6.4837E+19	7.2041E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 7.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	9.7406E+18	5.1665E+17
Organic I (atoms)	3.0126E+17	1.5979E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 8.0000

EAB Doses:

Time (h) = 8.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 8.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 8.0000	Ci	kg	Atoms	Decay
I-131	5.0737E+02	4.0925E-06	1.8814E+19	4.3613E+17
I-132	6.7674E+01	6.5562E-09	2.9911E+16	1.8013E+17
I-133	8.2703E+02	7.3007E-07	3.3057E+18	7.8431E+17
I-134	2.1450E+00	8.0408E-11	3.6136E+14	6.6210E+16
I-135	4.3606E+02	1.2417E-07	5.5389E+17	5.3094E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 8.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.2022E+19	0.0000E+00	
Organic I (atoms)	6.8110E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.2911E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.5052E-08
Total I (Ci)			1.8403E+03

Time (h) = 8.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.3449E+20
Organic I (atoms)	0.0000E+00	7.2524E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 8.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.4350E+21	2.7056E+20
Organic I (atoms)	7.5310E+19	8.3678E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 8.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1495E+19	6.0898E+17
Organic I (atoms)	3.5551E+17	1.8834E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 10.0000

EAB Doses:

Time (h) = 10.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 10.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 10.0000	Ci	kg	Atoms	Decay
I-131	5.0343E+02	4.0608E-06	1.8667E+19	5.7076E+17
I-132	3.7016E+01	3.5861E-09	1.6361E+16	1.9367E+17
I-133	7.7323E+02	6.8258E-07	3.0907E+18	9.9739E+17
I-134	4.4096E-01	1.6530E-11	7.4288E+13	6.6497E+16
I-135	3.5334E+02	1.0061E-07	4.4882E+17	6.3570E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 10.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.1557E+19	0.0000E+00	
Organic I (atoms)	6.6670E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.2607E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.4535E-08
Total I (Ci)			1.6675E+03

Time (h) = 10.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.0490E+20
Organic I (atoms)	0.0000E+00	9.4299E+18
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 10.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.1012E+21	3.4458E+20
Organic I (atoms)	9.5915E+19	1.0657E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 10.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.4946E+19	7.9062E+17
Organic I (atoms)	4.6225E+17	2.4452E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 12.0000

EAB Doses:

Time (h) = 12.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 12.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 12.0000	Ci	kg	Atoms	Decay
I-131	4.9952E+02	4.0292E-06	1.8522E+19	7.0435E+17
I-132	2.0247E+01	1.9615E-09	8.9487E+15	2.0108E+17
I-133	7.2292E+02	6.3817E-07	2.8896E+18	1.1966E+18
I-134	9.0651E-02	3.3981E-12	1.5272E+13	6.6556E+16
I-135	2.8631E+02	8.1527E-08	3.6368E+17	7.2058E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 12.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.1131E+19	0.0000E+00	
Organic I (atoms)	6.5354E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.2326E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.4073E-08
Total I (Ci)			1.5291E+03

Time (h) = 12.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.7386E+20
Organic I (atoms)	0.0000E+00	1.1563E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 12.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.7538E+21	4.1709E+20
Organic I (atoms)	1.1610E+20	1.2900E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 12.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.8327E+19	9.6855E+17
Organic I (atoms)	5.6680E+17	2.9955E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 14.0000

EAB Doses:

Time (h) = 14.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 14.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 14.0000	Ci	kg	Atoms	Decay
I-131	4.9563E+02	3.9978E-06	1.8378E+19	8.3689E+17
I-132	1.1074E+01	1.0729E-09	4.8947E+15	2.0512E+17
I-133	6.7589E+02	5.9665E-07	2.7016E+18	1.3828E+18
I-134	1.8635E-02	6.9857E-13	3.1394E+12	6.6568E+16
I-135	2.3200E+02	6.6061E-08	2.9469E+17	7.8936E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 14.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.0738E+19	0.0000E+00	
Organic I (atoms)	6.4138E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.2064E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.3655E-08
Total I (Ci)			1.4146E+03

Time (h) = 14.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.4166E+20
Organic I (atoms)	0.0000E+00	1.3660E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 14.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.3954E+21	4.8837E+20
Organic I (atoms)	1.3594E+20	1.5104E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 14.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.1650E+19	1.1435E+18
Organic I (atoms)	6.6959E+17	3.5365E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 16.0000

EAB Doses:

Time (h) = 16.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 16.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 16.0000	Ci	kg	Atoms	Decay
I-131	4.9177E+02	3.9667E-06	1.8235E+19	9.6837E+17
I-132	6.0573E+00	5.8683E-10	2.6772E+15	2.0734E+17
I-133	6.3192E+02	5.5783E-07	2.5258E+18	1.5569E+18
I-134	3.8310E-03	1.4361E-13	6.4539E+11	6.6570E+16
I-135	1.8799E+02	5.3529E-08	2.3879E+17	8.4508E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 16.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.0372E+19	0.0000E+00	
Organic I (atoms)	6.3008E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.1819E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.3273E-08
Total I (Ci)			1.3177E+03

Time (h) = 16.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.0862E+20
Organic I (atoms)	0.0000E+00	1.5731E+19

Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 16.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.0290E+21	5.5878E+20
Organic I (atoms)	1.5554E+20	1.7282E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 16.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.4932E+19	1.3162E+18
Organic I (atoms)	7.7111E+17	4.0708E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 18.0000

EAB Doses:

Time (h) = 18.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 18.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 18.0000	Ci	kg	Atoms	Decay
I-131	4.8795E+02	3.9359E-06	1.8093E+19	1.0988E+18
I-132	3.3132E+00	3.2098E-10	1.4644E+15	2.0855E+17
I-133	5.9080E+02	5.2154E-07	2.3615E+18	1.7197E+18
I-134	7.8755E-04	2.9522E-14	1.3268E+11	6.6571E+16
I-135	1.5233E+02	4.3375E-08	1.9349E+17	8.9023E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 18.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.0030E+19	0.0000E+00	
Organic I (atoms)	6.1949E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.1589E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.2923E-08
Total I (Ci)			1.2344E+03

Time (h) = 18.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.7440E+20
Organic I (atoms)	0.0000E+00	1.7765E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 18.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.6515E+21	6.2794E+20
Organic I (atoms)	1.7479E+20	1.9421E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 18.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00

Elemental I (atoms)	2.8157E+19	1.4859E+18
Organic I (atoms)	8.7084E+17	4.5957E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 20.0000

EAB Doses:

Time (h) = 20.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 20.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 20.0000	Ci	kg	Atoms	Decay
I-131	4.8415E+02	3.9053E-06	1.7953E+19	1.2283E+18
I-132	1.8122E+00	1.7556E-10	8.0097E+14	2.0921E+17
I-133	5.5237E+02	4.8761E-07	2.2078E+18	1.8718E+18
I-134	1.6190E-04	6.0689E-15	2.7275E+10	6.6571E+16
I-135	1.2343E+02	3.5146E-08	1.5678E+17	9.2681E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 20.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.9709E+19	0.0000E+00	
Organic I (atoms)	6.0954E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.1373E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.2598E-08
Total I (Ci)			1.1618E+03

Time (h) = 20.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.3908E+20
Organic I (atoms)	0.0000E+00	1.9765E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 20.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.2635E+21	6.9594E+20
Organic I (atoms)	1.9372E+20	2.1524E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 20.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.1328E+19	1.6528E+18
Organic I (atoms)	9.6889E+17	5.1118E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 22.0000

EAB Doses:

Time (h) = 22.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 22.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 22.0000	Ci	kg	Atoms	Decay
I-131	4.8039E+02	3.8749E-06	1.7813E+19	1.3567E+18
I-132	9.9122E-01	9.6029E-11	4.3810E+14	2.0958E+17
I-133	5.1643E+02	4.5588E-07	2.0642E+18	2.0141E+18
I-134	3.3282E-05	1.2476E-15	5.6069E+09	6.6571E+16
I-135	1.0001E+02	2.8479E-08	1.2704E+17	9.5646E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 22.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.9405E+19	0.0000E+00	
Organic I (atoms)	6.0014E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.1168E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.2297E-08
Total I (Ci)			1.0978E+03

Time (h) = 22.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.0272E+20
Organic I (atoms)	0.0000E+00	2.1734E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 22.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.8657E+21	7.6285E+20
Organic I (atoms)	2.1234E+20	2.3593E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 22.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.4447E+19	1.8170E+18
Organic I (atoms)	1.0654E+18	5.6196E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 24.0000

EAB Doses:

Time (h) = 24.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 24.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 24.0000	Ci	kg	Atoms	Decay
I-131	4.7665E+02	3.8447E-06	1.7674E+19	1.4841E+18
I-132	5.4217E-01	5.2525E-11	2.3963E+14	2.0977E+17
I-133	4.8283E+02	4.2622E-07	1.9299E+18	2.1471E+18
I-134	6.8420E-06	2.5648E-16	1.1526E+09	6.6571E+16
I-135	8.1042E+01	2.3077E-08	1.0294E+17	9.8048E+17

Reactor Enclosure Transport Group Inventory:

Time (h) = 24.0000	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.9116E+19	0.0000E+00
Organic I (atoms)	5.9123E+17	0.0000E+00

Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.0974E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.2016E-08
Total I (Ci)			1.0411E+03

Time (h) = 24.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.6538E+20
Organic I (atoms)	0.0000E+00	2.3671E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 24.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.4586E+21	8.2873E+20
Organic I (atoms)	2.3068E+20	2.5631E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 24.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.7519E+19	1.9786E+18
Organic I (atoms)	1.1604E+18	6.1195E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 32.0000

EAB Doses:

Time (h) = 32.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 32.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 32.0000	Ci	kg	Atoms	Decay
I-131	4.6199E+02	3.7265E-06	1.7131E+19	1.9839E+18
I-132	4.8527E-02	4.7013E-12	2.1448E+13	2.0999E+17
I-133	3.6891E+02	3.2566E-07	1.4746E+18	2.5979E+18
I-134	1.2219E-08	4.5806E-19	2.0586E+06	6.6571E+16
I-135	3.4937E+01	9.9484E-09	4.4378E+16	1.0388E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 32.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.8090E+19	0.0000E+00	
Organic I (atoms)	5.5949E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.0288E-08
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.1056E-08
Total I (Ci)			8.6589E+02

Time (h) = 32.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.0087E+21
Organic I (atoms)	0.0000E+00	3.1198E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 32.0000	Pathway Filtered	Transported

Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	9.7615E+21	1.0846E+21
Organic I (atoms)	3.0190E+20	3.3545E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

	Pathway	
Time (h) = 32.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.9448E+19	2.6065E+18
Organic I (atoms)	1.5293E+18	8.0614E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 40.0000

EAB Doses:

Time (h) = 40.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 40.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 40.0000	Ci	kg	Atoms	Decay
I-131	4.4778E+02	3.6119E-06	1.6604E+19	2.4683E+18
I-132	4.3435E-03	4.2079E-13	1.9198E+12	2.1001E+17
I-133	2.8188E+02	2.4883E-07	1.1267E+18	2.9423E+18
I-135	1.5062E+01	4.2888E-09	1.9132E+16	1.0640E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 40.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.7217E+19	0.0000E+00	
Organic I (atoms)	5.3249E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.7141E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.0288E-08
Total I (Ci)			7.4472E+02

	Deposition	Recirculating
Time (h) = 40.0000	Surfaces	Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.2394E+21
Organic I (atoms)	0.0000E+00	3.8332E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

	Pathway	
Time (h) = 40.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1944E+22	1.3271E+21
Organic I (atoms)	3.6941E+20	4.1045E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

	Pathway	
Time (h) = 40.0000	Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.0755E+19	3.2016E+18
Organic I (atoms)	1.8790E+18	9.9020E+16
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 48.0000

EAB Doses:

Time (h) = 48.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 48.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 48.0000	Ci	kg	Atoms	Decay
I-131	4.3401E+02	3.5008E-06	1.6093E+19	2.9378E+18
I-132	3.8877E-04	3.7664E-14	1.7183E+11	2.1001E+17
I-133	2.1537E+02	1.9012E-07	8.6087E+17	3.2055E+18
I-135	6.4931E+00	1.8489E-09	8.2477E+15	1.0748E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 48.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.6454E+19	0.0000E+00	
Organic I (atoms)	5.0887E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		9.2219E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.6551E-09
Total I (Ci)			6.5588E+02

Time (h) = 48.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.4592E+21
Organic I (atoms)	0.0000E+00	4.5129E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 48.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.4024E+22	1.5582E+21
Organic I (atoms)	4.3372E+20	4.8192E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 48.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.1528E+19	3.7686E+18
Organic I (atoms)	2.2122E+18	1.1656E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 56.0000

EAB Doses:

Time (h) = 56.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 56.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 56.0000	Ci	kg	Atoms	Decay
I-131	4.2066E+02	3.3931E-06	1.5598E+19	3.3928E+18
I-132	3.4797E-05	3.3711E-15	1.5380E+10	2.1001E+17
I-133	1.6456E+02	1.4527E-07	6.5776E+17	3.4066E+18

I-135	2.7992E+00	7.9707E-10	3.5556E+15	1.0795E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 56.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.5772E+19	0.0000E+00	
Organic I (atoms)	4.8779E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.7920E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		9.1207E-09
Total I (Ci)			5.8802E+02

Time (h) = 56.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.6694E+21
Organic I (atoms)	0.0000E+00	5.1630E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 56.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.6013E+22	1.7792E+21
Organic I (atoms)	4.9524E+20	5.5026E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 56.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	8.1832E+19	4.3109E+18
Organic I (atoms)	2.5309E+18	1.3333E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 64.0000

EAB Doses:

Time (h) = 64.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 64.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 64.0000	Ci	kg	Atoms	Decay
I-131	4.0772E+02	3.2888E-06	1.5119E+19	3.8339E+18
I-132	3.1146E-06	3.0174E-16	1.3766E+09	2.1001E+17
I-133	1.2574E+02	1.1099E-07	5.0258E+17	3.5603E+18
I-135	1.2067E+00	3.4362E-10	1.5328E+15	1.0815E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 64.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.5154E+19	0.0000E+00	
Organic I (atoms)	4.6868E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.4105E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.6607E-09
Total I (Ci)			5.3467E+02

Time (h) = 64.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	1.8710E+21
Organic I (atoms)	0.0000E+00	5.7865E+19

Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 64.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7920E+22	1.9912E+21
Organic I (atoms)	5.5424E+20	6.1582E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 64.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	9.1714E+19	4.8311E+18
Organic I (atoms)	2.8365E+18	1.4941E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 72.0000

EAB Doses:

Time (h) = 72.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 72.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 72.0000	Ci	kg	Atoms	Decay
I-131	3.9519E+02	3.1876E-06	1.4654E+19	4.2614E+18
I-132	2.7877E-07	2.7007E-17	1.2321E+08	2.1001E+17
I-133	9.6071E+01	8.4808E-08	3.8400E+17	3.6777E+18
I-135	5.2023E-01	1.4814E-10	6.6081E+14	1.0824E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 72.0000	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.4587E+19	0.0000E+00
Organic I (atoms)	4.5115E+17	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00
Dose Effective (Ci/cc)	I-131 (Thyroid)	8.0673E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	8.2579E-09
Total I (Ci)		4.9178E+02

Time (h) = 72.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.0648E+21
Organic I (atoms)	0.0000E+00	6.3859E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 72.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.9754E+22	2.1949E+21
Organic I (atoms)	6.1096E+20	6.7884E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 72.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0121E+20	5.3311E+18

Organic I (atoms)	3.1303E+18	1.6488E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 80.0000

EAB Doses:

Time (h) = 80.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 80.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 80.0000	Ci	kg	Atoms	Decay
I-131	3.8303E+02	3.0896E-06	1.4203E+19	4.6757E+18
I-132	2.4952E-08	2.4173E-18	1.1028E+07	2.1001E+17
I-133	7.3405E+01	6.4799E-08	2.9341E+17	3.7674E+18
I-135	2.2427E-01	6.3862E-11	2.8488E+14	1.0828E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 80.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.4062E+19	0.0000E+00	
Organic I (atoms)	4.3490E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.7546E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.9001E-09
Total I (Ci)			4.5666E+02

Time (h) = 80.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.2514E+21
Organic I (atoms)	0.0000E+00	6.9631E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 80.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.1520E+22	2.3911E+21
Organic I (atoms)	6.6557E+20	7.3953E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 80.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1036E+20	5.8125E+18
Organic I (atoms)	3.4133E+18	1.7977E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 88.0000

EAB Doses:

Time (h) = 88.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 88.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 88.0000	Ci	kg	Atoms	Decay
I-131	3.7125E+02	2.9946E-06	1.3766E+19	5.0773E+18
I-132	2.2334E-09	2.1637E-19	9.8711E+05	2.1001E+17
I-133	5.6087E+01	4.9511E-08	2.2418E+17	3.8359E+18
I-135	9.6685E-02	2.7531E-11	1.2281E+14	1.0829E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 88.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.3571E+19	0.0000E+00	
Organic I (atoms)	4.1972E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.4669E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.5780E-09
Total I (Ci)			4.2743E+02

Time (h) = 88.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.4313E+21
Organic I (atoms)	0.0000E+00	7.5196E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 88.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.3223E+22	2.5803E+21
Organic I (atoms)	7.1824E+20	7.9804E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 88.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.1918E+20	6.2768E+18
Organic I (atoms)	3.6861E+18	1.9413E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 96.0000

EAB Doses:

Time (h) = 96.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 96.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 96.0000	Ci	kg	Atoms	Decay
I-131	3.5983E+02	2.9025E-06	1.3343E+19	5.4665E+18
I-132	1.9990E-10	1.9366E-20	8.8353E+04	2.1001E+17
I-133	4.2854E+01	3.7830E-08	1.7129E+17	3.8883E+18
I-135	4.1681E-02	1.1869E-11	5.2945E+13	1.0830E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 96.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.3109E+19	0.0000E+00	
Organic I (atoms)	4.0543E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.1996E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.2845E-09
Total I (Ci)			4.0273E+02

Time (h) = 96.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	2.6051E+21
Organic I (atoms)	0.0000E+00	8.0569E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 96.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.4867E+22	2.7630E+21
Organic I (atoms)	7.6908E+20	8.5453E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 96.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.2770E+20	6.7250E+18
Organic I (atoms)	3.9495E+18	2.0799E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 120.0000

EAB Doses:

Time (h) = 120.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 120.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 120.0000	Ci	kg	Atoms	Decay
I-131	3.2764E+02	2.6428E-06	1.2149E+19	6.5639E+18
I-133	1.9116E+01	1.6875E-08	7.6407E+16	3.9822E+18
I-135	3.3395E-03	9.5093E-13	4.2419E+12	1.0830E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 120.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.1859E+19	0.0000E+00	
Organic I (atoms)	3.6677E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.4906E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.5284E-09
Total I (Ci)			3.4676E+02

Time (h) = 120.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.0921E+21
Organic I (atoms)	0.0000E+00	9.5632E+19
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 120.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.9476E+22	3.2751E+21
Organic I (atoms)	9.1161E+20	1.0129E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 120.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.5157E+20	7.9815E+18
Organic I (atoms)	4.6878E+18	2.4685E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 144.0000

EAB Doses:

Time (h) = 144.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 144.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 144.0000	Ci	kg	Atoms	Decay
I-131	2.9833E+02	2.4064E-06	1.1062E+19	7.5631E+18
I-133	8.5269E+00	7.5273E-09	3.4083E+16	4.0241E+18
I-135	2.6756E-04	7.6189E-14	3.3987E+11	1.0830E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 144.0000	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.0764E+19	0.0000E+00
Organic I (atoms)	3.3289E+17	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00
Dose Effective (Ci/cc)	I-131 (Thyroid)	5.8809E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	5.8978E-09
Total I (Ci)		3.0686E+02

Time (h) = 144.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.5334E+21
Organic I (atoms)	0.0000E+00	1.0928E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 144.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.3651E+22	3.7390E+21
Organic I (atoms)	1.0408E+21	1.1564E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 144.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.7320E+20	9.1200E+18
Organic I (atoms)	5.3568E+18	2.8206E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 168.0000

EAB Doses:

Time (h) = 168.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 168.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 168.0000	Ci	kg	Atoms	Decay
I-131	2.7165E+02	2.1911E-06	1.0073E+19	8.4729E+18
I-133	3.8036E+00	3.3577E-09	1.5203E+16	4.0428E+18
I-135	2.1437E-05	6.1043E-15	2.7230E+10	1.0830E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 168.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	9.7854E+18	0.0000E+00	
Organic I (atoms)	3.0264E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		5.3419E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		5.3495E-09
Total I (Ci)			2.7545E+02

Time (h) = 168.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	3.9342E+21
Organic I (atoms)	0.0000E+00	1.2168E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 168.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.7444E+22	4.1604E+21
Organic I (atoms)	1.1581E+21	1.2867E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 168.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.9285E+20	1.0154E+19
Organic I (atoms)	5.9645E+18	3.1404E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 192.0000

EAB Doses:

Time (h) = 192.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 192.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 192.0000	Ci	kg	Atoms	Decay
I-131	2.4735E+02	1.9951E-06	9.1717E+18	9.3014E+18
I-133	1.6967E+00	1.4977E-09	6.7817E+15	4.0511E+18
I-135	1.7176E-06	4.8908E-16	2.1817E+09	1.0830E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 192.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	8.9032E+18	0.0000E+00	
Organic I (atoms)	2.7536E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.8583E-09

Dose Effective (Ci/cc) I-131 (ICRP2 Thyroid)		4.8616E-09
Total I (Ci)		2.4904E+02

Time (h) = 192.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.2987E+21
Organic I (atoms)	0.0000E+00	1.3295E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 192.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.0893E+22	4.5437E+21
Organic I (atoms)	1.2647E+21	1.4053E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 192.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.1072E+20	1.1095E+19
Organic I (atoms)	6.5172E+18	3.4313E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 216.0000

EAB Doses:

Time (h) = 216.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 216.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 216.0000	Ci	kg	Atoms	Decay
I-131	2.2522E+02	1.8167E-06	8.3513E+18	1.0056E+19
I-133	7.5682E-01	6.6809E-10	3.0251E+15	4.0549E+18
I-135	1.3761E-07	3.9185E-17	1.7480E+08	1.0830E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 216.0000	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	8.1037E+18	0.0000E+00
Organic I (atoms)	2.5063E+17	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00
Dose Effective (Ci/cc) I-131 (Thyroid)		4.4211E-09
Dose Effective (Ci/cc) I-131 (ICRP2 Thyroid)		4.4226E-09
Total I (Ci)		2.2598E+02

Time (h) = 216.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.6304E+21
Organic I (atoms)	0.0000E+00	1.4321E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 216.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.4032E+22	4.8925E+21
Organic I (atoms)	1.3618E+21	1.5131E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 216.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.2698E+20	1.1950E+19
Organic I (atoms)	7.0201E+18	3.6960E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 240.0000

EAB Doses:

Time (h) = 240.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 240.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 240.0000	Ci	kg	Atoms	Decay
I-131	2.0507E+02	1.6541E-06	7.6042E+18	1.0743E+19
I-133	3.3759E-01	2.9801E-10	1.3494E+15	4.0565E+18
I-135	1.1026E-08	3.1396E-18	1.4005E+07	1.0830E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 240.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	7.3774E+18	0.0000E+00	
Organic I (atoms)	2.2817E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		4.0245E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		4.0251E-09
Total I (Ci)			2.0541E+02

Time (h) = 240.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	4.9324E+21
Organic I (atoms)	0.0000E+00	1.5255E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 240.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.6890E+22	5.2100E+21
Organic I (atoms)	1.4502E+21	1.6113E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 240.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.4178E+20	1.2729E+19
Organic I (atoms)	7.4779E+18	3.9370E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 288.0000

EAB Doses:

Time (h) = 288.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 288.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 288.0000	Ci	kg	Atoms	Decay
I-131	1.7002E+02	1.3714E-06	6.3046E+18	1.1937E+19
I-133	6.7173E-02	5.9298E-11	2.6850E+14	4.0576E+18
I-135	7.0777E-11	2.0154E-20	8.9903E+04	1.0830E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 288.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	6.1157E+18	0.0000E+00	
Organic I (atoms)	1.8914E+17	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		3.3360E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		3.3361E-09
Total I (Ci)			1.7009E+02

Time (h) = 288.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.4576E+21
Organic I (atoms)	0.0000E+00	1.6879E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 288.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.1860E+22	5.7622E+21
Organic I (atoms)	1.6039E+21	1.7821E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 288.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.6753E+20	1.4085E+19
Organic I (atoms)	8.2741E+18	4.3560E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 336.0000

EAB Doses:

Time (h) = 336.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 336.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 336.0000	Ci	kg	Atoms	Decay
I-131	1.4096E+02	1.1370E-06	5.2270E+18	1.2928E+19
I-133	1.3366E-02	1.1799E-11	5.3424E+13	4.0578E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 336.0000	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.0703E+18	0.0000E+00
Organic I (atoms)	1.5681E+17	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Dose Effective (Ci/cc)	I-131 (Thyroid)	2.7657E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	2.7657E-09
Total I (Ci)		1.4098E+02

Time (h) = 336.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	5.8930E+21
Organic I (atoms)	0.0000E+00	1.8226E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 336.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.5980E+22	6.2200E+21
Organic I (atoms)	1.7313E+21	1.9237E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 336.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	2.8887E+20	1.5208E+19
Organic I (atoms)	8.9342E+18	4.7035E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 384.0000

EAB Doses:

Time (h) = 384.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 384.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 384.0000	Ci	kg	Atoms	Decay
I-131	1.1687E+02	9.4271E-07	4.3337E+18	1.3749E+19
I-133	2.6595E-03	2.3477E-12	1.0630E+13	4.0578E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 384.0000	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	4.2037E+18	0.0000E+00
Organic I (atoms)	1.3001E+17	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Dose Effective (Ci/cc)	I-131 (Thyroid)	2.2930E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	2.2930E-09
Total I (Ci)		1.1688E+02

Time (h) = 384.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.2540E+21
Organic I (atoms)	0.0000E+00	1.9342E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 384.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	5.9396E+22	6.5995E+21
Organic I (atoms)	1.8370E+21	2.0411E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 384.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.0657E+20	1.6139E+19
Organic I (atoms)	9.4815E+18	4.9915E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 432.0000

EAB Doses:

Time (h) = 432.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 432.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 432.0000	Ci	kg	Atoms	Decay
I-131	9.6898E+01	7.8159E-07	3.5930E+18	1.4430E+19
I-133	5.2917E-04	4.6713E-13	2.1151E+12	4.0578E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 432.0000	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.4852E+18	0.0000E+00
Organic I (atoms)	1.0779E+17	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00
Dose Effective (Ci/cc)	I-131 (Thyroid)	1.9011E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	1.9011E-09
Total I (Ci)		9.6898E+01

Time (h) = 432.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.5533E+21
Organic I (atoms)	0.0000E+00	2.0268E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 432.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.2228E+22	6.9142E+21
Organic I (atoms)	1.9246E+21	2.1384E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 432.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.2124E+20	1.6911E+19
Organic I (atoms)	9.9353E+18	5.2303E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 480.0000

EAB Doses:

Time (h) = 480.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 480.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 480.0000	Ci	kg	Atoms	Decay
I-131	8.0337E+01	6.4801E-07	2.9789E+18	1.4995E+19
I-133	1.0529E-04	9.2948E-14	4.2086E+11	4.0578E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 480.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.8896E+18	0.0000E+00	
Organic I (atoms)	8.9368E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.5762E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.5762E-09
Total I (Ci)			8.0337E+01

Time (h) = 480.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	6.8015E+21
Organic I (atoms)	0.0000E+00	2.1035E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 480.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.4576E+22	7.1751E+21
Organic I (atoms)	1.9972E+21	2.2191E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 480.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.3340E+20	1.7552E+19
Organic I (atoms)	1.0311E+19	5.4283E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 528.0000

EAB Doses:

Time (h) = 528.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 528.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 528.0000	Ci	kg	Atoms	Decay
I-131	6.6607E+01	5.3726E-07	2.4698E+18	1.5463E+19
I-133	2.0951E-05	1.8494E-14	8.3741E+10	4.0578E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 528.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	2.3957E+18	0.0000E+00	
Organic I (atoms)	7.4094E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		1.3068E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		1.3068E-09

Total I (Ci) 6.6607E+01

Time (h) = 528.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.0072E+21
Organic I (atoms)	0.0000E+00	2.1672E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 528.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.6523E+22	7.3914E+21
Organic I (atoms)	2.0574E+21	2.2860E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 528.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.4349E+20	1.8082E+19
Organic I (atoms)	1.0623E+19	5.5925E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 576.0000

EAB Doses:

Time (h) = 576.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 576.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 576.0000	Ci	kg	Atoms	Decay
I-131	5.5223E+01	4.4544E-07	2.0477E+18	1.5851E+19
I-133	4.1687E-06	3.6799E-15	1.6662E+10	4.0578E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 576.0000	Atmosphere	Sump
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	1.9863E+18	0.0000E+00
Organic I (atoms)	6.1431E+16	0.0000E+00
Aerosols (kg)	0.0000E+00	0.0000E+00

Dose Effective (Ci/cc)	I-131 (Thyroid)	1.0834E-09
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)	1.0834E-09
Total I (Ci)		5.5223E+01

Time (h) = 576.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.1778E+21
Organic I (atoms)	0.0000E+00	2.2199E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 576.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.8137E+22	7.5707E+21
Organic I (atoms)	2.1073E+21	2.3415E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 576.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.5185E+20	1.8522E+19
Organic I (atoms)	1.0882E+19	5.7286E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 624.0000

EAB Doses:

Time (h) = 624.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 624.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 624.0000	Ci	kg	Atoms	Decay
I-131	4.5785E+01	3.6931E-07	1.6977E+18	1.6173E+19
I-133	8.2946E-07	7.3222E-16	3.3154E+09	4.0578E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 624.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.6468E+18	0.0000E+00	
Organic I (atoms)	5.0932E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		8.9826E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		8.9826E-10
Total I (Ci)			4.5785E+01

Time (h) = 624.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.3192E+21
Organic I (atoms)	0.0000E+00	2.2637E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 624.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	6.9475E+22	7.7194E+21
Organic I (atoms)	2.1487E+21	2.3875E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 624.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.5878E+20	1.8887E+19
Organic I (atoms)	1.1096E+19	5.8414E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 672.0000

EAB Doses:

Time (h) = 672.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 672.0000	Whole Body	Thyroid	TEDE

Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 672.0000	Ci	kg	Atoms	Decay
I-131	3.7960E+01	3.0619E-07	1.4076E+18	1.6440E+19
I-133	1.6504E-07	1.4569E-16	6.5969E+08	4.0578E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 672.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.3653E+18	0.0000E+00	
Organic I (atoms)	4.2227E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		7.4474E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		7.4474E-10
Total I (Ci)			3.7960E+01

Time (h) = 672.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.4364E+21
Organic I (atoms)	0.0000E+00	2.2999E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 672.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.0584E+22	7.8427E+21
Organic I (atoms)	2.1830E+21	2.4256E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 672.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.6453E+20	1.9190E+19
Organic I (atoms)	1.1274E+19	5.9350E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

Detailed model information at time (H) = 720.0000

EAB Doses:

Time (h) = 720.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

LPZ Doses:

Time (h) = 720.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00

Reactor Enclosure Compartment Nuclide Inventory:

Time (h) = 720.0000	Ci	kg	Atoms	Decay
I-131	3.1472E+01	2.5386E-07	1.1670E+18	1.6661E+19
I-133	3.2839E-08	2.8989E-17	1.3126E+08	4.0578E+18

Reactor Enclosure Transport Group Inventory:

Time (h) = 720.0000	Atmosphere	Sump	
Noble gases (atoms)	0.0000E+00	0.0000E+00	
Elemental I (atoms)	1.1320E+18	0.0000E+00	
Organic I (atoms)	3.5010E+16	0.0000E+00	
Aerosols (kg)	0.0000E+00	0.0000E+00	
Dose Effective (Ci/cc)	I-131 (Thyroid)		6.1746E-10
Dose Effective (Ci/cc)	I-131 (ICRP2 Thyroid)		6.1746E-10
Total I (Ci)			3.1472E+01

Time (h) = 720.0000	Deposition Surfaces	Recirculating Filter
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	0.0000E+00	7.5336E+21
Organic I (atoms)	0.0000E+00	2.3300E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

ECCS Fluid to Reactor Enclosure Transport Group Inventory:

Time (h) = 720.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	7.1504E+22	7.9449E+21
Organic I (atoms)	2.2115E+21	2.4572E+20
Aerosols (kg)	0.0000E+00	0.0000E+00

Reactor Enclosure to SGTS Node Transport Group Inventory:

Time (h) = 720.0000	Pathway Filtered	Transported
Noble gases (atoms)	0.0000E+00	0.0000E+00
Elemental I (atoms)	3.6930E+20	1.9441E+19
Organic I (atoms)	1.1422E+19	6.0126E+17
Aerosols (kg)	0.0000E+00	0.0000E+00

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##
I-131 Summary
##

Time (hr)	ECCS Fluid I-131 (Curies)	Reactor Enclosure I-131 (Curies)	Environment I-131 (Curies)
0.000	5.2650E+03	4.5708E-05	8.2155E-10
0.017	1.5826E+05	4.1277E-02	2.2958E-05
0.058	5.5239E+05	5.0228E-01	9.7631E-04
0.100	9.4735E+05	1.4755E+00	4.9219E-03
0.142	1.3422E+06	2.9581E+00	1.3988E-02
0.183	1.7359E+06	4.9422E+00	3.0245E-02
0.225	2.1305E+06	7.4353E+00	5.5874E-02
0.258	2.4456E+06	9.7869E+00	8.4458E-02
0.267	2.5250E+06	1.0296E+01	8.4462E-02
0.396	3.7455E+06	1.9703E+01	8.4541E-02
0.500	4.7297E+06	2.9190E+01	8.4647E-02
0.742	8.5318E+06	6.1214E+01	8.5089E-02
1.038	1.3190E+07	1.1744E+02	8.6178E-02
1.335	1.7838E+07	1.8525E+02	8.8039E-02
1.632	2.2475E+07	2.5997E+02	9.0785E-02
1.928	2.7103E+07	3.3879E+02	9.4482E-02
2.000	2.8220E+07	3.5825E+02	9.5523E-02
2.300	2.8186E+07	4.2208E+02	1.0043E-01
2.600	2.8153E+07	4.6014E+02	1.0597E-01
2.900	2.8121E+07	4.8275E+02	1.1187E-01
3.200	2.8088E+07	4.9607E+02	1.1799E-01
3.500	2.8055E+07	5.0383E+02	1.2425E-01
3.800	2.8022E+07	5.0824E+02	1.3057E-01
4.100	2.7989E+07	5.1064E+02	1.3694E-01
4.400	2.7956E+07	5.1185E+02	1.4333E-01
4.700	2.7924E+07	5.1233E+02	1.4973E-01
5.000	2.7891E+07	5.1238E+02	1.5614E-01
5.300	2.7858E+07	5.1217E+02	1.6254E-01
5.600	2.7826E+07	5.1180E+02	1.6894E-01
5.900	2.7793E+07	5.1134E+02	1.7533E-01
6.200	2.7761E+07	5.1083E+02	1.8172E-01
6.500	2.7728E+07	5.1028E+02	1.8810E-01
6.800	2.7696E+07	5.0972E+02	1.9447E-01
7.100	2.7663E+07	5.0914E+02	2.0084E-01
7.400	2.7631E+07	5.0855E+02	2.0720E-01
7.700	2.7598E+07	5.0796E+02	2.1355E-01
8.000	2.7566E+07	5.0737E+02	2.1990E-01
8.300	2.7534E+07	5.0678E+02	2.2623E-01
8.600	2.7502E+07	5.0619E+02	2.3256E-01
8.900	2.7469E+07	5.0560E+02	2.3889E-01
9.200	2.7437E+07	5.0501E+02	2.4520E-01

9.500	2.7405E+07	5.0441E+02	2.5151E-01
9.800	2.7373E+07	5.0382E+02	2.5781E-01
10.100	2.7341E+07	5.0323E+02	2.6410E-01
10.400	2.7309E+07	5.0265E+02	2.7039E-01
24.000	2.5897E+07	4.7665E+02	5.4701E-01
96.000	1.9550E+07	3.5983E+02	1.7846E+00
720.000	1.7099E+06	3.1472E+01	5.2634E+00

Time (hr)	SGTS Node I-131 (Curies)
0.000	2.4890E-11
0.017	2.2916E-08
0.058	2.7899E-07
0.100	8.1963E-07
0.142	1.6432E-06
0.183	2.7455E-06
0.225	4.1305E-06
0.258	5.4369E-06
0.267	2.8598E-07
0.396	5.4729E-07
0.500	8.1083E-07
0.742	1.7004E-06
1.038	3.2622E-06
1.335	5.1457E-06
1.632	7.2213E-06
1.928	9.4107E-06
2.000	9.9513E-06
2.300	1.1724E-05
2.600	1.2782E-05
2.900	1.3410E-05
3.200	1.3780E-05
3.500	1.3995E-05
3.800	1.4118E-05
4.100	1.4185E-05
4.400	1.4218E-05
4.700	1.4231E-05
5.000	1.4233E-05
5.300	1.4227E-05
5.600	1.4217E-05
5.900	1.4204E-05
6.200	1.4190E-05
6.500	1.4175E-05
6.800	1.4159E-05
7.100	1.4143E-05
7.400	1.4126E-05
7.700	1.4110E-05
8.000	1.4094E-05
8.300	1.4077E-05
8.600	1.4061E-05
8.900	1.4044E-05
9.200	1.4028E-05
9.500	1.4012E-05
9.800	1.3995E-05
10.100	1.3979E-05
10.400	1.3962E-05
24.000	1.3240E-05
96.000	9.9954E-06
720.000	8.7422E-07

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#################################################################
                    Cumulative Dose Summary
#################################################################
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	EAB		LPZ	
Time (hr)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)
0.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.017	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.058	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.100	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.183	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.225	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.258	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

0.267	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.396	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.500	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.742	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
1.038	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
1.335	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
1.632	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
1.928	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.300	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.600	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.900	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3.200	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3.500	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
3.800	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
4.100	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
4.400	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
4.700	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
5.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
5.300	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
5.600	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
5.900	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
6.200	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
6.500	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
6.800	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7.100	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7.400	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
7.700	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
8.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
8.300	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
8.600	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
8.900	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
9.200	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
9.500	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
9.800	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
10.100	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
10.400	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
24.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
96.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
720.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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#######################################################################
                         Worst Two-Hour Doses
#######################################################################
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EAB

Time (hr)	Whole Body (rem)	Thyroid (rem)	TEDE (rem)
0.0	0.0000E+00	0.0000E+00	0.0000E+00

OUTPUT CUR IE DATA FOR VERIFICATI ON OF PROPER READIN

time (hrs)	1.7000E-03	3.3000E-03	5.0000E-03	6.7000E-03	8.3000E-03	1.0000E-02	1.1700E-02	1.3300E-02	1.5000E-02	1.6700E-02
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	4.0285E-05	1.6113E-04	3.6252E-04	6.4444E-04	1.0069E-03	1.4498E-03	1.9733E-03	2.5772E-03	3.2616E-03	4.0264E-03
Kr-85m	8.4845E-04	3.3927E-03	7.6313E-03	1.3562E-02	2.1185E-02	3.0496E-02	4.1496E-02	5.4182E-02	6.8552E-02	8.4606E-02
Kr-87	1.6656E-03	6.6560E-03	1.4962E-02	2.6573E-02	4.1480E-02	5.9673E-02	8.1144E-02	1.0588E-01	1.3388E-01	1.6512E-01
Kr-88	2.3502E-03	9.3963E-03	2.1132E-02	3.7551E-02	5.8646E-02	8.4411E-02	1.1484E-01	1.4992E-01	1.8966E-01	2.3404E-01
Rb-86	6.6541E-06	2.6614E-05	5.9878E-05	1.0644E-04	1.6630E-04	2.3946E-04	3.2590E-04	4.2564E-04	5.3866E-04	6.6496E-04
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	2.7431E-03	1.0972E-02	2.4684E-02	4.3879E-02	6.8556E-02	9.8713E-02	1.3435E-01	1.7546E-01	2.2205E-01	2.7412E-01
I-132	3.9604E-03	1.5835E-02	3.5612E-02	6.3283E-02	9.8838E-02	1.4227E-01	1.9356E-01	2.5271E-01	3.1970E-01	3.9453E-01
I-133	5.6717E-03	2.2684E-02	5.1032E-02	9.0713E-02	1.4172E-01	2.0405E-01	2.7770E-01	3.6267E-01	4.5894E-01	5.6652E-01
I-134	6.2854E-03	2.5107E-02	5.6412E-02	1.0015E-01	1.5626E-01	2.2471E-01	3.0543E-01	3.9837E-01	5.0349E-01	6.2073E-01
I-135	5.2995E-03	2.1193E-02	4.7672E-02	8.4729E-02	1.3236E-01	1.9055E-01	2.5929E-01	3.3858E-01	4.2841E-01	5.2878E-01
Xe-133	5.6057E-03	2.2422E-02	5.0446E-02	8.9677E-02	1.4011E-01	2.0175E-01	2.7459E-01	3.5863E-01	4.5386E-01	5.6029E-01
Xe-135	2.2748E-03	9.1000E-03	2.0476E-02	3.6405E-02	5.6887E-02	8.1922E-02	1.1151E-01	1.4566E-01	1.8436E-01	2.2762E-01
Cs-134	7.4320E-04	2.9726E-03	6.6878E-03	1.1889E-02	1.8575E-02	2.6746E-02	3.6401E-02	4.7541E-02	6.0164E-02	7.4272E-02
Cs-136	2.0693E-04	8.2766E-04	1.8621E-03	3.3101E-03	5.1717E-03	7.4467E-03	1.0135E-02	1.3237E-02	1.6751E-02	2.0679E-02
Cs-137	4.6327E-04	1.8530E-03	4.1689E-03	7.4108E-03	1.1579E-02	1.6672E-02	2.2691E-02	2.9635E-02	3.7504E-02	4.6297E-02
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

time (hrs)	1.6700E-02	2.5000E-02	5.0000E-02	7.5000E-02	1.0000E-01	1.2500E-01	1.5000E-01	1.7500E-01	2.0000E-01	2.2500E-01
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	4.0409E-03	9.0533E-03	3.6183E-02	8.1344E-02	1.4449E-01	2.2558E-01	3.2457E-01	4.4140E-01	5.7605E-01	7.2845E-01
Kr-85m	8.4910E-02	1.8999E-01	7.5639E-01	1.6939E+00	2.9973E+00	4.6612E+00	6.6807E+00	9.0505E+00	1.1766E+01	1.4821E+01
Kr-87	1.6571E-01	3.6959E-01	1.4571E+00	3.2315E+00	5.6624E+00	8.7204E+00	1.2377E+01	1.6605E+01	2.1377E+01	2.6666E+01
Kr-88	2.3488E-01	5.2516E-01	2.0861E+00	4.6614E+00	8.2296E+00	1.2770E+01	1.8262E+01	2.4684E+01	3.2018E+01	4.0243E+01
Rb-86	6.6735E-04	1.4804E-03	5.8152E-03	1.2884E-02	2.2564E-02	3.4740E-02	4.9300E-02	6.6138E-02	8.5152E-02	1.0624E-01
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	2.7511E-01	6.1027E-01	2.3972E+00	5.3110E+00	9.3015E+00	1.4321E+01	2.0322E+01	2.7263E+01	3.5101E+01	4.3795E+01
I-132	3.9595E-01	8.7682E-01	3.4250E+00	7.5455E+00	1.3145E+01	2.0133E+01	2.8427E+01	3.7946E+01	4.8615E+01	6.0361E+01
I-133	5.6856E-01	1.2609E+00	4.9494E+00	1.0957E+01	1.9176E+01	2.9501E+01	4.1834E+01	5.6079E+01	7.2147E+01	8.9950E+01
I-134	6.2295E-01	1.3729E+00	5.2879E+00	1.1487E+01	1.9726E+01	2.9778E+01	4.1434E+01	5.4502E+01	6.8803E+01	8.4172E+01
I-135	5.3068E-01	1.1762E+00	4.6087E+00	1.0185E+01	1.7792E+01	2.7323E+01	3.8676E+01	5.1753E+01	6.6462E+01	8.2715E+01
Xe-133	5.6231E-01	1.2598E+00	5.0350E+00	1.1319E+01	2.0106E+01	3.1389E+01	4.5162E+01	6.1419E+01	8.0154E+01	1.0136E+02
Xe-135	2.2844E-01	5.1212E-01	2.0504E+00	4.6175E+00	8.2159E+00	1.2848E+01	1.8516E+01	2.5221E+01	3.2965E+01	4.1750E+01
Cs-134	7.4539E-02	1.6535E-01	6.4955E-01	1.4391E+00	2.5206E+00	3.8808E+00	5.5076E+00	7.3889E+00	9.5135E+00	1.1871E+01
Cs-136	2.0753E-02	4.6037E-02	1.8084E-01	4.0064E-01	7.0166E-01	1.0803E+00	1.5330E+00	2.0565E+00	2.6477E+00	3.3035E+00
Cs-137	4.6464E-02	1.0307E-01	4.0490E-01	8.9709E-01	1.5712E+00	2.4191E+00	3.4332E+00	4.6059E+00	5.9303E+00	7.3996E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

time (hrs)	2.5000E-01	2.5830E-01	2.9660E-01	4.4490E-01	5.0000E-01	5.9320E-01	7.4150E-01	8.8980E-01	1.0381E+00	1.1864E+00
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	7.6890E-04	4.7388E-03	1.1375E-02	2.0042E-02	3.0253E-02
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	9.2048E-04	5.6734E-03	1.3619E-02	2.3997E-02	3.6225E-02
Kr-85	8.9858E-01	9.5897E-01	1.2635E+00	2.8330E+00	3.5731E+00	5.6868E+00	1.2287E+01	2.2820E+01	3.7237E+01	5.5490E+01
Kr-85m	1.8212E+01	1.9411E+01	2.5425E+01	5.5712E+01	6.9670E+01	1.0930E+02	2.3079E+02	4.1891E+02	6.6805E+02	9.7295E+02
Kr-87	3.2449E+01	3.4473E+01	4.4484E+01	9.1993E+01	1.1259E+02	1.7032E+02	3.3942E+02	5.8144E+02	8.7509E+02	1.2028E+03
Kr-88	4.9339E+01	5.2548E+01	6.8593E+01	1.4833E+02	1.8458E+02	2.8716E+02	5.9839E+02	1.0718E+03	1.6868E+03	2.4243E+03
Rb-86	1.2932E-01	1.3741E-01	1.7743E-01	3.6872E-01	4.5248E-01	6.1349E-01	9.2034E-01	1.2762E+00	1.6693E+00	2.0903E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.1255E+00	6.9366E+00	1.6650E+01	2.9335E+01	4.4280E+01
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.2788E-01	7.8820E-01	1.8921E+00	3.3339E+00	5.0328E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.4647E+00	8.9307E+00	2.1207E+01	3.6966E+01	5.5202E+01
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.3889E+00	8.2418E+00	1.9048E+01	3.2314E+01	4.6965E+01
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.4442E-03	9.8019E-03	2.5448E-02	4.8130E-02	7.7518E-02
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.3901E-02	8.5869E-02	2.0653E-01	3.6460E-01	5.5138E-01
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	4.1479E-02	4.2295E-01	1.3440E+00	2.8905E+00	5.0766E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.7486E-02	1.0668E-01	2.5350E-01	4.4216E-01	6.6071E-01
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.8059E-02	1.1130E-01	2.6715E-01	4.7070E-01	7.1051E-01
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.8289E-02	1.1204E-01	2.6732E-01	4.6818E-01	7.0247E-01
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.8156E-02	1.1191E-01	2.6863E-01	4.7333E-01	7.1452E-01
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.5384E-01	1.5621E+00	3.7439E+00	6.5867E+00	9.9276E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.2375E-01	1.3792E+00	3.3107E+00	5.8335E+00	8.8058E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.1127E-01	1.3020E+00	3.1251E+00	5.5060E+00	8.3108E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.3333E-01	8.0300E-01	1.8835E+00	3.2428E+00	4.7832E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	8.7015E-02	5.3631E-01	1.2874E+00	2.2684E+00	3.4243E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.3844E-01	8.5316E-01	2.0476E+00	3.6070E+00	5.4433E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.9004E-01	1.7857E+00	4.2818E+00	7.5363E+00	1.1364E+01
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	7.9009E-01	4.7552E+00	1.1146E+01	1.9179E+01	2.8271E+01
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.8850E-01	1.7774E+00	4.2646E+00	7.5110E+00	1.1333E+01
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	3.8783E-02	2.3904E-01	5.7383E-01	1.0111E+00	1.5264E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	8.1819E-01	4.9817E+00	1.1806E+01	2.0525E+01	3.0554E+01
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.2749E-01	7.8581E-01	1.8864E+00	3.3240E+00	5.0180E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	3.8392E-01	2.3582E+00	5.6415E+00	9.9066E+00	1.4904E+01
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	3.8238E+00	2.3537E+01	5.6425E+01	9.9294E+01	1.4969E+02
I-131	5.3307E+01	5.6640E+01	7.3138E+01	1.5198E+02	1.8650E+02	2.5555E+02	3.9593E+02	5.6587E+02	7.5822E+02	9.6748E+02

I-132	7.3117E+01	7.7564E+01	9.9424E+01	2.0068E+02	2.4365E+02	3.2880E+02	4.9957E+02	7.0156E+02	9.2413E+02	1.1595E+03
I-133	1.0941E+02	1.1622E+02	1.4990E+02	3.1010E+02	3.7991E+02	5.1912E+02	8.0074E+02	1.1394E+03	1.5199E+03	1.9307E+03
I-134	1.0046E+02	1.0604E+02	1.3286E+02	2.4566E+02	2.8867E+02	3.6756E+02	5.0673E+02	6.4442E+02	7.6831E+02	8.7232E+02
I-135	1.0043E+02	1.0661E+02	1.3714E+02	2.8070E+02	3.4254E+02	4.6495E+02	7.0962E+02	9.9905E+02	1.3186E+03	1.6574E+03
Xe-133	1.2503E+02	1.3343E+02	1.7580E+02	3.9413E+02	4.9707E+02	7.9103E+02	1.7085E+03	3.1718E+03	5.1733E+03	7.7057E+03
Xe-135	5.1577E+01	5.5071E+01	7.2717E+01	1.6423E+02	2.0768E+02	3.3166E+02	7.1739E+02	1.3308E+03	2.1674E+03	3.2224E+03
Cs-134	1.4450E+01	1.5353E+01	1.9827E+01	4.1210E+01	5.0576E+01	6.8582E+01	1.0291E+02	1.4274E+02	1.8674E+02	2.3389E+02
Cs-136	4.0211E+00	4.2724E+00	5.5168E+00	1.1463E+01	1.4067E+01	1.9071E+01	2.8607E+01	3.9666E+01	5.1877E+01	6.4956E+01
Cs-137	9.0072E+00	9.5705E+00	1.2359E+01	2.5689E+01	3.1527E+01	4.2752E+01	6.4150E+01	8.8977E+01	1.1641E+02	1.4580E+02
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.5181E+00	8.6845E+00	1.9349E+01	3.1644E+01	4.4335E+01
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.9675E+00	1.2123E+01	2.9090E+01	5.1241E+01	7.7326E+01
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.3316E-02	1.6571E-01	4.4457E-01	8.6354E-01	1.4219E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.6817E-02	1.0097E-01	2.3613E-01	4.0532E-01	5.9607E-01
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.3967E-02	8.0536E-02	1.8085E-01	2.9812E-01	4.2100E-01
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	4.5187E-02	2.7849E-01	6.6847E-01	1.1778E+00	1.7779E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	4.3984E-02	2.7025E-01	6.4672E-01	1.1360E+00	1.7095E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	3.6174E-02	2.2295E-01	5.3518E-01	9.4301E-01	1.4235E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.7281E-02	1.0655E-01	2.5584E-01	4.5095E-01	6.8094E-01
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	7.3846E-03	4.5497E-02	1.0917E-01	1.9229E-01	2.9016E-01
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	5.3900E-01	3.3161E+00	7.9458E+00	1.3975E+01	2.1059E+01
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.8068E-04	1.1136E-03	2.6732E-03	4.7103E-03	7.1106E-03
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.2073E-05	7.4414E-05	1.7863E-04	3.1477E-04	4.7517E-04
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.2957E-05	7.9862E-05	1.9171E-04	3.3780E-04	5.0993E-04
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	6.2191E-03	3.8331E-02	9.2013E-02	1.6213E-01	2.4475E-01
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	3.8344E-06	2.3634E-05	5.6735E-05	9.9974E-05	1.5092E-04
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	9.6083E-04	5.9219E-03	1.4215E-02	2.5047E-02	3.7809E-02
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.0470E-04	6.4534E-04	1.5491E-03	2.7297E-03	4.1206E-03

time (hrs)	1.3347E+00	1.4830E+00	1.6313E+00	1.7796E+00	1.9279E+00	2.0000E+00	3.0000E+00	4.0000E+00	5.0000E+00	6.0000E+00
Co-58	4.1633E-02	5.3896E-02	6.6820E-02	8.0236E-02	9.3883E-02	1.0053E-01	1.3672E-01	1.3248E-01	1.2020E-01	1.0729E-01
Co-60	4.9855E-02	6.4543E-02	8.0026E-02	9.6099E-02	1.1245E-01	1.2041E-01	1.6383E-01	1.5881E-01	1.4415E-01	1.2871E-01
Kr-85	7.7533E+01	1.0332E+02	1.3280E+02	1.6593E+02	2.0267E+02	2.2182E+02	4.8223E+02	7.2176E+02	9.4208E+02	1.1447E+03
Kr-85m	1.3286E+03	1.7303E+03	2.1735E+03	2.6542E+03	3.1683E+03	3.4293E+03	6.3862E+03	8.1881E+03	9.1555E+03	9.5302E+03
Kr-87	1.5501E+03	1.9052E+03	2.2587E+03	2.6030E+03	2.9324E+03	3.0858E+03	3.8895E+03	3.3753E+03	2.5543E+03	1.7996E+03
Kr-88	3.2669E+03	4.1986E+03	5.2048E+03	6.2722E+03	7.3886E+03	7.9457E+03	1.3532E+04	1.5868E+04	1.6226E+04	1.5446E+04
Rb-86	2.5324E+00	2.9899E+00	3.4588E+00	3.9359E+00	4.4130E+00	4.6427E+00	5.8302E+00	5.5884E+00	5.0560E+00	4.5062E+00
Sr-89	6.0936E+01	7.8882E+01	9.7796E+01	1.1743E+02	1.3740E+02	1.4712E+02	2.0006E+02	1.9382E+02	1.7583E+02	1.5691E+02
Sr-90	6.9264E+00	8.9671E+00	1.1118E+01	1.3351E+01	1.5623E+01	1.6729E+01	2.2762E+01	2.2065E+01	2.0028E+01	1.7883E+01
Sr-91	7.5156E+01	9.6251E+01	1.1806E+02	1.4024E+02	1.6234E+02	1.7292E+02	2.1872E+02	1.9711E+02	1.6632E+02	1.3806E+02
Sr-92	6.2230E+01	7.7566E+01	9.2592E+01	1.0705E+02	1.2060E+02	1.2679E+02	1.3357E+02	1.0026E+02	7.0466E+01	4.8720E+01
Y-90	1.1325E-01	1.5495E-01	2.0228E-01	2.5491E-01	3.1214E-01	3.4138E-01	6.7019E-01	8.7656E-01	1.0023E+00	1.0780E+00
Y-91	7.6016E-01	9.8578E-01	1.2242E+00	1.4724E+00	1.7256E+00	1.8491E+00	2.5543E+00	2.5164E+00	2.3186E+00	2.0990E+00
Y-92	7.8736E+00	1.1228E+01	1.5076E+01	1.9348E+01	2.3946E+01	2.6263E+01	5.2416E+01	6.1813E+01	6.0438E+01	5.4291E+01
Y-93	9.0010E-01	1.1535E+00	1.4157E+00	1.6828E+00	1.9492E+00	2.0770E+00	2.6385E+00	2.3881E+00	2.0238E+00	1.6873E+00
Zr-95	9.7779E-01	1.2658E+00	1.5693E+00	1.8844E+00	2.2049E+00	2.3609E+00	3.2108E+00	3.1111E+00	2.8226E+00	2.5192E+00
Zr-97	9.6092E-01	1.2365E+00	1.5238E+00	1.8188E+00	2.1153E+00	2.2584E+00	2.9493E+00	2.7442E+00	2.3907E+00	2.0489E+00
Nb-95	9.8337E-01	1.2731E+00	1.5785E+00	1.8955E+00	2.2180E+00	2.3751E+00	3.2315E+00	3.1326E+00	2.8433E+00	2.5388E+00
Mo-99	1.3642E+01	1.7634E+01	2.1829E+01	2.6173E+01	3.0579E+01	3.2720E+01	4.4053E+01	4.2258E+01	3.7956E+01	3.3538E+01
Tc-99m	1.2118E+01	1.5687E+01	1.9448E+01	2.3351E+01	2.7319E+01	2.9252E+01	3.9733E+01	3.8417E+01	3.4750E+01	3.0899E+01
Ru-103	1.1437E+01	1.4804E+01	1.8354E+01	2.2038E+01	2.5785E+01	2.7609E+01	3.7537E+01	3.6361E+01	3.2980E+01	2.9427E+01
Ru-105	6.4324E+00	8.1369E+00	9.8578E+00	1.1567E+01	1.3225E+01	1.4003E+01	1.6299E+01	1.3516E+01	1.0495E+01	8.0168E+00
Ru-106	4.7127E+00	6.1011E+00	7.5645E+00	9.0837E+00	1.0629E+01	1.1382E+01	1.5485E+01	1.5010E+01	1.3623E+01	1.2163E+01
Rh-105	7.4886E+00	9.6907E+00	1.2009E+01	1.4414E+01	1.6856E+01	1.8044E+01	2.4417E+01	2.3494E+01	2.1132E+01	1.8671E+01
Sb-127	1.5622E+01	2.0203E+01	2.5021E+01	3.0013E+01	3.5081E+01	3.7545E+01	5.0701E+01	4.8782E+01	4.3947E+01	3.8948E+01
Sb-129	3.7993E+01	4.8030E+01	5.8151E+01	6.8189E+01	7.7915E+01	8.2474E+01	9.5578E+01	7.8918E+01	6.1013E+01	4.6403E+01
Te-127	1.5590E+01	2.0173E+01	2.5000E+01	3.0007E+01	3.5096E+01	3.7572E+01	5.0945E+01	4.9207E+01	4.4494E+01	3.9571E+01
Te-127m	2.1008E+00	2.7197E+00	3.3722E+00	4.0495E+00	4.7386E+00	5.0743E+00	6.9045E+00	6.6938E+00	6.0763E+00	5.4260E+00
Te-129	4.1448E+01	5.2867E+01	6.4554E+01	7.6316E+01	8.7885E+01	9.3360E+01	1.1342E+02	9.7424E+01	7.8094E+01	6.1552E+01
Te-129m	6.9063E+00	8.9413E+00	1.1086E+01	1.3313E+01	1.5579E+01	1.6682E+01	2.2698E+01	2.2000E+01	1.9965E+01	1.7821E+01
Te-131m	2.0441E+01	2.6373E+01	3.2587E+01	3.8999E+01	4.5478E+01	4.8618E+01	6.4638E+01	6.1229E+01	5.4306E+01	4.7384E+01
Te-132	2.0575E+02	2.6602E+02	3.2939E+02	3.9503E+02	4.6164E+02	4.9402E+02	6.6623E+02	6.4014E+02	5.7591E+02	5.0970E+02
I-131	1.1894E+03	1.4208E+03	1.6591E+03	1.9025E+03	2.1467E+03	2.2646E+03	2.8857E+03	2.7792E+03	2.5275E+03	2.2668E+03
I-132	1.4018E+03	1.6471E+03	1.8922E+03	2.1350E+03	2.3711E+03	2.4822E+03	2.6326E+03	2.0633E+03	1.5476E+03	1.1662E+03
I-133	2.3631E+03	2.8103E+03	3.2672E+03	3.7298E+03	4.1899E+03	4.4105E+03	5.4548E+03	5.0992E+03	4.5012E+03	3.9184E+03
I-134	9.5426E+02	1.0143E+03	1.0539E+03	1.0753E+03	1.0796E+03	1.0761E+03	6.2406E+02	2.7356E+02	1.1323E+02	4.6221E+01
I-135	2.0072E+03	2.3619E+03	2.7168E+03	3.0688E+03	3.4110E+03	3.5721E+03	4.1129E+03	3.5793E+03	2.9414E+03	2.3838E+03
Xe-133	1.0762E+04	1.4334E+04	1.8415E+04	2.2999E+04	2.8077E+04	3.0723E+04	6.6520E+04	9.9105E+04	1.2874E+05	1.5568E+05
Xe-135	4.4911E+03	5.9684E+03	7.6495E+03	9.5294E+03	1.1603E+04	1.2680E+04	2.6434E+04	3.7439E+04	4.6053E+04	5.2617E+04
Cs-134	2.8341E+02	3.3469E+02	3.8727E+02	4.4079E+02	4.9433E+02	5.2011E+02	6.5414E+02	6.2795E+02	5.6899E+02	5.0787E+02
Cs-136	7.8684E+01	9.2891E+01	1.0745E+02	1.2226E+02	1.3706E+02	1.4419E+02	1.8095E+02	1.7333E+02	1.5672E+02	1.3958E+02
Cs-137	1.7667E+02	2.0864E+02	2.4142E+02	2.7478E+02	3.0816E+02	3.2423E+02	4.0780E+02	3.9149E+02	3.5474E+02	3.1665E+02
Ba-139	5.6632E+01	6.8048E+01	7.8308E+01	8.7278E+01	9.4789E+01	9.7888E+01	8.0548E+01	4.7223E+01	2.5923E+01	1.3999E+01
Ba-140	1.0639E+02	1.3768E+02	1.7065E+02	2.0486E+02	2.3964E+02	2.5657E+02	3.4829E+02	3.3687E+02	3.0507E+02	2.7179E+02
La-140	2.1164E+00	2.9425E+00	3.8948E+00	4.9678E+00	6.1484E+00	6.7563E+00	1.4155E+01	1.9153E+01	2.2290E+01	2.4208E+01
La-141	7.9917E-01	1.0079E+00	1.2174E+00	1.4242E+00	1.6235E+00	1.7165E+00	1.9578E+00	1.5910E+00	1.2106E+00	9.0620E-01
La-142	5.4204E-01	6.5647E-01	7.6144E-01	8.5540E-01	9.3638E-01	9.7072E-01	8.4247E-01	5.2095E-01	3.0162E-01	1.7179E-01
Ce-141	2.4467E+00	3.1674E+00	3.9269E+00	4.7153E+00	5.5173E+00	5.9079E+00	8.0335E+00	7.7822E+00	7.0587E+00	6.2981E+00
Ce-143	2.3455E+00	3.0271E+00	3.7415E+00	4.4790E+00	5.2248E+00	5.5864E+00	7.4428E+00	7.0650E+00	6.2795E+00	5.4905E+00
Ce-144	1.9591E+00	2.5363E+00	3.1446E+00	3.7761E+00	4.4186E+00	4.7315E+00	6.4370E+00	6.2393E+00	5.6627E+00	5.0558E+00
Pr-143	9.3741E-01	1.2139E+00	1.5055E+00	1.8084E+00	2.1167E+00	2.2668E+00	3.0923E+00	3.0063E+00	2.7364E+00	2.4500E+00

Nd-147	3.9919E-01	5.1660E-01	6.4027E-01	7.6857E-01	8.9899E-01	9.6248E-01	1.3061E+00	1.2628E+00	1.1432E+00	1.0181E+00
Np-239	2.8930E+01	3.7385E+01	4.6268E+01	5.5460E+01	6.4779E+01	6.9306E+01	9.3147E+01	8.9195E+01	7.9974E+01	7.0539E+01
Pu-238	9.7861E-03	1.2669E-02	1.5708E-02	1.8863E-02	2.2073E-02	2.3636E-02	3.2160E-02	3.1175E-02	2.8297E-02	2.5267E-02
Pu-239	6.5398E-04	8.4667E-04	1.0498E-03	1.2607E-03	1.4752E-03	1.5797E-03	2.1496E-03	2.0841E-03	1.8920E-03	1.6896E-03
Pu-240	7.0180E-04	9.0857E-04	1.1265E-03	1.3528E-03	1.5829E-03	1.6951E-03	2.3063E-03	2.2357E-03	2.0293E-03	1.8120E-03
Pu-241	3.3684E-01	4.3608E-01	5.4068E-01	6.4928E-01	7.5976E-01	8.1357E-01	1.1069E+00	1.0730E+00	9.7396E-01	8.6966E-01
Am-241	2.0772E-04	2.6892E-04	3.3344E-04	4.0043E-04	4.6858E-04	5.0177E-04	6.8289E-04	6.6218E-04	6.0122E-04	5.3700E-04
Cm-242	5.2034E-02	6.7363E-02	8.3519E-02	1.0029E-01	1.1735E-01	1.2566E-01	1.7095E-01	1.6568E-01	1.5036E-01	1.3424E-01
Cm-244	5.6710E-03	7.3418E-03	9.1030E-03	1.0931E-02	1.2791E-02	1.3697E-02	1.8636E-02	1.8066E-02	1.6398E-02	1.4642E-02

time (hrs)	7.0000E+00	8.0000E+00	1.0000E+01	1.2000E+01	1.4000E+01	1.6000E+01	1.8000E+01	2.0000E+01	2.2000E+01	2.4000E+01
Co-58	9.5463E-02	8.4890E-02	6.7112E-02	5.3055E-02	4.2612E-02	3.5715E-02	3.0032E-02	2.5256E-02	2.1240E-02	1.9921E-02
Co-60	1.1457E-01	1.0192E-01	8.0640E-02	6.3800E-02	5.1282E-02	4.3016E-02	3.6199E-02	3.0466E-02	2.5642E-02	2.4068E-02
Kr-85	1.3311E+03	1.5025E+03	1.8052E+03	2.0612E+03	2.2776E+03	2.4606E+03	2.6153E+03	2.7459E+03	2.8563E+03	2.9495E+03
Kr-85m	9.4934E+03	9.1799E+03	8.0937E+03	6.7818E+03	5.4995E+03	4.3602E+03	3.4009E+03	2.6205E+03	2.0004E+03	1.5159E+03
Kr-87	1.2133E+03	7.9406E+02	3.2071E+02	1.2310E+02	4.5728E+01	1.6607E+01	5.9339E+00	2.0945E+00	7.3242E-01	2.5426E-01
Kr-88	1.4072E+04	1.2444E+04	9.1761E+03	6.4307E+03	4.3615E+03	2.8920E+03	1.8866E+03	1.2158E+03	7.7626E+02	4.9200E+02
Rb-86	4.0047E+00	3.5571E+00	2.8057E+00	2.2130E+00	1.7734E+00	1.4829E+00	1.2441E+00	1.0439E+00	8.7589E-01	8.1963E-01
Sr-89	1.3959E+02	1.2411E+02	9.8088E+01	7.7518E+01	6.2239E+01	5.2149E+01	4.3836E+01	3.6853E+01	3.0982E+01	2.9049E+01
Sr-90	1.5918E+01	1.4161E+01	1.1205E+01	8.8649E+00	7.1258E+00	5.9773E+00	5.0302E+00	4.2337E+00	3.5633E+00	3.3447E+00
Sr-91	1.1425E+02	9.4484E+01	6.4607E+01	4.4176E+01	3.0688E+01	2.2247E+01	1.6180E+01	1.1769E+01	8.5606E+00	6.9445E+00
Sr-92	3.3581E+01	2.3132E+01	1.0973E+01	5.2055E+00	2.5088E+00	1.2617E+00	6.3664E-01	3.2127E-01	1.6212E-01	9.1241E-02
Y-90	1.1208E+00	1.1389E+00	1.1221E+00	1.0588E+00	9.8604E-01	9.3818E-01	8.8099E-01	8.1681E-01	7.4952E-01	7.6053E-01
Y-91	1.8920E+00	1.7027E+00	1.3747E+00	1.1063E+00	9.0206E-01	7.6586E-01	6.5110E-01	5.5272E-01	4.6856E-01	4.4249E-01
Y-92	4.6575E+01	3.8780E+01	2.5352E+01	1.5746E+01	9.6646E+00	6.0605E+00	3.7405E+00	2.2759E+00	1.3694E+00	9.1088E-01
Y-93	1.4023E+00	1.1648E+00	8.0338E-01	5.5410E-01	3.8827E-01	2.8393E-01	2.0830E-01	1.5283E-01	1.1213E-01	9.1756E-02
Zr-95	2.2415E+00	1.9931E+00	1.5756E+00	1.2455E+00	1.0002E+00	8.3827E-01	7.0482E-01	5.9268E-01	4.9838E-01	4.6739E-01
Zr-97	1.7506E+00	1.4947E+00	1.0895E+00	7.9413E-01	5.8807E-01	4.5444E-01	3.5232E-01	2.7318E-01	2.1182E-01	1.8317E-01
Nb-95	2.2599E+00	2.0104E+00	1.5906E+00	1.2584E+00	1.0115E+00	8.4846E-01	7.1401E-01	6.0093E-01	5.0576E-01	4.7472E-01
Mo-99	2.9541E+01	2.6006E+01	2.0149E+01	1.5610E+01	1.2287E+01	1.0092E+01	8.3169E+00	6.8544E+00	5.6492E+00	5.1925E+00
Tc-99m	2.7372E+01	2.4218E+01	1.8926E+01	1.4765E+01	1.1757E+01	9.7874E+00	8.1526E+00	6.7773E+00	5.6246E+00	5.1989E+00
Ru-103	2.6175E+01	2.3269E+01	1.8383E+01	1.4523E+01	1.1657E+01	9.7640E+00	8.2049E+00	6.8956E+00	5.7952E+00	5.4317E+00
Ru-105	6.1047E+00	4.6459E+00	2.6901E+00	1.5576E+00	9.1623E-01	5.6245E-01	3.4639E-01	2.1336E-01	1.3141E-01	9.0272E-02
Ru-106	1.0826E+01	9.6303E+00	7.6185E+00	6.0268E+00	4.8437E+00	4.0624E+00	3.4182E+00	2.8765E+00	2.4207E+00	2.2718E+00
Rh-105	1.6426E+01	1.4427E+01	1.1097E+01	8.5127E+00	6.6211E+00	5.3661E+00	4.3580E+00	3.5367E+00	2.8682E+00	2.5929E+00
Sb-127	3.4410E+01	3.0383E+01	2.3682E+01	1.8458E+01	1.4616E+01	1.2078E+01	1.0013E+01	8.3018E+00	6.8832E+00	6.3648E+00
Sb-129	3.5183E+01	2.6659E+01	1.5303E+01	8.7841E+00	5.1226E+00	3.1174E+00	1.9033E+00	1.1622E+00	7.0967E-01	4.8328E-01
Te-127	3.5078E+01	3.1071E+01	2.4363E+01	1.9093E+01	1.5234E+01	1.2699E+01	1.0611E+01	8.8604E+00	7.3943E+00	6.8784E+00
Te-127m	4.8303E+00	4.2974E+00	3.4007E+00	2.6909E+00	2.1633E+00	1.8148E+00	1.5274E+00	1.2857E+00	1.0822E+00	1.0159E+00
Te-129	4.8431E+01	3.8189E+01	2.4024E+01	1.5419E+01	1.1601E+01	9.0728E+00	6.8715E+00	5.2237E+00	4.0300E+00	3.5252E+00
Te-129m	1.5857E+01	1.4100E+01	1.1144E+01	8.8055E+00	7.0682E+00	5.9202E+00	4.9745E+00	4.1802E+00	3.5125E+00	3.2917E+00
Te-131m	4.1215E+01	3.5828E+01	2.7068E+01	2.0449E+01	1.5695E+01	1.2571E+01	1.0101E+01	8.1179E+00	6.5240E+00	5.8473E+00
Te-132	4.4970E+02	3.9653E+02	3.0823E+02	2.3958E+02	1.8920E+02	1.5592E+02	1.2891E+02	1.0659E+02	8.8137E+01	8.1277E+01
I-131	2.0292E+03	1.8175E+03	1.4629E+03	1.1841E+03	9.7749E+02	8.4058E+02	7.2818E+02	6.3411E+02	5.5530E+02	5.2726E+02
I-132	8.9465E+02	7.0035E+02	4.5470E+02	3.1498E+02	2.3945E+02	1.9637E+02	1.6236E+02	1.3470E+02	1.1200E+02	1.0175E+02
I-133	3.4049E+03	2.9601E+03	2.2449E+03	1.7119E+03	1.3315E+03	1.0788E+03	8.8052E+02	7.2246E+02	5.9611E+02	5.3330E+02
I-134	1.8833E+01	7.6775E+00	1.2802E+00	2.1466E-01	3.6711E-02	6.5402E-03	1.1737E-03	2.1175E-04	3.8417E-05	7.5571E-06
I-135	1.9284E+03	1.5607E+03	1.0258E+03	6.7798E+02	4.5703E+02	3.2093E+02	2.2702E+02	1.6144E+02	1.1545E+02	8.9513E+01
Xe-133	1.8014E+05	2.0234E+05	2.4067E+05	2.7202E+05	2.9750E+05	3.1809E+05	3.3457E+05	3.4762E+05	3.5780E+05	3.6559E+05
Xe-135	5.7439E+04	6.0793E+04	6.4028E+04	6.3886E+04	6.1512E+04	5.7786E+04	5.3333E+04	4.8568E+04	4.3769E+04	3.9121E+04
Cs-134	4.5204E+02	4.0212E+02	3.1814E+02	2.5169E+02	2.0230E+02	1.6968E+02	1.4279E+02	1.2017E+02	1.0113E+02	9.4922E+01
Cs-136	1.2397E+02	1.1004E+02	8.6682E+01	6.8281E+01	5.4644E+01	4.5635E+01	3.8236E+01	3.2040E+01	2.6848E+01	2.5091E+01
Cs-137	2.8185E+02	2.5073E+02	1.9838E+02	1.5696E+02	1.2617E+02	1.0583E+02	8.9063E+01	7.4960E+01	6.3091E+01	5.9220E+01
Ba-139	7.5362E+00	4.0546E+00	1.1734E+00	3.3957E-01	9.9834E-02	3.0630E-02	9.4283E-03	2.9025E-03	8.9351E-04	3.0677E-04
Ba-140	2.4138E+02	2.1425E+02	1.6875E+02	1.3291E+02	1.0635E+02	8.8809E+01	7.4400E+01	6.2336E+01	5.2229E+01	4.8803E+01
La-140	2.5308E+01	2.5793E+01	2.5446E+01	2.3963E+01	2.2236E+01	2.1059E+01	1.9668E+01	1.8126E+01	1.6526E+01	1.6657E+01
La-141	6.7622E-01	5.0430E-01	2.8041E-01	1.5591E-01	8.8073E-02	5.1918E-02	3.0705E-02	1.8161E-02	1.0742E-02	7.0860E-03
La-142	9.7545E-02	5.5354E-02	1.7820E-02	5.7369E-03	1.8763E-03	6.4041E-04	2.1929E-04	7.5098E-05	2.5718E-05	9.8225E-06
Ce-141	5.6019E+00	4.9796E+00	3.9335E+00	3.1070E+00	2.4932E+00	2.0878E+00	1.7539E+00	1.4736E+00	1.2381E+00	1.1601E+00
Ce-143	4.7858E+00	4.1690E+00	3.1629E+00	2.3995E+00	1.8494E+00	1.4875E+00	1.2003E+00	9.6872E-01	7.8179E-01	7.0365E-01
Ce-144	4.4999E+00	4.0028E+00	3.1664E+00	2.5048E+00	2.0130E+00	1.6882E+00	1.4204E+00	1.1953E+00	1.0058E+00	9.4393E-01
Pr-143	2.1865E+00	1.9499E+00	1.5500E+00	1.2316E+00	9.9377E-01	8.3653E-01	7.0622E-01	5.9608E-01	5.0296E-01	4.7316E-01
Nd-147	9.0387E-01	8.0198E-01	6.3121E-01	4.9679E-01	3.9723E-01	3.3146E-01	2.7748E-01	2.3232E-01	1.9451E-01	1.8162E-01
Np-239	6.2025E+01	5.4506E+01	4.2081E+01	3.2487E+01	2.5481E+01	2.0857E+01	1.7127E+01	1.4066E+01	1.1552E+01	1.0580E+01
Pu-238	2.2491E-02	2.0009E-02	1.5831E-02	1.2526E-02	1.0069E-02	8.4459E-03	7.1078E-03	5.9824E-03	5.0352E-03	4.7264E-03
Pu-239	1.5042E-03	1.3383E-03	1.0592E-03	8.3825E-04	6.7397E-04	5.6549E-04	4.7601E-04	4.0073E-04	3.3735E-04	3.1673E-04
Pu-240	1.6129E-03	1.4349E-03	1.1353E-03	8.9824E-04	7.2202E-04	6.0566E-04	5.0970E-04	4.2899E-04	3.6106E-04	3.3892E-04
Pu-241	7.7412E-01	6.8866E-01	5.4488E-01	4.3110E-01	3.4652E-01	2.9067E-01	2.4461E-01	2.0588E-01	1.7328E-01	1.6265E-01
Am-241	4.7815E-04	4.2550E-04	3.3686E-04	2.6668E-04	2.1449E-04	1.8003E-04	1.5159E-04	1.2766E-04	1.0751E-04	1.0098E-04
Cm-242	1.1947E-01	1.0626E-01	8.4046E-02	6.6473E-02	5.3413E-02	4.4789E-02	3.7679E-02	3.1702E-02	2.6673E-02	2.5028E-02
Cm-244	1.3033E-02	1.1594E-02	9.1737E-03	7.2581E-03	5.8341E-03	4.8938E-03	4.1184E-03	3.4663E-03	2.9174E-03	2.7384E-03

time (hrs)	3.2000E+01	4.0000E+01	4.8000E+01	5.6000E+01	6.4000E+01	7.2000E+01	8.0000E+01	8.8000E+01	9.6000E+01	1.2000E+02
Co-58	9.1441E-03	8.4065E-03	7.7285E-03	7.1051E-03	6.5320E-03	6.0052E-03	5.5208E-03	5.0755E-03	4.6661E-03	3.6257E-03
Co-60	1.1083E-02	1.0221E-02	9.4260E-03	8.6930E-03	8.0170E-03	7.3936E-03	6.8186E-03	6.2884E-03	5.7994E-03	4.5489E-03
Kr-85	2.3563E+03	2.0510E+03	1.8936E+03	1.8120E+03	1.7693E+03	1.7467E+03	1.7343E+03	1.7272E+03	1.7228E+03	1.7156E+03
Kr-85m	3.5127E+02	8.8684E+01	2.3748E+01	6.5912E+00	1.8668E+00	5.3453E-01	1.5394E-01	4.4468E-02	1.2865E-02	3.1262E-04
Kr-87	2.5943E-03	2.8841E-05	3.4007E-07	4.1562E-09	5.1834E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	5.5783E+01	6.8911E+00	9.0292E-01	1.2262E-01	1.6993E-02	2.3809E-03	3.3551E-04	4.7422E-05	6.7132E-06	1.9111E-08
Rb-86	3.7281E-01	3.3963E-01	3.0940E-01	2.8187E-01	2.5678E-01	2.3393E-01	2.1311E-01	1.9414E-01	1.7686E-01	1.3372E-01

Sr-89	1.3317E+01	1.2226E+01	1.1225E+01	1.0307E+01	9.4628E+00	8.6882E+00	7.9769E+00	7.3239E+00	6.7244E+00	5.2044E+00
Sr-90	1.5403E+00	1.4207E+00	1.3103E+00	1.2085E+00	1.1147E+00	1.0281E+00	9.4824E-01	8.7459E-01	8.0665E-01	6.3291E-01
Sr-91	1.7840E+00	9.1789E-01	4.7226E-01	2.4299E-01	1.2502E-01	6.4324E-02	3.3095E-02	1.7028E-02	8.7611E-03	1.1933E-03
Sr-92	5.4299E-03	6.4720E-04	7.7141E-05	9.1945E-06	1.0959E-06	1.3062E-07	1.5569E-08	1.8557E-09	2.2118E-10	0.0000E+00
Y-90	4.4971E-01	4.9891E-01	5.3132E-01	5.5024E-01	5.5841E-01	5.5809E-01	5.5116E-01	5.3915E-01	5.2332E-01	4.6230E-01
Y-91	2.0698E-01	1.9222E-01	1.7766E-01	1.6376E-01	1.5073E-01	1.3862E-01	1.2743E-01	1.1711E-01	1.0761E-01	8.3459E-02
Y-92	9.9653E-02	2.0629E-02	4.1441E-03	8.1850E-04	1.6006E-04	3.1114E-05	6.0263E-06	1.1646E-06	2.2477E-07	1.6096E-09
Y-93	2.4403E-02	1.2999E-02	6.9240E-03	3.6882E-03	1.9646E-03	1.0465E-03	5.5741E-04	2.9691E-04	1.5816E-04	2.3903E-05
Zr-95	2.1447E-01	1.9710E-01	1.8114E-01	1.6647E-01	1.5299E-01	1.4060E-01	1.2922E-01	1.1875E-01	1.0914E-01	8.4714E-02
Zr-97	6.0757E-02	4.0364E-02	2.6816E-02	1.7815E-02	1.1835E-02	7.8628E-03	5.2236E-03	3.4703E-03	2.3055E-03	6.7600E-04
Nb-95	2.1858E-01	2.0157E-01	1.8588E-01	1.7140E-01	1.5805E-01	1.4574E-01	1.3438E-01	1.2390E-01	1.1424E-01	8.9539E-02
Mo-99	2.1986E+00	1.8644E+00	1.5811E+00	1.3408E+00	1.1370E+00	9.6421E-01	8.1767E-01	6.9340E-01	5.8801E-01	3.5860E-01
Tc-99m	2.2312E+00	1.9031E+00	1.6179E+00	1.3735E+00	1.1653E+00	9.8839E-01	8.3825E-01	7.1088E-01	6.0285E-01	3.6765E-01
Ru-103	2.4868E+00	2.2802E+00	2.0908E+00	1.9172E+00	1.7579E+00	1.6119E+00	1.4780E+00	1.3552E+00	1.2427E+00	9.5803E-01
Ru-105	1.1924E-02	3.1543E-03	8.3446E-04	2.2075E-04	5.8399E-05	1.5449E-05	4.0869E-06	1.0812E-06	2.8602E-07	5.2953E-09
Ru-106	1.0456E+00	9.6378E-01	8.8838E-01	8.1888E-01	7.5482E-01	6.9577E-01	6.4134E-01	5.9117E-01	5.4492E-01	4.2677E-01
Rh-105	1.0242E+00	8.0847E-01	6.3770E-01	5.0287E-01	3.9652E-01	3.1265E-01	2.4652E-01	1.9437E-01	1.5326E-01	7.5126E-02
Sb-127	2.7604E+00	2.3978E+00	2.0828E+00	1.8091E+00	1.5715E+00	1.3650E+00	1.1857E+00	1.0299E+00	8.9460E-01	5.8630E-01
Sb-129	6.1658E-02	1.5755E-02	4.0258E-03	1.0287E-03	2.6286E-04	6.7166E-05	1.7163E-05	4.3854E-06	1.1206E-06	1.8696E-08
Te-127	3.0430E+00	2.6852E+00	2.3644E+00	2.0797E+00	1.8287E+00	1.6080E+00	1.4143E+00	1.2443E+00	1.0954E+00	7.4976E-01
Te-127m	4.6795E-01	4.3164E-01	3.9809E-01	3.6711E-01	3.3851E-01	3.1210E-01	2.8772E-01	2.6522E-01	2.4446E-01	1.9133E-01
Te-129	1.3888E+00	1.2149E+00	1.0982E+00	1.0023E+00	9.1714E-01	8.3988E-01	7.6929E-01	7.0467E-01	6.4549E-01	4.9615E-01
Te-129m	1.5057E+00	1.3793E+00	1.2635E+00	1.1574E+00	1.0602E+00	9.7117E-01	8.8962E-01	8.1492E-01	7.4649E-01	5.7378E-01
Te-131m	2.2384E+00	1.7161E+00	1.3157E+00	1.0088E+00	7.7341E-01	5.9297E-01	4.5462E-01	3.4855E-01	2.6723E-01	1.2043E-01
Te-132	3.4868E+01	2.9959E+01	2.5741E+01	2.2117E+01	1.9003E+01	1.6327E+01	1.4029E+01	1.2054E+01	1.0357E+01	6.5691E+00
I-131	2.4204E+02	2.2275E+02	2.0527E+02	1.8944E+02	1.7509E+02	1.6207E+02	1.5025E+02	1.3951E+02	1.2974E+02	1.0535E+02
I-132	4.2451E+01	3.6403E+01	3.1299E+01	2.6918E+01	2.3151E+01	1.9912E+01	1.7127E+01	1.4731E+01	1.2671E+01	8.0630E+00
I-133	1.9294E+02	1.3995E+02	1.0165E+02	7.3945E+01	5.3871E+01	3.9306E+01	2.8723E+01	2.1023E+01	1.5411E+01	6.1298E+00
I-134	6.3909E-09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-135	1.8272E+01	7.4779E+00	3.0646E+00	1.2578E+00	5.1702E-01	2.1284E-01	8.7758E-02	3.6240E-02	1.4990E-02	1.0709E-03
Xe-133	2.7975E+05	2.3326E+05	2.0627E+05	1.8903E+05	1.7674E+05	1.6704E+05	1.5877E+05	1.5136E+05	1.4450E+05	1.2615E+05
Xe-135	1.7288E+04	8.3369E+03	4.2553E+03	2.2436E+03	1.2031E+03	6.5049E+02	3.5302E+02	1.9187E+02	1.0433E+02	1.6763E+01
Cs-134	4.3701E+01	4.0295E+01	3.7154E+01	3.4259E+01	3.1589E+01	2.9127E+01	2.6857E+01	2.4764E+01	2.2834E+01	1.7900E+01
Cs-136	1.1353E+01	1.0288E+01	9.3234E+00	8.4490E+00	7.6567E+00	6.9387E+00	6.2880E+00	5.6983E+00	5.1639E+00	3.8431E+00
Cs-137	2.7272E+01	2.5154E+01	2.3200E+01	2.1398E+01	1.9736E+01	1.8203E+01	1.6789E+01	1.5485E+01	1.4282E+01	1.1206E+01
Ba-139	2.5284E-06	4.1738E-08	6.8899E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	2.2071E+01	1.9991E+01	1.8108E+01	1.6401E+01	1.4856E+01	1.3456E+01	1.2188E+01	1.1040E+01	9.9994E+00	7.4307E+00
La-140	9.5733E+00	1.0311E+01	1.0657E+01	1.0712E+01	1.0554E+01	1.0244E+01	9.8284E+00	9.3442E+00	8.8189E+00	7.1798E+00
La-141	7.9593E-04	1.7905E-04	4.0281E-05	9.0616E-06	2.0385E-06	4.5859E-07	1.0317E-07	2.3209E-08	5.2211E-09	5.9442E-11
La-142	1.2399E-07	3.1345E-09	7.9243E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	5.3050E-01	4.8584E-01	4.4494E-01	4.0748E-01	3.7318E-01	3.4176E-01	3.1299E-01	2.8664E-01	2.6251E-01	2.0163E-01
Ce-143	2.7393E-01	2.1357E-01	1.6652E-01	1.2983E-01	1.0123E-01	7.8926E-02	6.1537E-02	4.7979E-02	3.7409E-02	1.7731E-02
Ce-144	4.3435E-01	4.0029E-01	3.6891E-01	3.3999E-01	3.1333E-01	2.8877E-01	2.6613E-01	2.4526E-01	2.2603E-01	1.7693E-01
Pr-143	2.1926E-01	2.0275E-01	1.8692E-01	1.7188E-01	1.5772E-01	1.4447E-01	1.3213E-01	1.2069E-01	1.1013E-01	8.3256E-02
Nd-147	8.1900E-02	7.3967E-02	6.6803E-02	6.0332E-02	5.4488E-02	4.9211E-02	4.4444E-02	4.0139E-02	3.6252E-02	2.6705E-02
Np-239	4.4172E+00	3.6935E+00	3.0883E+00	2.5823E+00	2.1592E+00	1.8054E+00	1.5096E+00	1.2623E+00	1.0554E+00	6.1701E-01
Pu-238	2.1767E-03	2.0077E-03	1.8519E-03	1.7081E-03	1.5755E-03	1.4532E-03	1.3404E-03	1.2364E-03	1.1404E-03	8.9491E-04
Pu-239	1.4598E-04	1.3475E-04	1.2437E-04	1.1479E-04	1.0593E-04	9.7756E-05	9.0207E-05	8.3237E-05	7.6802E-05	6.0320E-05
Pu-240	1.5608E-04	1.4396E-04	1.3278E-04	1.2247E-04	1.1296E-04	1.0419E-04	9.6099E-05	8.8636E-05	8.1754E-05	6.4149E-05
Pu-241	7.4900E-02	6.9081E-02	6.3714E-02	5.8764E-02	5.4198E-02	4.9987E-02	4.6104E-02	4.2522E-02	3.9218E-02	3.0769E-02
Am-241	4.6612E-05	4.3094E-05	3.9841E-05	3.6833E-05	3.4052E-05	3.1481E-05	2.9104E-05	2.6906E-05	2.4874E-05	1.9653E-05
Cm-242	1.1510E-02	1.0601E-02	9.7637E-03	8.9928E-03	8.2827E-03	7.6287E-03	7.0263E-03	6.4715E-03	5.9605E-03	4.6571E-03
Cm-244	1.2611E-03	1.1631E-03	1.0727E-03	9.8941E-04	9.1255E-04	8.4165E-04	7.7627E-04	7.1597E-04	6.6035E-04	5.1810E-04
time (hrs)	1.4400E+02	1.6800E+02	1.9200E+02	2.1600E+02	2.4000E+02	2.8800E+02	3.3600E+02	3.8400E+02	4.3200E+02	4.8000E+02
Co-58	2.8172E-03	2.1890E-03	1.7009E-03	1.3216E-03	1.0269E-03	6.2003E-04	3.7435E-04	2.2602E-04	1.3646E-04	8.2388E-05
Co-60	3.5681E-03	2.7988E-03	2.1953E-03	1.7219E-03	1.3507E-03	8.3100E-04	5.1128E-04	3.1456E-04	1.9354E-04	1.1907E-04
Kr-85	1.7107E+03	1.7061E+03	1.7015E+03	1.6969E+03	1.6924E+03	1.6834E+03	1.6744E+03	1.6654E+03	1.6565E+03	1.6477E+03
Kr-85m	7.6063E-06	1.8510E-07	4.5047E-09	1.0963E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	5.4473E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	1.0110E-01	7.6433E-02	5.7788E-02	4.3690E-02	3.3032E-02	1.8882E-02	1.0793E-02	6.1694E-03	3.5265E-03	2.0158E-03
Sr-89	4.0281E+00	3.1176E+00	2.4129E+00	1.8675E+00	1.4454E+00	8.6583E-01	5.1865E-01	3.1069E-01	1.8611E-01	1.1148E-01
Sr-90	4.9659E-01	3.8963E-01	3.0571E-01	2.3986E-01	1.8820E-01	1.1586E-01	7.1325E-02	4.3909E-02	2.7031E-02	1.6641E-02
Sr-91	1.6253E-04	2.2137E-05	3.0151E-06	4.1067E-07	5.5934E-08	1.0377E-09	1.9250E-11	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	3.9401E-01	3.2807E-01	2.6886E-01	2.1788E-01	1.7514E-01	1.1135E-01	6.9836E-02	4.3465E-02	2.6931E-02	1.6642E-02
Y-91	6.4718E-02	5.0184E-02	3.8914E-02	3.0175E-02	2.3398E-02	1.4069E-02	8.4594E-03	5.0865E-03	3.0584E-03	1.8390E-03
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	3.6126E-06	5.4598E-07	8.2517E-08	1.2471E-08	1.8848E-09	4.3053E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	6.5756E-02	5.1040E-02	3.9618E-02	3.0752E-02	2.3870E-02	1.4382E-02	8.6649E-03	5.2206E-03	3.1454E-03	1.8951E-03
Zr-97	1.9821E-04	5.8119E-05	1.7041E-05	4.9967E-06	1.4651E-06	1.2596E-07	1.0830E-08	9.3108E-10	8.0049E-11	6.8822E-12
Nb-95	7.0165E-02	5.4973E-02	4.3063E-02	3.3728E-02	2.6413E-02	1.6190E-02	9.9182E-03	6.0726E-03	3.7161E-03	2.2729E-03
Mo-99	2.1869E-01	1.3337E-01	8.1332E-02	4.9600E-02	3.0248E-02	1.1249E-02	4.1838E-03	1.5560E-03	5.7868E-04	2.1522E-04
Tc-99m	2.2421E-01	1.3673E-01	8.3385E-02	5.0852E-02	3.1012E-02	1.1533E-02	4.2894E-03	1.5953E-03	5.9329E-04	2.2065E-04
Ru-103	7.3858E-01	5.6940E-01	4.3897E-01	3.3842E-01	2.6090E-01	1.5507E-01	9.2163E-02	5.4777E-02	3.2556E-02	1.9350E-02
Ru-105	9.8036E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	3.3424E-01	2.6178E-01	2.0502E-01	1.6057E-01	1.2576E-01	7.7137E-02	4.7314E-02	2.9022E-02	1.7802E-02	1.0919E-02
Rh-105	3.6826E-02	1.8052E-02	8.8488E-03	4.3376E-03	2.1262E-03	5.1091E-04	1.2276E-04	2.9499E-05	7.0881E-06	1.7032E-06
Sb-127	3.8425E-01	2.5183E-01	1.6505E-01	1.0817E-01	7.0891E-02	3.0449E-02	1.3079E-02	5.6177E-03	2.4129E-03	1.0364E-03

Sb-129	3.1191E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	5.1615E-01	3.5758E-01	2.4941E-01	1.7519E-01	1.2397E-01	6.3486E-02	3.3493E-02	1.8170E-02	1.0105E-02	5.7385E-03
Te-127m	1.4966E-01	1.1700E-01	9.1433E-02	7.1425E-02	5.5778E-02	3.3992E-02	2.0700E-02	1.2599E-02	7.6658E-03	4.6630E-03
Te-129	3.8136E-01	2.9313E-01	2.2531E-01	1.7319E-01	1.3312E-01	7.8648E-02	4.6466E-02	2.7453E-02	1.6219E-02	9.5825E-03
Te-129m	4.4103E-01	3.3900E-01	2.6057E-01	2.0028E-01	1.5395E-01	9.0953E-02	5.3736E-02	3.1748E-02	1.8757E-02	1.1082E-02
Te-131m	5.4276E-02	2.4461E-02	1.1024E-02	4.9681E-03	2.2390E-03	4.5474E-04	9.2360E-05	1.8759E-05	3.8100E-06	7.7383E-07
Te-132	4.1668E+00	2.6430E+00	1.6765E+00	1.0634E+00	6.7451E-01	2.7138E-01	1.0919E-01	4.3930E-02	1.7675E-02	7.1113E-03
I-131	8.6772E+01	7.2468E+01	6.1322E+01	5.2520E+01	4.5473E+01	3.5034E+01	2.7759E+01	2.2428E+01	1.8358E+01	1.5154E+01
I-132	5.1309E+00	3.2646E+00	2.0768E+00	1.3208E+00	8.3980E-01	3.3919E-01	1.3685E-01	5.5164E-02	2.2222E-02	8.9481E-03
I-133	2.4732E+00	1.0119E+00	4.1945E-01	1.7599E-01	7.4647E-02	1.3802E-02	2.6246E-03	5.0891E-04	9.9971E-05	1.9805E-05
I-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-135	7.7607E-05	5.7029E-06	4.2462E-07	3.2000E-08	2.4379E-09	1.4542E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-133	1.1025E+05	9.6364E+04	8.4226E+04	7.3616E+04	6.4343E+04	4.9152E+04	3.7548E+04	2.8683E+04	2.1911E+04	1.6738E+04
Xe-135	2.6881E+00	4.3056E-01	6.8923E-02	1.1030E-02	1.7650E-03	4.5186E-05	1.1568E-06	2.9613E-08	7.5807E-10	1.9406E-11
Cs-134	1.4033E+01	1.1001E+01	8.6241E+00	6.7608E+00	5.3001E+00	3.2572E+00	2.0018E+00	1.2302E+00	7.5605E-01	4.6464E-01
Cs-136	2.8602E+00	2.1286E+00	1.5842E+00	1.1790E+00	8.7742E-01	4.8598E-01	2.6917E-01	1.4908E-01	8.2573E-02	4.5735E-02
Cs-137	8.7925E+00	6.8987E+00	5.4128E+00	4.2470E+00	3.3322E+00	2.0514E+00	1.2629E+00	7.7745E-01	4.7861E-01	2.9464E-01
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	5.5218E+00	4.1033E+00	3.0492E+00	2.2659E+00	1.6838E+00	9.2985E-01	5.1348E-01	2.8355E-01	1.5658E-01	8.6467E-02
La-140	5.6606E+00	4.3753E+00	3.3390E+00	2.5267E+00	1.9013E+00	1.0654E+00	5.9250E-01	3.2831E-01	1.8160E-01	1.0037E-01
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	1.5488E-01	1.1896E-01	9.1375E-02	7.0186E-02	5.3910E-02	3.1806E-02	1.8765E-02	1.1071E-02	6.5320E-03	3.8538E-03
Ce-143	8.4038E-03	3.9832E-03	1.8879E-03	8.9482E-04	4.2412E-04	9.5278E-05	2.1404E-05	4.8084E-06	1.0802E-06	2.4267E-07
Ce-144	1.3849E-01	1.0840E-01	8.4854E-02	6.6419E-02	5.1990E-02	3.1854E-02	1.9517E-02	1.1958E-02	7.3269E-03	4.4892E-03
Pr-143	6.2617E-02	4.6942E-02	3.5121E-02	2.6243E-02	1.9593E-02	1.0907E-02	6.0663E-03	3.3728E-03	1.8750E-03	1.0423E-03
Nd-147	1.9673E-02	1.4492E-02	1.0676E-02	7.8644E-03	5.7934E-03	3.1439E-03	1.7061E-03	9.2584E-04	5.0242E-04	2.7265E-04
Np-239	3.6070E-01	2.1087E-01	1.2327E-01	7.2065E-02	4.2129E-02	1.4398E-02	4.9205E-03	1.6816E-03	5.7470E-04	1.9641E-04
Pu-238	7.0227E-04	5.5109E-04	4.3246E-04	3.3937E-04	2.6631E-04	1.6400E-04	1.0099E-04	6.2190E-05	3.8297E-05	2.3583E-05
Pu-239	4.7364E-05	3.7184E-05	2.9189E-05	2.2910E-05	1.7980E-05	1.1074E-05	6.8190E-06	4.1988E-06	2.5853E-06	1.5918E-06
Pu-240	5.0336E-05	3.9497E-05	3.0992E-05	2.4318E-05	1.9082E-05	1.1748E-05	7.2335E-06	4.4537E-06	2.7421E-06	1.6883E-06
Pu-241	2.4140E-02	1.8939E-02	1.4859E-02	1.1658E-02	9.1463E-03	5.6299E-03	3.4654E-03	2.1331E-03	1.3130E-03	8.0818E-04
Am-241	1.5527E-05	1.2266E-05	9.6902E-06	7.6547E-06	6.0465E-06	3.7722E-06	2.3530E-06	1.4674E-06	9.1502E-07	5.7047E-07
Cm-242	3.6388E-03	2.8431E-03	2.2214E-03	1.7356E-03	1.3561E-03	8.2787E-04	5.0539E-04	3.0853E-04	1.8835E-04	1.1498E-04
Cm-244	4.0649E-04	3.1892E-04	2.5022E-04	1.9632E-04	1.5403E-04	9.4815E-05	5.8365E-05	3.5928E-05	2.2116E-05	1.3614E-05

time (hrs)	5.2800E+02	5.7600E+02	6.2400E+02	6.7200E+02	7.2000E+02	no data	no data	no data	no data	no
Co-58	4.9743E-05	3.0033E-05	1.8132E-05	1.0948E-05	6.6097E-06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	7.3261E-05	4.5074E-05	2.7732E-05	1.7062E-05	1.0498E-05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	1.6389E+03	1.6301E+03	1.6214E+03	1.6128E+03	1.6042E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	1.1523E-03	6.5865E-04	3.7649E-04	2.1521E-04	1.2302E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	6.6782E-02	4.0004E-02	2.3963E-02	1.4355E-02	8.5988E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	1.0244E-02	6.3066E-03	3.8824E-03	2.3901E-03	1.4714E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	1.0268E-02	6.3299E-03	3.8999E-03	2.4020E-03	1.4791E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	1.1057E-03	6.6485E-04	3.9976E-04	2.4037E-04	1.4453E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	1.1418E-03	6.8793E-04	4.1448E-04	2.4972E-04	1.5046E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	1.3895E-03	8.4905E-04	5.1859E-04	3.1661E-04	1.9323E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	8.0041E-05	2.9768E-05	1.1071E-05	4.1174E-06	1.5313E-06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	8.2062E-05	3.0519E-05	1.1350E-05	4.2213E-06	1.5700E-06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	1.1500E-02	6.8353E-03	4.0625E-03	2.4145E-03	1.4351E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	6.6976E-03	4.1082E-03	2.5199E-03	1.5457E-03	9.4809E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	4.0925E-07	9.8337E-08	2.3629E-08	5.6777E-09	1.3643E-09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	4.4516E-04	1.9121E-04	8.2129E-05	3.5276E-05	1.5152E-05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	3.3149E-03	1.9406E-03	1.1477E-03	6.8394E-04	4.0987E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	2.8359E-03	1.7245E-03	1.0486E-03	6.3756E-04	3.8762E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	5.6615E-03	3.3449E-03	1.9762E-03	1.1675E-03	6.8980E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	6.5473E-03	3.8682E-03	2.2854E-03	1.3502E-03	7.9773E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	1.5717E-07	3.1921E-08	6.4834E-09	1.3168E-09	2.6745E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	2.8611E-03	1.1511E-03	4.6315E-04	1.8634E-04	7.4973E-05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	1.2576E+01	1.0473E+01	8.7396E+00	7.3029E+00	6.1074E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-132	3.6020E-03	1.4497E-03	5.8338E-04	2.3475E-04	9.4454E-05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-133	3.9446E-06	7.8832E-07	1.5788E-07	3.1662E-08	6.3547E-09	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-133	1.2786E+04	9.7676E+03	7.4616E+03	5.7000E+03	4.3542E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	2.8555E-01	1.7549E-01	1.0785E-01	6.6281E-02	4.0734E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	2.5331E-02	1.4030E-02	7.7709E-03	4.3041E-03	2.3839E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	1.8139E-01	1.1167E-01	6.8744E-02	4.2320E-02	2.6053E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Ba-140	4.7749E-02	2.6368E-02	1.4561E-02	8.0406E-03	4.4402E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	5.5445E-02	3.0624E-02	1.6913E-02	9.3399E-03	5.1577E-03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	2.2737E-03	1.3414E-03	7.9143E-04	4.6694E-04	2.7549E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	5.4516E-08	1.2247E-08	2.7513E-09	6.1807E-10	1.3885E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	2.7505E-03	1.6853E-03	1.0326E-03	6.3265E-04	3.8763E-04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	5.7938E-04	3.2206E-04	1.7902E-04	9.9510E-05	5.5314E-05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	1.4796E-04	8.0293E-05	4.3572E-05	2.3645E-05	1.2832E-05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	6.7123E-05	2.2940E-05	7.8398E-06	2.6793E-06	9.1566E-07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	1.4523E-05	8.9430E-06	5.5071E-06	3.3912E-06	2.0883E-06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	9.8009E-07	6.0344E-07	3.7154E-07	2.2876E-07	1.4085E-07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	1.0395E-06	6.4002E-07	3.9406E-07	2.4262E-07	1.4938E-07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	4.9746E-04	3.0621E-04	1.8848E-04	1.1602E-04	7.1412E-05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	3.5560E-07	2.2163E-07	1.3811E-07	8.6053E-08	5.3609E-08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	7.0195E-05	4.2852E-05	2.6160E-05	1.5970E-05	9.7495E-06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	8.3803E-06	5.1586E-06	3.1755E-06	1.9547E-06	1.2033E-06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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INTEGRATED SOURCE IN CURIE-HOUR S

	1.7000E-03	3.3000E-03	5.0000E-03	6.7000E-03	8.3000E-03	1.0000E-02	1.1700E-02	1.3300E-02	1.5000E-02	1.6700E-02
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	3.4242E-08	1.9537E-07	6.4048E-07	1.4964E-06	2.8175E-06	4.9057E-06	7.8153E-06	1.1456E-05	1.6419E-05	2.2613E-05
Kr-85m	7.2118E-07	4.1141E-06	1.3485E-05	3.1499E-05	5.9296E-05	1.0323E-04	1.6442E-04	2.4096E-04	3.4528E-04	4.7547E-04
Kr-87	1.4158E-06	8.0730E-06	2.6448E-05	6.1753E-05	1.1620E-04	2.0218E-04	3.2187E-04	4.7149E-04	6.7529E-04	9.2944E-04
Kr-88	1.9977E-06	1.1395E-05	3.7344E-05	8.7224E-05	1.6418E-04	2.8578E-04	4.5514E-04	6.6695E-04	9.5559E-04	1.3157E-03
Rb-86	5.6560E-09	3.2270E-08	1.0579E-07	2.4716E-07	4.6535E-07	8.1025E-07	1.2908E-06	1.8920E-06	2.7117E-06	3.7348E-06
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	2.3316E-06	1.3304E-05	4.3611E-05	1.0189E-04	1.9184E-04	3.3402E-04	5.3212E-04	7.7997E-04	1.1179E-03	1.5396E-03
I-132	3.3663E-06	1.9203E-05	6.2933E-05	1.4699E-04	2.7669E-04	4.8163E-04	7.6709E-04	1.1241E-03	1.6107E-03	2.2177E-03
I-133	4.8209E-06	2.7506E-05	9.0164E-05	2.1065E-04	3.9659E-04	6.9050E-04	1.1000E-03	1.6123E-03	2.3107E-03	3.1823E-03
I-134	5.3426E-06	3.0457E-05	9.9748E-05	2.3283E-04	4.3795E-04	7.6178E-04	1.2124E-03	1.7754E-03	2.5420E-03	3.4976E-03
I-135	4.5046E-06	2.5699E-05	8.4234E-05	1.9677E-04	3.7045E-04	6.4492E-04	1.0273E-03	1.5056E-03	2.1575E-03	2.9711E-03
Xe-133	4.7648E-06	2.7187E-05	8.9125E-05	2.0823E-04	3.9206E-04	6.8264E-04	1.0875E-03	1.5941E-03	2.2847E-03	3.1467E-03
Xe-135	1.9336E-06	1.1033E-05	3.6173E-05	8.4522E-05	1.5916E-04	2.7714E-04	4.4156E-04	6.4730E-04	9.2781E-04	1.2780E-03
Cs-134	6.3172E-07	3.6044E-06	1.1816E-05	2.7606E-05	5.1977E-05	9.0500E-05	1.4417E-04	2.1133E-04	3.0288E-04	4.1715E-04
Cs-136	1.7589E-07	1.0036E-06	3.2899E-06	7.6862E-06	1.4472E-05	2.5197E-05	4.0142E-05	5.8839E-05	8.4329E-05	1.1614E-04
Cs-137	3.9378E-07	2.2468E-06	7.3654E-06	1.7208E-05	3.2400E-05	5.6413E-05	8.9872E-05	1.3173E-04	1.8880E-04	2.6003E-04
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
	1.6700E-02	2.5000E-02	5.0000E-02	7.5000E-02	1.0000E-01	1.2500E-01	1.5000E-01	1.7500E-01	2.0000E-01	2.2500E-01
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	2.2613E-05	7.6954E-05	6.4241E-04	2.1115E-03	4.9344E-03	9.5603E-03	1.6437E-02	2.6012E-02	3.8730E-02	5.5036E-02
Kr-85m	4.7547E-04	1.6163E-03	1.3446E-02	4.4075E-02	1.0271E-01	1.9845E-01	3.4022E-01	5.3686E-01	7.9707E-01	1.1294E+00
Kr-87	9.2944E-04	3.1509E-03	2.5985E-02	8.4592E-02	1.9577E-01	3.7555E-01	6.3927E-01	1.0015E+00	1.4763E+00	2.0769E+00
Kr-88	1.3157E-03	4.4699E-03	3.7111E-02	1.2145E-01	2.8259E-01	5.4509E-01	9.3299E-01	1.4698E+00	2.1786E+00	3.0818E+00
Rb-86	3.7348E-06	1.2648E-05	1.0384E-04	3.3758E-04	7.8068E-04	1.4970E-03	2.5475E-03	3.9905E-03	5.8816E-03	8.2740E-03
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	1.5396E-03	5.2139E-03	4.2807E-02	1.3916E-01	3.2182E-01	6.1710E-01	1.0501E+00	1.6449E+00	2.4245E+00	3.4107E+00
I-132	2.2177E-03	7.4997E-03	6.1272E-02	1.9840E-01	4.5703E-01	8.7301E-01	1.4800E+00	2.3097E+00	3.3917E+00	4.7539E+00
I-133	3.1823E-03	1.0775E-02	8.8403E-02	2.8723E-01	6.6390E-01	1.2724E+00	2.1640E+00	3.3880E+00	4.9908E+00	7.0170E+00
I-134	3.4976E-03	1.1780E-02	9.5040E-02	3.0473E-01	6.9489E-01	1.3137E+00	2.2038E+00	3.4030E+00	4.9444E+00	6.8565E+00
I-135	2.9711E-03	1.0055E-02	8.2366E-02	2.6729E-01	6.1700E-01	1.1809E+00	2.0059E+00	3.1363E+00	4.6140E+00	6.4787E+00
Xe-133	3.1467E-03	1.0709E-02	8.9394E-02	2.9382E-01	6.8663E-01	1.3303E+00	2.2872E+00	3.6195E+00	5.3891E+00	7.6581E+00
Xe-135	1.2780E-03	4.3513E-03	3.6383E-02	1.1973E-01	2.8015E-01	5.4345E-01	9.3550E-01	1.4822E+00	2.2095E+00	3.1435E+00
Cs-134	4.1715E-04	1.4127E-03	1.1599E-02	3.7707E-02	8.7203E-02	1.6722E-01	2.8458E-01	4.4578E-01	6.5706E-01	9.2437E-01
Cs-136	1.1614E-04	3.9332E-04	3.2293E-03	1.0498E-02	2.4277E-02	4.6551E-02	7.9217E-02	1.2409E-01	1.8289E-01	2.5728E-01
Cs-137	2.6003E-04	8.8060E-04	7.2302E-03	2.3505E-02	5.4359E-02	1.0424E-01	1.7739E-01	2.7788E-01	4.0958E-01	5.7621E-01
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
	2.5000E-01	2.5830E-01	2.9660E-01	4.4490E-01	5.0000E-01	5.9320E-01	7.4150E-01	8.8980E-01	1.0381E+00	1.1864E+00
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	3.5831E-05	4.4423E-04	1.6391E-03	3.9686E-03	7.6980E-03
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	4.2894E-05	5.3183E-04	1.9624E-03	4.7516E-03	9.2170E-03
Kr-85	7.5374E-02	8.3083E-02	1.2564E-01	4.2940E-01	6.0589E-01	1.0374E+00	2.3702E+00	4.9733E+00	9.4266E+00	1.6302E+01
Kr-85m	1.5423E+00	1.6985E+00	2.5571E+00	8.5734E+00	1.2028E+01	2.0368E+01	4.5585E+01	9.3761E+01	1.7436E+02	2.9604E+02
Kr-87	2.8158E+00	3.0935E+00	4.6055E+00	1.4725E+01	2.0362E+01	3.3545E+01	7.1342E+01	1.3962E+02	2.4763E+02	4.0170E+02
Kr-88	4.2016E+00	4.6245E+00	6.9443E+00	2.3029E+01	3.2201E+01	5.4184E+01	1.1985E+02	2.4369E+02	4.4824E+02	7.5308E+02
Rb-86	1.1218E-02	1.2325E-02	1.8355E-02	5.8852E-02	8.1476E-02	1.3115E-01	2.4488E-01	4.0776E-01	6.2617E-01	9.0494E-01
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	5.2448E-02	6.5025E-01	2.3992E+00	5.8090E+00	1.1268E+01
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	5.9592E-03	7.3887E-02	2.7263E-01	6.6014E-01	1.2805E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	6.8255E-02	8.3907E-01	3.0738E+00	7.3873E+00	1.4222E+01
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	6.4723E-02	7.7884E-01	2.8024E+00	6.6109E+00	1.2489E+01
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	6.7300E-05	9.0120E-04	3.5150E-03	8.9708E-03	1.8288E-02
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	6.4779E-04	8.0457E-03	2.9727E-02	7.2076E-02	1.4000E-01
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.9329E-03	3.6370E-02	1.6739E-01	4.8138E-01	1.0721E+00

Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	8.1485E-04	1.0022E-02	3.6729E-02	8.8312E-02	1.7009E-01
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	8.4155E-04	1.0434E-02	3.8496E-02	9.3207E-02	1.8079E-01
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	8.5227E-04	1.0516E-02	3.8646E-02	9.3183E-02	1.7999E-01
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	8.4607E-04	1.0490E-02	3.8708E-02	9.3724E-02	1.8180E-01
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.1829E-02	1.4648E-01	5.3992E-01	1.3059E+00	2.5305E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.0427E-02	1.2929E-01	4.7704E-01	1.1551E+00	2.2406E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	9.8452E-03	1.2205E-01	4.5032E-01	1.0903E+00	2.1148E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	6.2132E-03	7.5642E-02	2.7485E-01	6.5496E-01	1.2501E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	4.0549E-03	5.0274E-02	1.8550E-01	4.4917E-01	8.7128E-01
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	6.4513E-03	7.9978E-02	2.9507E-01	7.1436E-01	1.3854E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.3516E-02	1.6743E-01	6.1734E-01	1.4936E+00	2.8951E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	3.6818E-02	4.4800E-01	1.6271E+00	3.8757E+00	7.3941E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.3444E-02	1.6663E-01	6.1464E-01	1.4878E+00	2.8851E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.8073E-03	2.2408E-02	8.2682E-02	2.0020E-01	3.8836E-01
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	3.8128E-02	4.6819E-01	1.7130E+00	4.1103E+00	7.8978E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	5.9410E-03	7.3662E-02	2.7181E-01	6.5816E-01	1.2767E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.7891E-02	2.2122E-01	8.1440E-01	1.9673E+00	3.8070E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.7819E-01	2.2070E+00	8.1362E+00	1.9683E+01	3.8145E+01
I-131	4.6245E+00	5.0808E+00	7.5660E+00	2.4259E+01	3.3584E+01	5.4183E+01	1.0249E+02	1.7381E+02	2.7199E+02	3.9995E+02
I-132	6.4224E+00	7.0477E+00	1.0437E+01	3.2690E+01	4.4931E+01	7.1607E+01	1.3303E+02	2.2209E+02	3.4264E+02	4.9714E+02
I-133	9.5090E+00	1.0445E+01	1.5542E+01	4.9651E+01	6.8660E+01	1.1056E+02	2.0842E+02	3.5228E+02	5.4947E+02	8.0533E+02
I-134	9.1644E+00	1.0021E+01	1.4596E+01	4.2664E+01	5.7384E+01	8.7965E+01	1.5279E+02	2.3815E+02	3.4291E+02	4.6456E+02
I-135	8.7680E+00	9.6272E+00	1.4295E+01	4.5278E+01	6.2448E+01	1.0008E+02	1.8717E+02	3.1387E+02	4.8572E+02	7.0639E+02
Xe-133	1.0488E+01	1.1561E+01	1.7482E+01	5.9743E+01	8.4295E+01	1.4432E+02	3.2966E+02	6.9154E+02	1.3103E+03	2.2653E+03
Xe-135	4.3101E+00	4.7526E+00	7.1998E+00	2.4769E+01	3.5016E+01	6.0149E+01	1.3794E+02	2.8981E+02	5.4920E+02	9.4885E+02
Cs-134	1.2534E+00	1.3771E+00	2.0508E+00	6.5767E+00	9.1054E+00	1.4658E+01	2.7374E+01	4.5589E+01	7.0020E+01	1.0121E+02
Cs-136	3.4884E-01	3.8325E-01	5.7072E-01	1.8298E+00	2.5331E+00	4.0774E+00	7.6127E+00	1.2675E+01	1.9463E+01	2.8126E+01
Cs-137	7.8129E-01	8.5839E-01	1.2783E+00	4.0996E+00	5.6759E+00	9.1373E+00	1.7064E+01	2.8418E+01	4.3648E+01	6.3091E+01
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	7.0743E-02	8.2727E-01	2.9060E+00	6.6871E+00	1.2321E+01
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	9.1686E-02	1.1365E+00	4.1924E+00	1.0149E+01	1.9682E+01
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.0865E-03	1.5103E-02	6.0355E-02	1.5735E-01	3.2682E-01
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	7.8367E-04	9.5176E-03	3.4514E-02	8.2077E-02	1.5633E-01
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	6.5086E-04	7.6583E-03	2.7040E-02	6.2556E-02	1.1588E-01
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.1057E-03	2.6106E-02	9.6323E-02	2.3322E-01	4.5239E-01
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.0497E-03	2.5350E-02	9.3343E-02	2.2553E-01	4.3653E-01
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.6857E-03	2.0900E-02	7.7115E-02	1.8672E-01	3.6220E-01
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	8.0529E-04	9.9874E-03	3.6859E-02	8.9267E-02	1.7320E-01
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	3.4412E-04	4.2653E-03	1.5734E-02	3.8087E-02	7.3861E-02
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.5117E-02	3.1097E-01	1.1460E+00	2.7715E+00	5.3692E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	8.4197E-06	1.0439E-04	3.8518E-04	9.3267E-04	1.8092E-03
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	5.6260E-07	6.9756E-06	2.5739E-05	6.2324E-05	1.2090E-04
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	6.0380E-07	7.4863E-06	2.7623E-05	6.6887E-05	1.2975E-04
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	2.8981E-04	3.5932E-03	1.3258E-02	3.2103E-02	6.2273E-02
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	1.7868E-07	2.2155E-06	8.1748E-06	1.9795E-05	3.8399E-05
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	4.4775E-05	5.5513E-04	2.0483E-03	4.9596E-03	9.6203E-03
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	4.8790E-06	6.0494E-05	2.2321E-04	5.4049E-04	1.0484E-03
	1.3347E+00	1.4830E+00	1.6313E+00	1.7796E+00	1.9279E+00	2.0000E+00	3.0000E+00	4.0000E+00	5.0000E+00	6.0000E+00
Co-58	1.3028E-02	2.0112E-02	2.9063E-02	3.9967E-02	5.2878E-02	5.9887E-02	1.7851E-01	3.1311E-01	4.3945E-01	5.5320E-01
Co-60	1.5600E-02	2.4082E-02	3.4802E-02	4.7862E-02	6.3326E-02	7.1720E-02	2.1384E-01	3.7516E-01	5.2664E-01	6.6307E-01
Kr-85	2.6166E+01	3.9576E+01	5.7084E+01	7.9235E+01	1.0657E+02	1.2187E+02	4.7389E+02	1.0759E+03	1.9078E+03	2.9512E+03
Kr-85m	4.6670E+02	6.9352E+02	9.8298E+02	1.3410E+03	1.7727E+03	2.0105E+03	6.9183E+03	1.4205E+04	2.2877E+04	3.2220E+04
Kr-87	6.0583E+02	8.6204E+02	1.1708E+03	1.5313E+03	1.9417E+03	2.1587E+03	5.6463E+03	9.2787E+03	1.2244E+04	1.4420E+04
Kr-88	1.1751E+03	1.7286E+03	2.4259E+03	3.2769E+03	4.2899E+03	4.8427E+03	1.5582E+04	3.0282E+04	4.6329E+04	6.2165E+04
Rb-86	1.2477E+00	1.6572E+00	2.1354E+00	2.6837E+00	3.3028E+00	3.6292E+00	8.8657E+00	1.4575E+01	1.9897E+01	2.4678E+01
Sr-89	1.9069E+01	2.9437E+01	4.2537E+01	5.8496E+01	7.7392E+01	8.7649E+01	2.6124E+02	4.5818E+02	6.4300E+02	8.0937E+02
Sr-90	2.1673E+00	3.3458E+00	4.8351E+00	6.6495E+00	8.7979E+00	9.9642E+00	2.9710E+01	5.2123E+01	7.3170E+01	9.2125E+01
Sr-91	2.3888E+01	3.6597E+01	5.2489E+01	7.1642E+01	9.4078E+01	1.0616E+02	3.0198E+02	5.0990E+02	6.9161E+02	8.4380E+02
Sr-92	2.0586E+01	3.0952E+01	4.3569E+01	5.8373E+01	7.5253E+01	8.4171E+01	2.1435E+02	3.3127E+02	4.1663E+02	4.7622E+02
Y-90	3.2433E-02	5.2320E-02	7.8809E-02	1.1271E-01	1.5476E-01	1.7832E-01	6.8410E-01	1.4575E+00	2.3969E+00	3.4371E+00
Y-91	2.3725E-01	3.6671E-01	5.3058E-01	7.3053E-01	9.6766E-01	1.0965E+00	3.2982E+00	5.8336E+00	8.2511E+00	1.0460E+01
Y-92	2.0324E+00	3.4488E+00	5.3992E+00	7.9518E+00	1.1162E+01	1.2972E+01	5.2312E+01	1.0943E+02	1.7055E+02	2.2792E+02
Y-93	2.8582E-01	4.3810E-01	6.2860E-01	8.5836E-01	1.1277E+00	1.2728E+00	3.6306E+00	6.1439E+00	8.3498E+00	1.0205E+01
Zr-95	3.0598E-01	4.7234E-01	6.8257E-01	9.3866E-01	1.2419E+00	1.4065E+00	4.1923E+00	7.3533E+00	1.0320E+01	1.2991E+01
Zr-97	3.0333E-01	4.6627E-01	6.7094E-01	9.1880E-01	1.2105E+00	1.3682E+00	3.9720E+00	6.8188E+00	9.3862E+00	1.1606E+01
Nb-95	3.0770E-01	4.7502E-01	6.8646E-01	9.4406E-01	1.2491E+00	1.4147E+00	4.2180E+00	7.4000E+00	1.0388E+01	1.3079E+01
Mo-99	4.2782E+00	6.5973E+00	9.5235E+00	1.3083E+01	1.7291E+01	1.9573E+01	5.7959E+01	1.0111E+02	1.4122E+02	1.7697E+02
Tc-99m	3.7921E+00	5.8538E+00	8.4591E+00	1.1633E+01	1.5390E+01	1.7429E+01	5.1922E+01	9.0997E+01	1.2758E+02	1.6040E+02
Ru-103	3.5791E+00	5.5249E+00	7.9836E+00	1.0979E+01	1.4525E+01	1.6450E+01	4.9023E+01	8.5972E+01	1.2064E+02	1.5185E+02
Ru-105	2.0817E+00	3.1620E+00	4.4963E+00	6.0850E+00	7.9233E+00	8.9049E+00	2.4056E+01	3.8963E+01	5.0969E+01	6.0225E+01
Ru-106	1.4746E+00	2.2765E+00	3.2898E+00	4.5242E+00	5.9859E+00	6.7794E+00	2.0213E+01	3.5460E+01	4.9777E+01	6.2670E+01
Rh-105	2.3443E+00	3.6182E+00	5.2272E+00	7.1865E+00	9.5052E+00	1.0763E+01	3.1994E+01	5.5949E+01	7.8262E+01	9.8164E+01
Sb-127	4.8961E+00	7.5525E+00	1.0906E+01	1.4987E+01	1.9813E+01	2.2432E+01	6.6555E+01	1.1630E+02	1.6266E+02	2.0411E+02
Sb-129	1.2308E+01	1.8686E+01	2.6559E+01	3.5928E+01	4.6761E+01	5.2543E+01	1.4157E+02	2.2882E+02	2.9878E+02	3.5249E+02
Te-127	4.8814E+00	7.5333E+00	1.0883E+01	1.4962E+01	1.9789E+01	2.2409E+01	6.6667E+01	1.1674E+02	1.6359E+02	2.0563E+02
Te-127m	6.5732E-01	1.0148E+00	1.4665E+00	2.0168E+00	2.6684E+00	3.0222E+00	9.0116E+00	1.5811E+01	2.2196E+01	2.7947E+01
Te-129	1.3237E+01	2.0230E+01	2.8937E+01	3.9383E+01	5.1558E+01	5.8092E+01	1.6148E+02	2.6690E+02	3.5466E+02	4.2449E+02
Te-129m	2.1609E+00	3.3360E+00	4.8210E+00	6.6302E+00	8.7726E+00	9.9356E+00	2.9626E+01	5.1975E+01	7.2957E+01	9.1850E+01
Te-131m	6.4278E+00	9.8991E+00	1.4271E+01	1.9579E+01	2.5843E+01	2.9235E+01	8.5863E+01	1.4880E+02	2.0656E+02	2.5741E+02
Te-132	6.4501E+01	9.9483E+01	1.4363E+02	1.9735E+02	2.6087E+02	2.9532E+02	8.7545E+02	1.5286E+03	2.1367E+03	2.6795E+03

I-131	5.5988E+02	7.5343E+02	9.8180E+02	1.2459E+03	1.5461E+03	1.7052E+03	4.2803E+03	7.1128E+03	9.7661E+03	1.2163E+04
I-132	6.8706E+02	9.1314E+02	1.1756E+03	1.4742E+03	1.8083E+03	1.9833E+03	4.5407E+03	6.8886E+03	8.6941E+03	1.0051E+04
I-133	1.1237E+03	1.5073E+03	1.9580E+03	2.4768E+03	3.0640E+03	3.3741E+03	8.3067E+03	1.3584E+04	1.8384E+04	2.2594E+04
I-134	6.0000E+02	7.4597E+02	8.9932E+02	1.0572E+03	1.2170E+03	1.2947E+03	2.1448E+03	2.5936E+03	2.7870E+03	2.8667E+03
I-135	9.7812E+02	1.3021E+03	1.6787E+03	2.1077E+03	2.5882E+03	2.8399E+03	6.6824E+03	1.0528E+04	1.3789E+04	1.6451E+04
Xe-133	3.6347E+03	5.4956E+03	7.9239E+03	1.0995E+04	1.4782E+04	1.6902E+04	6.5523E+04	1.4834E+05	2.6226E+05	4.0447E+05
Xe-135	1.5208E+03	2.2964E+03	3.3061E+03	4.5800E+03	6.1469E+03	7.0223E+03	2.6579E+04	5.8516E+04	1.0026E+05	1.4960E+05
Cs-134	1.3957E+02	1.8540E+02	2.3893E+02	3.0033E+02	3.6967E+02	4.0624E+02	9.9337E+02	1.6344E+03	2.2329E+03	2.7713E+03
Cs-136	3.8777E+01	5.1499E+01	6.6355E+01	8.3388E+01	1.0262E+02	1.1276E+02	2.7533E+02	4.5247E+02	6.1749E+02	7.6564E+02
Cs-137	8.7002E+01	1.1557E+02	1.4894E+02	1.8722E+02	2.3045E+02	2.5324E+02	6.1926E+02	1.0189E+03	1.3920E+03	1.7277E+03
Ba-139	1.9808E+01	2.9053E+01	3.9905E+01	5.2183E+01	6.5683E+01	7.2629E+01	1.6185E+02	2.2573E+02	2.6231E+02	2.8227E+02
Ba-140	3.3305E+01	5.1403E+01	7.4265E+01	1.0211E+02	1.3507E+02	1.5296E+02	4.5539E+02	7.9797E+02	1.1189E+03	1.4074E+03
La-140	5.8918E-01	9.6430E-01	1.4713E+00	2.1284E+00	2.9527E+00	3.4179E+00	1.3874E+01	3.0528E+01	5.1249E+01	7.4498E+01
La-141	2.5979E-01	3.9378E-01	5.5879E-01	7.5466E-01	9.8065E-01	1.1011E+00	2.9382E+00	4.7126E+00	6.1134E+00	7.1718E+00
La-142	1.8729E-01	2.7616E-01	3.8130E-01	5.0118E-01	6.3404E-01	7.0280E-01	1.6094E+00	2.2911E+00	2.7024E+00	2.9391E+00
Ce-141	7.6564E-01	1.1819E+00	1.7080E+00	2.3488E+00	3.1075E+00	3.5194E+00	1.0490E+01	1.8398E+01	2.5818E+01	3.2497E+01
Ce-143	7.3720E-01	1.1356E+00	1.6375E+00	2.2470E+00	2.9666E+00	3.3563E+00	9.8709E+00	1.7125E+01	2.3797E+01	2.9682E+01
Ce-144	6.1302E-01	9.4635E-01	1.3676E+00	1.8808E+00	2.4884E+00	2.8183E+00	8.4025E+00	1.4741E+01	2.0692E+01	2.6051E+01
Pr-143	2.9320E-01	4.5272E-01	6.5436E-01	9.0009E-01	1.1911E+00	1.3492E+00	4.0287E+00	7.0780E+00	9.9494E+00	1.2543E+01
Nd-147	1.2498E-01	1.9288E-01	2.7866E-01	3.8313E-01	5.0678E-01	5.7388E-01	1.7082E+00	2.9926E+00	4.1956E+00	5.2763E+00
Np-239	9.0759E+00	1.3993E+01	2.0196E+01	2.7739E+01	3.6655E+01	4.1489E+01	1.2272E+02	2.1389E+02	2.9847E+02	3.7373E+02
Pu-238	3.0621E-03	4.7271E-03	6.8313E-03	9.3947E-03	1.2430E-02	1.4078E-02	4.1976E-02	7.3643E-02	1.0338E-01	1.3016E-01
Pu-239	2.0462E-04	3.1590E-04	4.5652E-04	6.2784E-04	8.3071E-04	9.4084E-04	2.8055E-03	4.9223E-03	6.9104E-03	8.7012E-03
Pu-240	2.1960E-04	3.3900E-04	4.8990E-04	6.7374E-04	8.9143E-04	1.0096E-03	3.0103E-03	5.2813E-03	7.4138E-03	9.3344E-03
Pu-241	1.0540E-01	1.6271E-01	2.3514E-01	3.2337E-01	4.2785E-01	4.8457E-01	1.4448E+00	2.5348E+00	3.5582E+00	4.4800E+00
Am-241	6.4992E-05	1.0033E-04	1.4500E-04	1.9942E-04	2.6385E-04	2.9883E-04	8.9116E-04	1.5637E-03	2.1954E-03	2.7645E-03
Cm-242	1.6282E-02	2.5135E-02	3.6323E-02	4.9953E-02	6.6091E-02	7.4851E-02	2.2316E-01	3.9147E-01	5.4949E-01	6.9179E-01
Cm-244	1.7745E-03	2.7394E-03	3.9588E-03	5.4443E-03	7.2033E-03	8.1582E-03	2.4325E-02	4.2676E-02	5.9908E-02	7.5428E-02

	7.0000E+00	8.0000E+00	1.0000E+01	1.2000E+01	1.4000E+01	1.6000E+01	1.8000E+01	2.0000E+01	2.2000E+01	2.4000E+01
Co-58	6.5457E-01	7.4475E-01	8.9675E-01	1.0169E+00	1.1126E+00	1.1909E+00	1.2567E+00	1.3119E+00	1.3584E+00	1.3996E+00
Co-60	7.8471E-01	8.9296E-01	1.0755E+00	1.2200E+00	1.3350E+00	1.4293E+00	1.5086E+00	1.5752E+00	1.6313E+00	1.6810E+00
Kr-85	4.1891E+03	5.6059E+03	8.9136E+03	1.2780E+04	1.7119E+04	2.1857E+04	2.6933E+04	3.2294E+04	3.7896E+04	4.3702E+04
Kr-85m	4.1732E+04	5.1069E+04	6.8342E+04	8.3218E+04	9.5499E+04	1.0536E+05	1.1312E+05	1.1914E+05	1.2376E+05	1.2728E+05
Kr-87	1.5927E+04	1.6931E+04	1.8045E+04	1.8489E+04	1.8658E+04	1.8720E+04	1.8743E+04	1.8751E+04	1.8754E+04	1.8755E+04
Kr-88	7.6924E+04	9.0182E+04	1.1180E+05	1.2741E+05	1.3820E+05	1.4545E+05	1.5023E+05	1.5334E+05	1.5533E+05	1.5660E+05
Rb-86	2.8934E+01	3.2715E+01	3.9077E+01	4.4096E+01	4.8083E+01	5.1339E+01	5.4066E+01	5.6354E+01	5.8274E+01	5.9969E+01
Sr-89	9.5762E+02	1.0895E+03	1.3117E+03	1.4873E+03	1.6270E+03	1.7414E+03	1.8374E+03	1.9181E+03	1.9859E+03	2.0460E+03
Sr-90	1.0903E+02	1.2407E+02	1.4943E+02	1.6950E+02	1.8549E+02	1.9859E+02	2.0960E+02	2.1887E+02	2.2666E+02	2.3357E+02
Sr-91	9.6996E+02	1.0743E+03	1.2334E+03	1.3422E+03	1.4171E+03	1.4700E+03	1.5084E+03	1.5364E+03	1.5567E+03	1.5722E+03
Sr-92	5.1737E+02	5.4573E+02	5.7983E+02	5.9601E+02	6.0373E+02	6.0750E+02	6.0940E+02	6.1035E+02	6.1084E+02	6.1109E+02
Y-90	4.5365E+00	5.6663E+00	7.9273E+00	1.0108E+01	1.2153E+01	1.4077E+01	1.5896E+01	1.7594E+01	1.9161E+01	2.0671E+01
Y-91	1.2455E+01	1.4253E+01	1.7330E+01	1.9811E+01	2.1819E+01	2.3487E+01	2.4904E+01	2.6108E+01	2.7129E+01	2.8041E+01
Y-92	2.7835E+02	3.2103E+02	3.8516E+02	4.2626E+02	4.5167E+02	4.6739E+02	4.7719E+02	4.8321E+02	4.8685E+02	4.8914E+02
Y-93	1.1750E+01	1.3034E+01	1.5002E+01	1.6359E+01	1.7302E+01	1.7974E+01	1.8466E+01	1.8827E+01	1.9092E+01	1.9296E+01
Zr-95	1.5371E+01	1.7489E+01	2.1057E+01	2.3878E+01	2.6124E+01	2.7963E+01	2.9506E+01	3.0803E+01	3.1894E+01	3.2860E+01
Zr-97	1.3506E+01	1.5128E+01	1.7713E+01	1.9596E+01	2.0978E+01	2.2021E+01	2.2828E+01	2.3453E+01	2.3938E+01	2.4333E+01
Nb-95	1.5478E+01	1.7614E+01	2.1215E+01	2.4064E+01	2.6333E+01	2.8193E+01	2.9756E+01	3.1071E+01	3.2177E+01	3.3158E+01
Mo-99	2.0851E+02	2.3628E+02	2.8244E+02	3.1820E+02	3.4609E+02	3.6847E+02	3.8688E+02	4.0205E+02	4.1456E+02	4.2540E+02
Tc-99m	1.8954E+02	2.1534E+02	2.5848E+02	2.9217E+02	3.1869E+02	3.4024E+02	3.5818E+02	3.7311E+02	3.8551E+02	3.9633E+02
Ru-103	1.7965E+02	2.0437E+02	2.4602E+02	2.7893E+02	3.0511E+02	3.2653E+02	3.4450E+02	3.5960E+02	3.7229E+02	3.8351E+02
Ru-105	6.7286E+01	7.2661E+01	7.9997E+01	8.4245E+01	8.6718E+01	8.8197E+01	8.9106E+01	8.9666E+01	9.0010E+01	9.0232E+01
Ru-106	7.4164E+01	8.4393E+01	1.0164E+02	1.1529E+02	1.2616E+02	1.3506E+02	1.4254E+02	1.4884E+02	1.5414E+02	1.5883E+02
Rh-105	1.1571E+02	1.3114E+02	1.5666E+02	1.7627E+02	1.9141E+02	2.0339E+02	2.1312E+02	2.2101E+02	2.2742E+02	2.3288E+02
Sb-127	2.4079E+02	2.7318E+02	3.2725E+02	3.6939E+02	4.0246E+02	4.2916E+02	4.5125E+02	4.6956E+02	4.8475E+02	4.9800E+02
Sb-129	3.9328E+02	4.2420E+02	4.6617E+02	4.9025E+02	5.0416E+02	5.1240E+02	5.1742E+02	5.2049E+02	5.2236E+02	5.2355E+02
Te-127	2.4295E+02	2.7603E+02	3.3146E+02	3.7492E+02	4.0924E+02	4.3718E+02	4.6049E+02	4.7996E+02	4.9621E+02	5.1048E+02
Te-127m	3.3075E+01	3.7639E+01	4.5337E+01	5.1429E+01	5.6283E+01	6.0261E+01	6.3603E+01	6.6416E+01	6.8784E+01	7.0882E+01
Te-129	4.7948E+02	5.2279E+02	5.8500E+02	6.2444E+02	6.5146E+02	6.7214E+02	6.8808E+02	7.0018E+02	7.0943E+02	7.1699E+02
Te-129m	1.0869E+02	1.2367E+02	1.4891E+02	1.6886E+02	1.8473E+02	1.9772E+02	2.0862E+02	2.1777E+02	2.2547E+02	2.3227E+02
Te-131m	3.0171E+02	3.4023E+02	4.0313E+02	4.5064E+02	4.8679E+02	5.1505E+02	5.3773E+02	5.5594E+02	5.7059E+02	5.8296E+02
Te-132	3.1592E+03	3.5823E+03	4.2870E+03	4.8348E+03	5.2636E+03	5.6087E+03	5.8936E+03	6.1291E+03	6.3238E+03	6.4932E+03
I-131	1.4311E+04	1.6235E+04	1.9515E+04	2.2162E+04	2.4324E+04	2.6142E+04	2.7710E+04	2.9073E+04	3.0262E+04	3.1345E+04
I-132	1.1081E+04	1.1879E+04	1.3034E+04	1.3804E+04	1.4358E+04	1.4794E+04	1.5153E+04	1.5450E+04	1.5696E+04	1.5910E+04
I-133	2.6255E+04	2.9438E+04	3.4643E+04	3.8600E+04	4.1643E+04	4.4053E+04	4.6013E+04	4.7616E+04	4.8934E+04	5.0064E+04
I-134	2.8992E+03	2.9125E+03	2.9215E+03	2.9229E+03	2.9232E+03	2.9232E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03
I-135	1.8608E+04	2.0352E+04	2.2939E+04	2.4642E+04	2.5777E+04	2.6555E+04	2.7103E+04	2.7492E+04	2.7769E+04	2.7974E+04
Xe-133	5.7238E+05	7.6362E+05	1.2066E+06	1.7193E+06	2.2888E+06	2.9044E+06	3.5571E+06	4.2393E+06	4.9447E+06	5.6681E+06
Xe-135	2.0462E+05	2.6374E+05	3.8856E+05	5.1648E+05	6.4187E+05	7.6117E+05	8.7229E+05	9.7419E+05	1.0665E+06	1.1494E+06
Cs-134	3.2513E+03	3.6783E+03	4.3986E+03	4.9684E+03	5.4224E+03	5.7944E+03	6.1069E+03	6.3698E+03	6.5911E+03	6.7872E+03
Cs-136	8.9742E+02	1.0144E+03	1.2111E+03	1.3661E+03	1.4890E+03	1.5893E+03	1.6732E+03	1.7435E+03	1.8023E+03	1.8543E+03
Cs-137	2.0270E+03	2.2933E+03	2.7424E+03	3.0977E+03	3.3808E+03	3.6128E+03	3.8077E+03	3.9717E+03	4.1098E+03	4.2321E+03
Ba-139	2.9303E+02	2.9883E+02	3.0406E+02	3.0557E+02	3.0601E+02	3.0614E+02	3.0618E+02	3.0619E+02	3.0620E+02	3.0620E+02
Ba-140	1.6640E+03	1.8918E+03	2.2748E+03	2.5764E+03	2.8157E+03	3.0108E+03	3.1741E+03	3.3108E+03	3.4254E+03	3.5264E+03
La-140	9.9256E+01	1.2481E+02	1.7605E+02	2.2545E+02	2.7165E+02	3.1495E+02	3.5568E+02	3.9347E+02	4.2812E+02	4.6130E+02
La-141	7.9630E+00	8.5533E+00	9.3380E+00	9.7743E+00	1.0018E+01	1.0158E+01	1.0241E+01	1.0290E+01	1.0319E+01	1.0337E+01
La-142	3.0738E+00	3.1502E+00	3.2234E+00	3.2469E+00	3.2546E+00	3.2571E+00	3.2579E+00	3.2582E+00	3.2583E+00	3.2584E+00
Ce-141	3.8447E+01	4.3738E+01	5.2651E+01	5.9691E+01	6.5291E+01	6.9872E+01	7.3714E+01	7.6942E+01	7.9653E+01	8.2051E+01
Ce-143	3.4820E+01	3.9298E+01	4.6630E+01	5.2192E+01	5.6441E+01	5.9778E+01	6.2466E+01	6.4635E+01	6.6385E+01	6.7870E+01
Ce-144	3.0829E+01	3.5080E+01	4.2249E+01	4.7921E+01	5.2438E+01	5.6140E+01	5.9248E+01	6.1864E+01	6.4065E+01	6.6015E+01

Pr-143	1.4861E+01	1.6929E+01	2.0429E+01	2.3211E+01	2.5436E+01	2.7266E+01	2.8809E+01	3.0111E+01	3.1210E+01	3.2186E+01
Nd-147	6.2373E+00	7.0902E+00	8.5234E+00	9.6514E+00	1.0545E+01	1.1274E+01	1.1883E+01	1.2393E+01	1.2820E+01	1.3196E+01
Np-239	4.4001E+02	4.9827E+02	5.9486E+02	6.6943E+02	7.2740E+02	7.7374E+02	8.1172E+02	8.4291E+02	8.6853E+02	8.9066E+02
Pu-238	1.5404E-01	1.7529E-01	2.1113E-01	2.3949E-01	2.6208E-01	2.8060E-01	2.9615E-01	3.0924E-01	3.2026E-01	3.3002E-01
Pu-239	1.0298E-02	1.1719E-02	1.4117E-02	1.6014E-02	1.7527E-02	1.8766E-02	1.9807E-02	2.0684E-02	2.1422E-02	2.2076E-02
Pu-240	1.1047E-02	1.2571E-02	1.5141E-02	1.7175E-02	1.8795E-02	2.0122E-02	2.1238E-02	2.2177E-02	2.2967E-02	2.3667E-02
Pu-241	5.3019E+00	6.0333E+00	7.2669E+00	8.2428E+00	9.0205E+00	9.6577E+00	1.0193E+01	1.0643E+01	1.1023E+01	1.1359E+01
Am-241	3.2721E-03	3.7239E-03	4.4863E-03	5.0898E-03	5.5710E-03	5.9655E-03	6.2971E-03	6.5764E-03	6.8115E-03	7.0200E-03
Cm-242	8.1865E-01	9.3151E-01	1.1218E+00	1.2723E+00	1.3922E+00	1.4904E+00	1.5729E+00	1.6423E+00	1.7006E+00	1.7523E+00
Cm-244	8.9265E-02	1.0158E-01	1.2235E-01	1.3878E-01	1.5187E-01	1.6260E-01	1.7161E-01	1.7920E-01	1.8558E-01	1.9123E-01
	3.2000E+01	4.0000E+01	4.8000E+01	5.6000E+01	6.4000E+01	7.2000E+01	8.0000E+01	8.8000E+01	9.6000E+01	1.2000E+02
Co-58	1.5159E+00	1.5861E+00	1.6506E+00	1.7099E+00	1.7645E+00	1.8146E+00	1.8607E+00	1.9031E+00	1.9421E+00	2.0416E+00
Co-60	1.8216E+00	1.9069E+00	1.9854E+00	2.0579E+00	2.1248E+00	2.1864E+00	2.2432E+00	2.2957E+00	2.3440E+00	2.4682E+00
Kr-85	6.4925E+04	8.2554E+04	9.8333E+04	1.1316E+05	1.2748E+05	1.4154E+05	1.5547E+05	1.6931E+05	1.8311E+05	2.2438E+05
Kr-85m	1.3475E+05	1.3651E+05	1.3696E+05	1.3708E+05	1.3711E+05	1.3712E+05	1.3712E+05	1.3712E+05	1.3713E+05	1.3713E+05
Kr-87	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04
Kr-88	1.5879E+05	1.5904E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05
Rb-86	6.4739E+01	6.7589E+01	7.0185E+01	7.2550E+01	7.4704E+01	7.6667E+01	7.8455E+01	8.0084E+01	8.1568E+01	8.5295E+01
Sr-89	2.2154E+03	2.3176E+03	2.4114E+03	2.4975E+03	2.5766E+03	2.6492E+03	2.7159E+03	2.7771E+03	2.8333E+03	2.9764E+03
Sr-90	2.5311E+02	2.6496E+02	2.7588E+02	2.8595E+02	2.9525E+02	3.0382E+02	3.1172E+02	3.1902E+02	3.2574E+02	3.4301E+02
Sr-91	1.6071E+03	1.6179E+03	1.6235E+03	1.6264E+03	1.6278E+03	1.6286E+03	1.6290E+03	1.6292E+03	1.6293E+03	1.6294E+03
Sr-92	6.1148E+02	6.1150E+02	6.1150E+02	6.1150E+02	6.1150E+02	6.1150E+02	6.1150E+02	6.1151E+02	6.1151E+02	6.1151E+02
Y-90	2.5512E+01	2.9306E+01	3.3427E+01	3.7753E+01	4.2188E+01	4.6654E+01	5.1091E+01	5.5452E+01	5.9702E+01	7.1529E+01
Y-91	3.0638E+01	3.2235E+01	3.3715E+01	3.5080E+01	3.6338E+01	3.7496E+01	3.8560E+01	3.9538E+01	4.0437E+01	4.2730E+01
Y-92	4.9318E+02	4.9366E+02	4.9376E+02	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02
Y-93	1.9761E+01	1.9910E+01	1.9990E+01	2.0033E+01	2.0055E+01	2.0067E+01	2.0074E+01	2.0077E+01	2.0079E+01	2.0081E+01
Zr-95	3.5588E+01	3.7234E+01	3.8747E+01	4.0137E+01	4.1415E+01	4.2589E+01	4.3669E+01	4.4661E+01	4.5572E+01	4.7898E+01
Zr-97	2.5309E+01	2.5713E+01	2.5982E+01	2.6161E+01	2.6279E+01	2.6358E+01	2.6410E+01	2.6445E+01	2.6468E+01	2.6504E+01
Nb-95	3.5931E+01	3.7612E+01	3.9162E+01	4.0591E+01	4.1908E+01	4.3124E+01	4.4244E+01	4.5277E+01	4.6230E+01	4.8675E+01
Mo-99	4.5496E+02	4.7121E+02	4.8500E+02	4.9668E+02	5.0659E+02	5.1500E+02	5.2213E+02	5.2817E+02	5.3330E+02	5.4466E+02
Tc-99m	4.2605E+02	4.4259E+02	4.5667E+02	4.6864E+02	4.7879E+02	4.8741E+02	4.9472E+02	5.0091E+02	5.0617E+02	5.1781E+02
Ru-103	4.1519E+02	4.3426E+02	4.5174E+02	4.6777E+02	4.8247E+02	4.9595E+02	5.0831E+02	5.1964E+02	5.3004E+02	5.5645E+02
Ru-105	9.0641E+01	9.0701E+01	9.0717E+01	9.0721E+01	9.0722E+01	9.0723E+01	9.0723E+01	9.0723E+01	9.0723E+01	9.0723E+01
Ru-106	1.7210E+02	1.8014E+02	1.8754E+02	1.9437E+02	2.0067E+02	2.0647E+02	2.1182E+02	2.1675E+02	2.2129E+02	2.3295E+02
Rh-105	2.4735E+02	2.5468E+02	2.6046E+02	2.6502E+02	2.6862E+02	2.7146E+02	2.7370E+02	2.7546E+02	2.7685E+02	2.7959E+02
Sb-127	5.3450E+02	5.5513E+02	5.7305E+02	5.8862E+02	6.0214E+02	6.1389E+02	6.2409E+02	6.3295E+02	6.4065E+02	6.5842E+02
Sb-129	5.2573E+02	5.2604E+02	5.2612E+02	5.2614E+02	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02
Te-127	5.5017E+02	5.7308E+02	5.9328E+02	6.1106E+02	6.2669E+02	6.4044E+02	6.5253E+02	6.6316E+02	6.7252E+02	6.9466E+02
Te-127m	7.6818E+01	8.0416E+01	8.3735E+01	8.6796E+01	8.9618E+01	9.2221E+01	9.4620E+01	9.6832E+01	9.8870E+01	1.0410E+02
Te-129	7.3664E+02	7.4706E+02	7.5631E+02	7.6471E+02	7.7239E+02	7.7942E+02	7.8585E+02	7.9175E+02	7.9715E+02	8.1085E+02
Te-129m	2.5146E+02	2.6300E+02	2.7357E+02	2.8325E+02	2.9212E+02	3.0025E+02	3.0769E+02	3.1451E+02	3.2076E+02	3.3660E+02
Te-131m	6.1530E+02	6.3112E+02	6.4325E+02	6.5254E+02	6.5967E+02	6.6514E+02	6.6933E+02	6.7254E+02	6.7500E+02	6.7966E+02
Te-132	6.9578E+03	7.2171E+03	7.4399E+03	7.6313E+03	7.7958E+03	7.9371E+03	8.0586E+03	8.1629E+03	8.2525E+03	8.4557E+03
I-131	3.4422E+04	3.6281E+04	3.7993E+04	3.9572E+04	4.1030E+04	4.2379E+04	4.3628E+04	4.4787E+04	4.5864E+04	4.8685E+04
I-132	1.6487E+04	1.6802E+04	1.7073E+04	1.7306E+04	1.7506E+04	1.7679E+04	1.7827E+04	1.7954E+04	1.8064E+04	1.8313E+04
I-133	5.2969E+04	5.4300E+04	5.5267E+04	5.5969E+04	5.6480E+04	5.6853E+04	5.7125E+04	5.7324E+04	5.7470E+04	5.7728E+04
I-134	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03
I-135	2.8405E+04	2.8508E+04	2.8550E+04	2.8567E+04	2.8574E+04	2.8577E+04	2.8578E+04	2.8579E+04	2.8579E+04	2.8579E+04
Xe-133	8.2494E+06	1.0301E+07	1.2060E+07	1.3641E+07	1.5104E+07	1.6479E+07	1.7782E+07	1.9023E+07	2.0206E+07	2.3454E+07
Xe-135	1.3751E+06	1.4776E+06	1.5279E+06	1.5539E+06	1.5677E+06	1.5751E+06	1.5791E+06	1.5813E+06	1.5825E+06	1.5840E+06
Cs-134	7.3417E+03	7.6777E+03	7.9875E+03	8.2731E+03	8.5365E+03	8.7794E+03	9.0033E+03	9.2098E+03	9.4002E+03	9.8890E+03
Cs-136	2.0001E+03	2.0866E+03	2.1651E+03	2.2362E+03	2.3006E+03	2.3590E+03	2.4119E+03	2.4598E+03	2.5033E+03	2.6113E+03
Cs-137	4.5781E+03	4.7878E+03	4.9812E+03	5.1596E+03	5.3241E+03	5.4759E+03	5.6159E+03	5.7449E+03	5.8640E+03	6.1699E+03
Ba-139	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02
Ba-140	3.8099E+03	3.9781E+03	4.1305E+03	4.2686E+03	4.3936E+03	4.5068E+03	4.6094E+03	4.7023E+03	4.7865E+03	4.9956E+03
La-140	5.6623E+02	6.4576E+02	7.2963E+02	8.1511E+02	9.0017E+02	9.8337E+02	1.0637E+03	1.1403E+03	1.2130E+03	1.4050E+03
La-141	1.0368E+01	1.0372E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01
La-142	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00
Ce-141	8.8814E+01	9.2879E+01	9.6602E+01	1.0001E+02	1.0313E+02	1.0599E+02	1.0861E+02	1.1101E+02	1.1321E+02	1.1878E+02
Ce-143	7.1781E+01	7.3731E+01	7.5251E+01	7.6437E+01	7.7361E+01	7.8081E+01	7.8643E+01	7.9081E+01	7.9423E+01	8.0085E+01
Ce-144	7.1528E+01	7.4866E+01	7.7943E+01	8.0779E+01	8.3392E+01	8.5800E+01	8.8020E+01	9.0066E+01	9.1951E+01	9.6786E+01
Pr-143	3.4956E+01	3.6644E+01	3.8203E+01	3.9638E+01	4.0956E+01	4.2165E+01	4.3272E+01	4.4283E+01	4.5206E+01	4.7527E+01
Nd-147	1.4250E+01	1.4873E+01	1.5436E+01	1.5945E+01	1.6404E+01	1.6819E+01	1.7194E+01	1.7532E+01	1.7838E+01	1.8593E+01
Np-239	9.5065E+02	9.8309E+02	1.0102E+03	1.0329E+03	1.0519E+03	1.0677E+03	1.0810E+03	1.0921E+03	1.1013E+03	1.1214E+03
Pu-238	3.5763E-01	3.7437E-01	3.8981E-01	4.0405E-01	4.1718E-01	4.2930E-01	4.4047E-01	4.5078E-01	4.6029E-01	4.8471E-01
Pu-239	2.3927E-02	2.5050E-02	2.6087E-02	2.7043E-02	2.7926E-02	2.8741E-02	2.9493E-02	3.0187E-02	3.0827E-02	3.2472E-02
Pu-240	2.5647E-02	2.6847E-02	2.7954E-02	2.8975E-02	2.9916E-02	3.0785E-02	3.1586E-02	3.2325E-02	3.3007E-02	3.4757E-02
Pu-241	1.2309E+01	1.2885E+01	1.3416E+01	1.3906E+01	1.4358E+01	1.4774E+01	1.5159E+01	1.5513E+01	1.5840E+01	1.6680E+01
Am-241	7.6104E-03	7.9692E-03	8.3010E-03	8.6077E-03	8.8912E-03	9.1533E-03	9.3957E-03	9.6197E-03	9.8268E-03	1.0361E-02
Cm-242	1.8985E+00	1.9869E+00	2.0684E+00	2.1434E+00	2.2125E+00	2.2762E+00	2.3348E+00	2.3888E+00	2.4385E+00	2.5659E+00
Cm-244	2.0723E-01	2.1693E-01	2.2587E-01	2.3412E-01	2.4173E-01	2.4875E-01	2.5522E-01	2.6119E-01	2.6669E-01	2.8083E-01
	1.4400E+02	1.6800E+02	1.9200E+02	2.1600E+02	2.4000E+02	2.8800E+02	3.3600E+02	3.8400E+02	4.3200E+02	4.8000E+02
Co-58	2.1189E+00	2.1790E+00	2.2257E+00	2.2619E+00	2.2901E+00	2.3296E+00	2.3535E+00	2.3679E+00	2.3766E+00	2.3819E+00
Co-60	2.5656E+00	2.6420E+00	2.7019E+00	2.7489E+00	2.7858E+00	2.8382E+00	2.8704E+00	2.8902E+00	2.9024E+00	2.9099E+00
Kr-85	2.6549E+05	3.0649E+05	3.4738E+05	3.8816E+05	4.2884E+05	5.0986E+05	5.9044E+05	6.7060E+05	7.5032E+05	8.2962E+05
Kr-85m	1.3713E+05	1.3713E+05	1.3713E+05	1.3713E+05	1.3713E+05	1.3713E+05	1.3713E+05	1.3713E+05	1.3713E+05	1.3713E+05
Kr-87	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04
Kr-88	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05

Rb-86	8.8113E+01	9.0244E+01	9.1854E+01	9.3072E+01	9.3993E+01	9.5239E+01	9.5951E+01	9.6358E+01	9.6591E+01	9.6724E+01
Sr-89	3.0872E+03	3.1730E+03	3.2393E+03	3.2907E+03	3.3304E+03	3.3859E+03	3.4191E+03	3.4390E+03	3.4510E+03	3.4581E+03
Sr-90	3.5657E+02	3.6720E+02	3.7555E+02	3.8209E+02	3.8723E+02	3.9453E+02	3.9902E+02	4.0179E+02	4.0349E+02	4.0454E+02
Sr-91	1.6294E+03	1.6294E+03	1.6294E+03	1.6294E+03	1.6294E+03	1.6294E+03	1.6294E+03	1.6294E+03	1.6294E+03	1.6294E+03
Sr-92	6.1151E+02	6.1151E+02	6.1151E+02	6.1151E+02	6.1151E+02	6.1151E+02	6.1151E+02	6.1151E+02	6.1151E+02	6.1151E+02
Y-90	8.1805E+01	9.0470E+01	9.7633E+01	1.0347E+02	1.0819E+02	1.1507E+02	1.1941E+02	1.2213E+02	1.2382E+02	1.2487E+02
Y-91	4.4508E+01	4.5887E+01	4.6956E+01	4.7785E+01	4.8428E+01	4.9327E+01	4.9868E+01	5.0193E+01	5.0388E+01	5.0506E+01
Y-92	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02
Y-93	2.0081E+01	2.0081E+01	2.0081E+01	2.0081E+01	2.0081E+01	2.0081E+01	2.0081E+01	2.0081E+01	2.0081E+01	2.0081E+01
Zr-95	4.9704E+01	5.1106E+01	5.2193E+01	5.3038E+01	5.3693E+01	5.4611E+01	5.5165E+01	5.5498E+01	5.5699E+01	5.5820E+01
Zr-97	2.6515E+01	2.6518E+01	2.6519E+01	2.6519E+01	2.6519E+01	2.6519E+01	2.6519E+01	2.6519E+01	2.6519E+01	2.6519E+01
Nb-95	5.0592E+01	5.2093E+01	5.3270E+01	5.4191E+01	5.4913E+01	5.5935E+01	5.6562E+01	5.6946E+01	5.7181E+01	5.7324E+01
Mo-99	5.5158E+02	5.5581E+02	5.5838E+02	5.5996E+02	5.6091E+02	5.6191E+02	5.6228E+02	5.6242E+02	5.6247E+02	5.6249E+02
Tc-99m	5.2492E+02	5.2925E+02	5.3189E+02	5.3350E+02	5.3448E+02	5.3550E+02	5.3588E+02	5.3602E+02	5.3608E+02	5.3610E+02
Ru-103	5.7680E+02	5.9250E+02	6.0460E+02	6.1393E+02	6.2112E+02	6.3110E+02	6.3704E+02	6.4056E+02	6.4266E+02	6.4391E+02
Ru-105	9.0723E+01	9.0723E+01	9.0723E+01	9.0723E+01	9.0723E+01	9.0723E+01	9.0723E+01	9.0723E+01	9.0723E+01	9.0723E+01
Ru-106	2.4209E+02	2.4924E+02	2.5484E+02	2.5923E+02	2.6266E+02	2.6753E+02	2.7052E+02	2.7235E+02	2.7347E+02	2.7416E+02
Rh-105	2.8093E+02	2.8159E+02	2.8191E+02	2.8207E+02	2.8215E+02	2.8221E+02	2.8223E+02	2.8223E+02	2.8223E+02	2.8223E+02
Sb-127	6.7007E+02	6.7770E+02	6.8270E+02	6.8598E+02	6.8813E+02	6.9056E+02	6.9161E+02	6.9206E+02	6.9225E+02	6.9233E+02
Sb-129	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02
Te-127	7.0985E+02	7.2034E+02	7.2762E+02	7.3272E+02	7.3631E+02	7.4081E+02	7.4313E+02	7.4437E+02	7.4505E+02	7.4543E+02
Te-127m	1.0819E+02	1.1139E+02	1.1389E+02	1.1585E+02	1.1737E+02	1.1953E+02	1.2084E+02	1.2164E+02	1.2213E+02	1.2242E+02
Te-129	8.2138E+02	8.2947E+02	8.3569E+02	8.4048E+02	8.4415E+02	8.4923E+02	8.5224E+02	8.5401E+02	8.5506E+02	8.5568E+02
Te-129m	3.4878E+02	3.5814E+02	3.6533E+02	3.7086E+02	3.7511E+02	3.8099E+02	3.8446E+02	3.8652E+02	3.8773E+02	3.8844E+02
Te-131m	6.8175E+02	6.8270E+02	6.8312E+02	6.8331E+02	6.8340E+02	6.8347E+02	6.8348E+02	6.8348E+02	6.8348E+02	6.8348E+02
Te-132	8.5845E+03	8.6662E+03	8.7180E+03	8.7509E+03	8.7718E+03	8.7945E+03	8.8036E+03	8.8073E+03	8.8088E+03	8.8094E+03
I-131	5.0991E+04	5.2901E+04	5.4507E+04	5.5873E+04	5.7049E+04	5.8981E+04	6.0488E+04	6.1693E+04	6.2672E+04	6.3476E+04
I-132	1.8471E+04	1.8572E+04	1.8636E+04	1.8676E+04	1.8702E+04	1.8731E+04	1.8742E+04	1.8747E+04	1.8749E+04	1.8749E+04
I-133	5.7832E+04	5.7873E+04	5.7891E+04	5.7898E+04	5.7901E+04	5.7903E+04	5.7903E+04	5.7903E+04	5.7903E+04	5.7903E+04
I-134	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03
I-135	2.8579E+04	2.8579E+04	2.8579E+04	2.8579E+04	2.8579E+04	2.8579E+04	2.8579E+04	2.8579E+04	2.8579E+04	2.8579E+04
Xe-133	2.6291E+07	2.8770E+07	3.0937E+07	3.2831E+07	3.4487E+07	3.7211E+07	3.9292E+07	4.0881E+07	4.2095E+07	4.3023E+07
Xe-135	1.5842E+06	1.5842E+06	1.5842E+06	1.5842E+06	1.5842E+06	1.5842E+06	1.5842E+06	1.5842E+06	1.5842E+06	1.5842E+06
Cs-134	1.0272E+04	1.0573E+04	1.0808E+04	1.0993E+04	1.1137E+04	1.1343E+04	1.1469E+04	1.1547E+04	1.1594E+04	1.1624E+04
Cs-136	2.6918E+03	2.7517E+03	2.7962E+03	2.8294E+03	2.8540E+03	2.8868E+03	2.9049E+03	2.9149E+03	2.9205E+03	2.9236E+03
Cs-137	6.4099E+03	6.5981E+03	6.7459E+03	6.8618E+03	6.9528E+03	7.0820E+03	7.1615E+03	7.2105E+03	7.2406E+03	7.2592E+03
Ba-139	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02
Ba-140	5.1511E+03	5.2666E+03	5.3524E+03	5.4162E+03	5.4636E+03	5.5263E+03	5.5610E+03	5.5801E+03	5.5906E+03	5.5965E+03
La-140	1.5591E+03	1.6795E+03	1.7721E+03	1.8425E+03	1.8956E+03	1.9668E+03	2.0066E+03	2.0287E+03	2.0409E+03	2.0477E+03
La-141	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01
La-142	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00
Ce-141	1.2306E+02	1.2634E+02	1.2887E+02	1.3081E+02	1.3229E+02	1.3435E+02	1.3557E+02	1.3628E+02	1.3670E+02	1.3695E+02
Ce-143	8.0398E+01	8.0547E+01	8.0617E+01	8.0651E+01	8.0667E+01	8.0679E+01	8.0682E+01	8.0682E+01	8.0683E+01	8.0683E+01
Ce-144	1.0057E+02	1.0353E+02	1.0585E+02	1.0767E+02	1.0909E+02	1.1110E+02	1.1233E+02	1.1309E+02	1.1355E+02	1.1384E+02
Pr-143	4.9277E+01	5.0592E+01	5.1577E+01	5.2313E+01	5.2863E+01	5.3595E+01	5.4002E+01	5.4229E+01	5.4355E+01	5.4425E+01
Nd-147	1.9150E+01	1.9560E+01	1.9862E+01	2.0084E+01	2.0248E+01	2.0462E+01	2.0579E+01	2.0642E+01	2.0676E+01	2.0695E+01
Np-239	1.1331E+03	1.1400E+03	1.1440E+03	1.1464E+03	1.1477E+03	1.1491E+03	1.1496E+03	1.1497E+03	1.1498E+03	1.1498E+03
Pu-238	5.0388E-01	5.1892E-01	5.3072E-01	5.3998E-01	5.4725E-01	5.5758E-01	5.6394E-01	5.6785E-01	5.7026E-01	5.7175E-01
Pu-239	3.3764E-02	3.4779E-02	3.5575E-02	3.6201E-02	3.6691E-02	3.7389E-02	3.7818E-02	3.8082E-02	3.8245E-02	3.8345E-02
Pu-240	3.6131E-02	3.7209E-02	3.8055E-02	3.8719E-02	3.9240E-02	3.9980E-02	4.0435E-02	4.0716E-02	4.0888E-02	4.0995E-02
Pu-241	1.7339E+01	1.7856E+01	1.8261E+01	1.8580E+01	1.8829E+01	1.9184E+01	1.9402E+01	1.9537E+01	1.9619E+01	1.9670E+01
Am-241	1.0783E-02	1.1117E-02	1.1380E-02	1.1588E-02	1.1753E-02	1.1989E-02	1.2136E-02	1.2227E-02	1.2284E-02	1.2320E-02
Cm-242	2.6655E+00	2.7433E+00	2.8040E+00	2.8515E+00	2.8886E+00	2.9410E+00	2.9730E+00	2.9926E+00	3.0045E+00	3.0118E+00
Cm-244	2.9193E-01	3.0063E-01	3.0746E-01	3.1282E-01	3.1703E-01	3.2300E-01	3.2667E-01	3.2894E-01	3.3033E-01	3.3119E-01
	5.2800E+02	5.7600E+02	6.2400E+02	6.7200E+02	7.2000E+02	no data	no data	no data	no data	no
Co-58	2.3850E+00	2.3870E+00	2.3881E+00	2.3888E+00	2.3892E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	2.9145E+00	2.9174E+00	2.9191E+00	2.9202E+00	2.9209E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	9.0850E+05	9.8696E+05	1.0650E+06	1.1426E+06	1.2198E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	1.3713E+05	1.3713E+05	1.3713E+05	1.3713E+05	1.3713E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	1.8756E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	1.5907E+05	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	9.6800E+01	9.6843E+01	9.6868E+01	9.6882E+01	9.6890E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	3.4624E+03	3.4649E+03	3.4665E+03	3.4674E+03	3.4680E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	4.0518E+02	4.0558E+02	4.0582E+02	4.0597E+02	4.0607E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	1.6294E+03	1.6294E+03	1.6294E+03	1.6294E+03	1.6294E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	6.1151E+02	6.1151E+02	6.1151E+02	6.1151E+02	6.1151E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	1.2551E+02	1.2591E+02	1.2616E+02	1.2631E+02	1.2640E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	5.0577E+01	5.0619E+01	5.0645E+01	5.0660E+01	5.0669E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02	4.9378E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	2.0081E+01	2.0081E+01	2.0081E+01	2.0081E+01	2.0081E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	5.5892E+01	5.5936E+01	5.5963E+01	5.5979E+01	5.5988E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	2.6519E+01	2.6519E+01	2.6519E+01	2.6519E+01	2.6519E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	5.7412E+01	5.7466E+01	5.7499E+01	5.7519E+01	5.7531E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	5.6250E+02	5.6250E+02	5.6250E+02	5.6250E+02	5.6250E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	5.3610E+02	5.3611E+02	5.3611E+02	5.3611E+02	5.3611E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	6.4465E+02	6.4509E+02	6.4535E+02	6.4550E+02	6.4560E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	9.0723E+01	9.0723E+01	9.0723E+01	9.0723E+01	9.0723E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	2.7459E+02	2.7485E+02	2.7501E+02	2.7510E+02	2.7516E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	2.8223E+02	2.8223E+02	2.8223E+02	2.8223E+02	2.8223E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Sb-127	6.9237E+02	6.9238E+02	6.9239E+02	6.9239E+02	6.9239E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02	5.2615E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	7.4565E+02	7.4578E+02	7.4585E+02	7.4589E+02	7.4592E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	1.2260E+02	1.2271E+02	1.2278E+02	1.2282E+02	1.2284E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	8.5604E+02	8.5626E+02	8.5639E+02	8.5646E+02	8.5651E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	3.8887E+02	3.8912E+02	3.8926E+02	3.8935E+02	3.8940E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	6.8348E+02	6.8348E+02	6.8348E+02	6.8348E+02	6.8348E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	8.8096E+03	8.8097E+03	8.8097E+03	8.8097E+03	8.8097E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	6.4141E+04	6.4695E+04	6.5156E+04	6.5541E+04	6.5862E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-132	1.8750E+04	1.8750E+04	1.8750E+04	1.8750E+04	1.8750E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-133	5.7903E+04	5.7903E+04	5.7903E+04	5.7903E+04	5.7903E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-134	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	2.9233E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-135	2.8579E+04	2.8579E+04	2.8579E+04	2.8579E+04	2.8579E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-133	4.3732E+07	4.4273E+07	4.4686E+07	4.5002E+07	4.5243E+07	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	1.5842E+06	1.5842E+06	1.5842E+06	1.5842E+06	1.5842E+06	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	1.1642E+04	1.1653E+04	1.1659E+04	1.1664E+04	1.1666E+04	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	2.9253E+03	2.9262E+03	2.9267E+03	2.9270E+03	2.9272E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	7.2706E+03	7.2776E+03	7.2820E+03	7.2846E+03	7.2863E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	5.5997E+03	5.6015E+03	5.6025E+03	5.6030E+03	5.6033E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	2.0514E+03	2.0535E+03	2.0546E+03	2.0553E+03	2.0556E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	1.0373E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	1.3710E+02	1.3719E+02	1.3724E+02	1.3727E+02	1.3729E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	8.0683E+01	8.0683E+01	8.0683E+01	8.0683E+01	8.0683E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	1.1401E+02	1.1412E+02	1.1418E+02	1.1422E+02	1.1425E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	5.4464E+01	5.4485E+01	5.4498E+01	5.4504E+01	5.4508E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	2.0705E+01	2.0710E+01	2.0713E+01	2.0715E+01	2.0716E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	1.1498E+03	1.1498E+03	1.1498E+03	1.1498E+03	1.1498E+03	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	5.7266E-01	5.7323E-01	5.7357E-01	5.7379E-01	5.7392E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	3.8407E-02	3.8445E-02	3.8469E-02	3.8483E-02	3.8492E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	4.1060E-02	4.1100E-02	4.1125E-02	4.1141E-02	4.1150E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	1.9702E+01	1.9721E+01	1.9733E+01	1.9740E+01	1.9744E+01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	1.2342E-02	1.2356E-02	1.2365E-02	1.2370E-02	1.2373E-02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	3.0162E+00	3.0189E+00	3.0206E+00	3.0216E+00	3.0222E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	3.3172E-01	3.3204E-01	3.3224E-01	3.3236E-01	3.3244E-01	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

OUTPUT CUR IE DATA FOR VERIFICATI ON OF PROPER READIN

time (hrs)	1.7000E-03	3.3000E-03	5.0000E-03	6.7000E-03	8.3000E-03	1.0000E-02	1.1700E-02	1.3300E-02	1.5000E-02	1.6700E-02
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	4.1152E-04	1.6460E-03	3.7032E-03	6.5830E-03	1.0285E-02	1.4810E-02	2.0157E-02	2.6326E-02	3.3316E-02	4.1129E-02
I-132	5.9408E-04	2.3750E-03	5.3408E-03	9.4894E-03	1.4819E-02	2.1327E-02	2.9013E-02	3.7873E-02	4.7906E-02	5.9111E-02
I-133	8.5086E-04	3.4031E-03	7.6561E-03	1.3609E-02	2.1262E-02	3.0614E-02	4.1665E-02	5.4413E-02	6.8859E-02	8.5001E-02
I-134	9.4294E-04	3.7666E-03	8.4632E-03	1.5025E-02	2.3444E-02	3.3713E-02	4.5825E-02	5.9770E-02	7.5543E-02	9.3135E-02
I-135	7.9503E-04	3.1794E-03	7.1519E-03	1.2712E-02	1.9857E-02	2.8588E-02	3.8902E-02	5.0800E-02	6.4278E-02	7.9338E-02
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

time (hrs)	1.6700E-02	2.5000E-02	5.0000E-02	5.8300E-02	7.5000E-02	1.0000E-01	1.2500E-01	1.4170E-01	1.5000E-01	1.7500E-01
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	4.1277E-02	9.2474E-02	3.6956E-01	5.0228E-01	8.3073E-01	1.4755E+00	2.3033E+00	2.9581E+00	3.3137E+00	4.5062E+00
I-132	5.9323E-02	1.3258E-01	5.2588E-01	7.1298E-01	1.1734E+00	2.0686E+00	3.2053E+00	4.0960E+00	4.5771E+00	6.1781E+00
I-133	8.5307E-02	1.9107E-01	7.6301E-01	1.0368E+00	1.7139E+00	3.0419E+00	4.7450E+00	6.0908E+00	6.8214E+00	9.2692E+00
I-134	9.3468E-02	2.0804E-01	8.1518E-01	1.1007E+00	1.7968E+00	3.1291E+00	4.7895E+00	6.0707E+00	6.7563E+00	9.0086E+00
I-135	7.9623E-02	1.7823E-01	7.1047E-01	9.6482E-01	1.5930E+00	2.8223E+00	4.3946E+00	5.6343E+00	6.3065E+00	8.5542E+00
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

time (hrs)	1.8330E-01	2.0000E-01	2.2500E-01	2.5000E-01	2.5830E-01	2.6670E-01	2.9670E-01	3.9580E-01	4.4500E-01	5.0000E-01
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	4.9422E+00	5.8802E+00	7.4353E+00	9.1709E+00	9.7869E+00	1.0296E+01	1.2219E+01	1.9703E+01	2.3992E+01	2.9190E+01
I-132	6.7592E+00	8.0021E+00	1.0043E+01	1.2296E+01	1.3089E+01	1.3736E+01	1.6157E+01	2.5294E+01	3.0352E+01	3.6329E+01
I-133	1.0164E+01	1.2087E+01	1.5272E+01	1.8822E+01	2.0082E+01	2.1121E+01	2.5045E+01	4.0264E+01	4.8957E+01	5.9467E+01

I-134	9.8160E+00	1.1526E+01	1.4291E+01	1.7283E+01	1.8324E+01	1.9150E+01	2.2198E+01	3.3106E+01	3.8781E+01	4.5185E+01
I-135	9.3741E+00	1.1134E+01	1.4043E+01	1.7278E+01	1.8423E+01	1.9364E+01	2.2912E+01	3.6576E+01	4.4316E+01	5.3619E+01
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

time (hrs)	5.9330E-01	7.4160E-01	8.9000E-01	1.0383E+00	1.1866E+00	1.3350E+00	1.4833E+00	1.6316E+00	1.7800E+00	1.9283E+00
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	3.9692E+01	6.1214E+01	8.7487E+01	1.1744E+02	1.5024E+02	1.8525E+02	2.2195E+02	2.5997E+02	2.9899E+02	3.3879E+02
I-132	4.8045E+01	7.0895E+01	9.6944E+01	1.2451E+02	1.5241E+02	1.7980E+02	2.0612E+02	2.3099E+02	2.5418E+02	2.7557E+02
I-133	8.0637E+01	1.2381E+02	1.7617E+02	2.3545E+02	2.9989E+02	3.6814E+02	4.3914E+02	5.1209E+02	5.8637E+02	6.6149E+02
I-134	5.7090E+01	7.8344E+01	9.9631E+01	1.1901E+02	1.3547E+02	1.4863E+02	1.5845E+02	1.6514E+02	1.6900E+02	1.7040E+02
I-135	7.2223E+01	1.0972E+02	1.5448E+02	2.0428E+02	2.5744E+02	3.1268E+02	3.6905E+02	4.2582E+02	4.8244E+02	5.3850E+02
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

time (hrs)	2.0000E+00	3.0000E+00	4.0000E+00	5.0000E+00	6.0000E+00	7.0000E+00	8.0000E+00	1.0000E+01	1.2000E+01	1.4000E+01
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	3.5825E+02	4.8800E+02	5.1001E+02	5.1238E+02	5.1118E+02	5.0933E+02	5.0737E+02	5.0343E+02	4.9952E+02	4.9563E+02
I-132	2.8524E+02	2.8849E+02	2.2385E+02	1.6698E+02	1.2368E+02	9.1499E+01	6.7674E+01	3.7016E+01	2.0247E+01	1.1074E+01
I-133	6.9800E+02	9.2294E+02	9.3631E+02	9.1311E+02	8.8428E+02	8.5528E+02	8.2703E+02	7.7323E+02	7.2292E+02	6.7589E+02
I-134	1.7030E+02	1.0559E+02	5.0230E+01	2.2970E+01	1.0431E+01	4.7307E+00	2.1450E+00	4.4096E-01	9.0651E-02	1.8635E-02
I-135	5.6531E+02	6.9589E+02	6.5723E+02	5.9669E+02	5.3796E+02	4.8439E+02	4.3606E+02	3.5334E+02	2.8631E+02	2.3200E+02
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

time (hrs)	1.6000E+01	1.8000E+01	2.0000E+01	2.2000E+01	2.4000E+01	3.2000E+01	4.0000E+01	4.8000E+01	5.6000E+01	6.4000E+01
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	4.9177E+02	4.8795E+02	4.8415E+02	4.8039E+02	4.7665E+02	4.6199E+02	4.4778E+02	4.3401E+02	4.2066E+02	4.0772E+02
I-132	6.0573E+00	3.3132E+00	1.8122E+00	9.9122E-01	5.4217E-01	4.8527E-02	4.3435E-03	3.8877E-04	3.4797E-05	3.1146E-06
I-133	6.3192E+02	5.9080E+02	5.5237E+02	5.1643E+02	4.8283E+02	3.6891E+02	2.8188E+02	2.1537E+02	1.6456E+02	1.2574E+02
I-134	3.8310E-03	7.8755E-04	1.6190E-04	3.3282E-05	6.8420E-06	1.2219E-08	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-135	1.8799E+02	1.5233E+02	1.2343E+02	1.0001E+02	8.1042E+01	3.4937E+01	1.5062E+01	6.4931E+00	2.7992E+00	1.2067E+00
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

time (hrs)	7.2000E+01	8.0000E+01	8.8000E+01	9.6000E+01	1.2000E+02	1.4400E+02	1.6800E+02	1.9200E+02	2.1600E+02	2.4000E+02
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	3.9519E+02	3.8303E+02	3.7125E+02	3.5983E+02	3.2764E+02	2.9833E+02	2.7165E+02	2.4735E+02	2.2522E+02	2.0507E+02
I-132	2.7877E-07	2.4952E-08	2.2334E-09	1.9990E-10	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-133	9.6071E+01	7.3405E+01	5.6087E+01	4.2854E+01	1.9116E+01	8.5269E+00	3.8036E+00	1.6967E+00	7.5682E-01	3.3759E-01
I-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-135	5.2023E-01	2.2427E-01	9.6685E-02	4.1681E-02	3.3395E-03	2.6756E-04	2.1437E-05	1.7176E-06	1.3761E-07	1.1026E-08
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

time (hrs)	2.8800E+02	3.3600E+02	3.8400E+02	4.3200E+02	4.8000E+02	5.2800E+02	5.7600E+02	6.2400E+02	6.7200E+02	7.2000E+02
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	1.7002E+02	1.4096E+02	1.1687E+02	9.6898E+01	8.0337E+01	6.6607E+01	5.5223E+01	4.5785E+01	3.7960E+01	3.1472E+01
I-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-133	6.7173E-02	1.3366E-02	2.6595E-03	5.2917E-04	1.0529E-04	2.0951E-05	4.1687E-06	8.2946E-07	1.6504E-07	3.2839E-08
I-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-135	7.0777E-11	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

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INTEGRATED SOURCE IN CURIE-HOUR S

	1.7000E-03	3.3000E-03	5.0000E-03	6.7000E-03	8.3000E-03	1.0000E-02	1.1700E-02	1.3300E-02	1.5000E-02	1.6700E-02
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	3.4979E-07	1.9958E-06	6.5426E-06	1.5286E-05	2.8780E-05	5.0111E-05	7.9833E-05	1.1702E-04	1.6772E-04	2.3099E-04
I-132	5.0497E-07	2.8802E-06	9.4387E-06	2.2044E-05	4.1491E-05	7.2215E-05	1.1500E-04	1.6851E-04	2.4143E-04	3.3239E-04
I-133	7.2323E-07	4.1264E-06	1.3527E-05	3.1602E-05	5.9499E-05	1.0359E-04	1.6503E-04	2.4189E-04	3.4667E-04	4.7746E-04
I-134	8.0150E-07	4.5691E-06	1.4964E-05	3.4929E-05	6.5705E-05	1.1429E-04	1.8190E-04	2.6637E-04	3.8139E-04	5.2476E-04
I-135	6.7578E-07	3.8553E-06	1.2637E-05	2.9521E-05	5.5576E-05	9.6755E-05	1.5412E-04	2.2588E-04	3.2370E-04	4.4577E-04
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

	1.6700E-02	2.5000E-02	5.0000E-02	5.8300E-02	7.5000E-02	1.0000E-01	1.2500E-01	1.4170E-01	1.5000E-01	1.7500E-01
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	2.3099E-04	7.8606E-04	6.5615E-03	1.0180E-02	2.1310E-02	5.0138E-02	9.7373E-02	1.4131E-01	1.6733E-01	2.6508E-01
I-132	3.3239E-04	1.1288E-03	9.3595E-03	1.4501E-02	3.0252E-02	7.0777E-02	1.3670E-01	1.9767E-01	2.3366E-01	3.6810E-01
I-133	4.7746E-04	1.6244E-03	1.3550E-02	2.1020E-02	4.3988E-02	1.0344E-01	2.0077E-01	2.9125E-01	3.4484E-01	5.4597E-01
I-134	5.2476E-04	1.7760E-03	1.4566E-02	2.2517E-02	4.6711E-02	1.0829E-01	2.0727E-01	2.9795E-01	3.5118E-01	5.4824E-01
I-135	4.4577E-04	1.5159E-03	1.2625E-02	1.9577E-02	4.0935E-02	9.6126E-02	1.8634E-01	2.7008E-01	3.1963E-01	5.0539E-01
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

	1.8330E-01	2.0000E-01	2.2500E-01	2.5000E-01	2.5830E-01	2.6670E-01	2.9670E-01	3.9580E-01	4.4500E-01	5.0000E-01
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	3.0429E-01	3.9466E-01	5.6110E-01	7.6868E-01	8.4736E-01	9.3170E-01	1.2694E+00	2.8512E+00	3.9261E+00	5.3886E+00
I-132	4.2179E-01	5.4505E-01	7.7061E-01	1.0498E+00	1.1552E+00	1.2679E+00	1.7163E+00	3.7702E+00	5.1390E+00	6.9728E+00
I-133	6.2662E-01	8.1241E-01	1.1544E+00	1.5806E+00	1.7420E+00	1.9151E+00	2.6076E+00	5.8436E+00	8.0385E+00	1.1020E+01
I-134	6.2637E-01	8.0457E-01	1.1273E+00	1.5220E+00	1.6697E+00	1.8271E+00	2.4473E+00	5.1877E+00	6.9561E+00	9.2651E+00
I-135	5.7979E-01	7.5104E-01	1.0657E+00	1.4573E+00	1.6054E+00	1.7641E+00	2.3983E+00	5.3459E+00	7.3358E+00	1.0029E+01
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
	5.9330E-01	7.4160E-01	8.9000E-01	1.0383E+00	1.1866E+00	1.3350E+00	1.4833E+00	1.6316E+00	1.7800E+00	1.9283E+00
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	8.6019E+00	1.6084E+01	2.7118E+01	4.2313E+01	6.2162E+01	8.7055E+01	1.1725E+02	1.5298E+02	1.9446E+02	2.4175E+02
I-132	1.0909E+01	1.9728E+01	3.2182E+01	4.8603E+01	6.9136E+01	9.3786E+01	1.2240E+02	1.5481E+02	1.9081E+02	2.3009E+02
I-133	1.7556E+01	3.2716E+01	5.4974E+01	8.5496E+01	1.2519E+02	1.7476E+02	2.3462E+02	3.0515E+02	3.8666E+02	4.7919E+02
I-134	1.4036E+01	2.4079E+01	3.7284E+01	5.3497E+01	7.2366E+01	9.3447E+01	1.1622E+02	1.4021E+02	1.6500E+02	1.9017E+02
I-135	1.5900E+01	2.9391E+01	4.8994E+01	7.5596E+01	1.0983E+02	1.5214E+02	2.0269E+02	2.6163E+02	3.2902E+02	4.0472E+02
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

	2.0000E+00	3.0000E+00	4.0000E+00	5.0000E+00	6.0000E+00	7.0000E+00	8.0000E+00	1.0000E+01	1.2000E+01	1.4000E+01
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	2.6674E+02	6.8986E+02	1.1889E+03	1.7001E+03	2.2118E+03	2.7221E+03	3.2304E+03	4.2412E+03	5.2442E+03	6.2393E+03
I-132	2.5020E+02	5.3706E+02	7.9323E+02	9.8865E+02	1.1340E+03	1.2416E+03	1.3212E+03	1.4258E+03	1.4831E+03	1.5144E+03
I-133	5.2792E+02	1.3384E+03	2.2680E+03	3.1927E+03	4.0914E+03	4.9612E+03	5.8024E+03	7.4026E+03	8.8988E+03	1.0298E+04
I-134	2.0238E+02	3.4033E+02	4.1824E+02	4.5484E+02	4.7154E+02	4.7912E+02	4.8256E+02	4.8514E+02	4.8568E+02	4.8579E+02
I-135	4.4429E+02	1.0749E+03	1.7515E+03	2.3784E+03	2.9457E+03	3.4569E+03	3.9171E+03	4.7065E+03	5.3462E+03	5.8645E+03
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

	1.6000E+01	1.8000E+01	2.0000E+01	2.2000E+01	2.4000E+01	3.2000E+01	4.0000E+01	4.8000E+01	5.6000E+01	6.4000E+01
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	7.2267E+03	8.2065E+03	9.1786E+03	1.0143E+04	1.1100E+04	1.4855E+04	1.8494E+04	2.2021E+04	2.5440E+04	2.8753E+04
I-132	1.5316E+03	1.5409E+03	1.5461E+03	1.5489E+03	1.5504E+03	1.5528E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03
I-133	1.1605E+04	1.2828E+04	1.3971E+04	1.5040E+04	1.6039E+04	1.9446E+04	2.2049E+04	2.4038E+04	2.5558E+04	2.6719E+04
I-134	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02
I-135	6.2845E+03	6.6248E+03	6.9006E+03	7.1240E+03	7.3051E+03	7.7690E+03	7.9690E+03	8.0552E+03	8.0924E+03	8.1084E+03
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

	7.2000E+01	8.0000E+01	8.8000E+01	9.6000E+01	1.2000E+02	1.4400E+02	1.6800E+02	1.9200E+02	2.1600E+02	2.4000E+02
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	3.1965E+04	3.5078E+04	3.8095E+04	4.1019E+04	4.9269E+04	5.6780E+04	6.3620E+04	6.9848E+04	7.5519E+04	8.0682E+04
I-132	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03
I-133	2.7607E+04	2.8285E+04	2.8802E+04	2.9198E+04	2.9942E+04	3.0274E+04	3.0422E+04	3.0488E+04	3.0517E+04	3.0530E+04
I-134	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02
I-135	8.1153E+03	8.1183E+03	8.1196E+03	8.1201E+03	8.1206E+03	8.1207E+03	8.1207E+03	8.1207E+03	8.1207E+03	8.1207E+03
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
	2.8800E+02	3.3600E+02	3.8400E+02	4.3200E+02	4.8000E+02	5.2800E+02	5.7600E+02	6.2400E+02	6.7200E+02	7.2000E+02
Co-58	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Co-60	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-85m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-87	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Kr-88	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rb-86	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-89	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sr-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-90	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-91	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-92	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Y-93	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Zr-97	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nb-95	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Mo-99	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Tc-99m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-103	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ru-106	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Rh-105	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Sb-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-127m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-129m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-131m	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Te-132	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
I-131	8.9685E+04	9.7148E+04	1.0334E+05	1.0847E+05	1.1272E+05	1.1625E+05	1.1917E+05	1.2159E+05	1.2360E+05	1.2527E+05
I-132	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03	1.5530E+03
I-133	3.0540E+04	3.0542E+04	3.0542E+04	3.0542E+04	3.0542E+04	3.0542E+04	3.0542E+04	3.0542E+04	3.0542E+04	3.0542E+04
I-134	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02	4.8581E+02

I-135	8.1207E+03	8.1207E+03	8.1207E+03	8.1207E+03	8.1207E+03	8.1207E+03	8.1207E+03	8.1207E+03	8.1207E+03	8.1207E+03
Xe-133	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Xe-135	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-134	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-136	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cs-137	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-139	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ba-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-140	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
La-142	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-141	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Ce-144	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pr-143	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Nd-147	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Np-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-238	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-239	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-240	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Pu-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Am-241	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-242	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Cm-244	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Isotope	Integrated Source thru 24hr (Ci-hr)	thru 96hr (Ci-hr)	thru 720hr (Ci-hr)	with CR occupancy (Ci-hr)		uCi-hr/cc	
Kr-85	4.3702E+04	1.8311E+05	1.2198E+06	5.4202E+05	0.0201	10.63402824	Kr-85
Kr-85m	1.2728E+05	1.3713E+05	1.3713E+05	1.3319E+05	0.0049	2.613074988	Kr-85m
Kr-87	1.8755E+04	1.8756E+04	1.8756E+04	1.8756E+04	0.0007	0.367968986	Kr-87
Kr-88	1.5660E+05	1.5907E+05	1.5907E+05	1.5808E+05	0.0059	3.101434945	Kr-88
Rb-86	5.9969E+01	8.1568E+01	9.6890E+01	7.9057E+01	0.0000		
Sr-89	2.0460E+03	2.8333E+03	3.4680E+03	2.7723E+03	0.0001		
Sr-90	2.3357E+02	3.2574E+02	4.0607E+02	3.2100E+02	0.0000		
Sr-91	1.5722E+03	1.6293E+03	1.6294E+03	1.6065E+03	0.0001		
Sr-92	6.1109E+02	6.1151E+02	6.1151E+02	6.1134E+02	0.0000		
Y-90	2.0671E+01	5.9702E+01	1.2640E+02	7.0769E+01	0.0000		
Y-91	2.8041E+01	4.0437E+01	5.0669E+01	3.9571E+01	0.0000		
Y-92	4.8914E+02	4.9378E+02	4.9378E+02	4.9192E+02	0.0000		
Y-93	1.9296E+01	2.0079E+01	2.0081E+01	1.9767E+01	0.0000		
Zr-95	3.2860E+01	4.5572E+01	5.5988E+01	4.4654E+01	0.0000		
Zr-97	2.4333E+01	2.6468E+01	2.6519E+01	2.5634E+01	0.0000		
Nb-95	3.3158E+01	4.6230E+01	5.7531E+01	4.5522E+01	0.0000		
Mo-99	4.2540E+02	5.3330E+02	5.6250E+02	5.0182E+02	0.0000		
Tc-99m	3.9633E+02	5.0617E+02	5.3611E+02	4.7421E+02	0.0000		
Ru-103	3.8351E+02	5.3004E+02	6.4560E+02	5.1765E+02	0.0000		
Ru-105	9.0232E+01	9.0723E+01	9.0723E+01	9.0527E+01	0.0000		
Ru-106	1.5883E+02	2.2129E+02	2.7516E+02	2.1785E+02	0.0000		
Rh-105	2.3288E+02	2.7685E+02	2.8223E+02	2.6141E+02	0.0000		
Sb-127	4.9800E+02	6.4065E+02	6.9239E+02	6.0429E+02	0.0000		
Sb-129	5.2355E+02	5.2615E+02	5.2615E+02	5.2511E+02	0.0000		
Te-127	5.1048E+02	6.7252E+02	7.4592E+02	6.3706E+02	0.0000		
Te-127m	7.0882E+01	9.8870E+01	1.2284E+02	9.7263E+01	0.0000		
Te-129	7.1699E+02	7.9715E+02	8.5651E+02	7.8883E+02	0.0000		
Te-129m	2.3227E+02	3.2076E+02	3.8940E+02	3.1282E+02	0.0000		
Te-131m	5.8296E+02	6.7500E+02	6.8348E+02	6.4158E+02	0.0000		
Te-132	6.4932E+03	8.2525E+03	8.8097E+03	7.7717E+03	0.0003		
I-131	4.2445E+04	8.6883E+04	1.9113E+05	1.1081E+05	0.0041	2.173947334	I-131
I-132	1.7460E+04	1.9617E+04	2.0303E+04	1.9029E+04	0.0007	0.373328154	I-132
I-133	6.6103E+04	8.6668E+04	8.8445E+04	7.9153E+04	0.0029	1.552910894	I-133
I-134	3.4091E+03	3.4091E+03	3.4091E+03	3.4091E+03	0.0001	0.066883851	I-134
I-135	3.5279E+04	3.6699E+04	3.6700E+04	3.6131E+04	0.0013	0.708866288	I-135
Xe-133	5.6681E+06	2.0206E+07	4.5243E+07	2.4406E+07	0.9052	478.8179853	Xe-133
Xe-135	1.1494E+06	1.5825E+06	1.5842E+06	1.4099E+06	0.0523	27.66182858	Xe-135
Cs-134	6.7872E+03	9.4002E+03	1.1666E+04	9.2613E+03	0.0003		
Cs-136	1.8543E+03	2.5033E+03	2.9272E+03	2.4133E+03	0.0001		
Cs-137	4.2321E+03	5.8640E+03	7.2863E+03	5.7802E+03	0.0002		
Ba-139	3.0620E+02	3.0620E+02	3.0620E+02	3.0620E+02	0.0000		
Ba-140	3.5264E+03	4.7865E+03	5.6033E+03	4.6092E+03	0.0002		
La-140	4.6130E+02	1.2130E+03	2.0556E+03	1.2494E+03	0.0000		
La-141	1.0337E+01	1.0373E+01	1.0373E+01	1.0359E+01	0.0000		
La-142	3.2584E+00	3.2584E+00	3.2584E+00	3.2584E+00	0.0000		
Ce-141	8.2051E+01	1.1321E+02	1.3729E+02	1.1038E+02	0.0000		
Ce-143	6.7870E+01	7.9423E+01	8.0683E+01	7.5306E+01	0.0000		
Ce-144	6.6015E+01	9.1951E+01	1.1425E+02	9.0496E+01	0.0000		
Pr-143	3.2186E+01	4.5206E+01	5.4508E+01	4.3719E+01	0.0000		
Nd-147	1.3196E+01	1.7838E+01	2.0716E+01	1.7132E+01	0.0000		
Np-239	8.9066E+02	1.1013E+03	1.1498E+03	1.0364E+03	0.0000		
Pu-238	3.3002E-01	4.6029E-01	5.7392E-01	4.5363E-01	0.0000		
Pu-239	2.2076E-02	3.0827E-02	3.8492E-02	3.0393E-02	0.0000		
Pu-240	2.3667E-02	3.3007E-02	4.1150E-02	3.2528E-02	0.0000		
Pu-241	1.1359E+01	1.5840E+01	1.9744E+01	1.5609E+01	0.0000		
Am-241	7.0200E-03	9.8268E-03	1.2373E-02	9.7226E-03	0.0000		
Cm-242	1.7523E+00	2.4385E+00	3.0222E+00	2.3975E+00	0.0000		
Cm-244	1.9123E-01	2.6669E-01	3.3244E-01	2.6281E-01	0.0000		
				2.6961E+07			
Xe-138				2.9715E+02	0.0000110	0.005829831	Xe-138
					90731.12996		

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis (Calculated)	MSIV Leak Fraction of Design Basis (Calculated)	Time (hours)	Time (days)
0	1.55E+01	1.50E+02	9.50E+01			0.000E+00	0.000E+00
60.1709	4.64E+01	2.76E+02	1.34E+02	0.848	1.200	1.671E-02	6.964E-04
60.4834	4.63E+01	2.76E+02	1.34E+02	0.848	1.199	1.680E-02	7.000E-04
60.7959	4.63E+01	2.76E+02	1.34E+02	0.848	1.199	1.689E-02	7.037E-04
61.1084	4.63E+01	2.76E+02	1.34E+02	0.848	1.199	1.697E-02	7.073E-04
61.4209	4.64E+01	2.76E+02	1.34E+02	0.848	1.199	1.706E-02	7.109E-04
61.7334	4.63E+01	2.76E+02	1.34E+02	0.848	1.199	1.715E-02	7.145E-04
62.0459	4.63E+01	2.76E+02	1.35E+02	0.848	1.199	1.723E-02	7.181E-04
62.3584	4.63E+01	2.76E+02	1.35E+02	0.848	1.199	1.732E-02	7.217E-04
62.6709	4.63E+01	2.76E+02	1.35E+02	0.848	1.199	1.741E-02	7.254E-04
62.9834	4.63E+01	2.76E+02	1.35E+02	0.848	1.199	1.750E-02	7.290E-04
63.2959	4.63E+01	2.76E+02	1.35E+02	0.848	1.199	1.758E-02	7.326E-04
63.6084	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.767E-02	7.362E-04
63.9209	4.63E+01	2.76E+02	1.35E+02	0.848	1.199	1.776E-02	7.398E-04
64.2334	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.784E-02	7.434E-04
64.5459	4.63E+01	2.76E+02	1.35E+02	0.848	1.199	1.793E-02	7.471E-04
64.8584	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.802E-02	7.507E-04
65.1709	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.810E-02	7.543E-04
65.4834	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.819E-02	7.579E-04
65.7959	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.828E-02	7.615E-04
66.1084	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.836E-02	7.651E-04
66.4209	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.845E-02	7.688E-04
66.7334	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.854E-02	7.724E-04
67.0459	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.862E-02	7.760E-04
67.3584	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.871E-02	7.796E-04
67.6709	4.63E+01	2.76E+02	1.35E+02	0.848	1.199	1.880E-02	7.832E-04
67.9834	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.888E-02	7.868E-04
68.2959	4.62E+01	2.76E+02	1.35E+02	0.846	1.197	1.897E-02	7.905E-04
68.53027	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.904E-02	7.932E-04
68.84277	4.62E+01	2.76E+02	1.35E+02	0.847	1.197	1.912E-02	7.968E-04
69.15527	4.62E+01	2.76E+02	1.35E+02	0.847	1.197	1.921E-02	8.004E-04
69.46777	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.930E-02	8.040E-04
69.78027	4.63E+01	2.76E+02	1.35E+02	0.847	1.198	1.938E-02	8.076E-04
70.09277	4.62E+01	2.76E+02	1.35E+02	0.847	1.197	1.947E-02	8.113E-04
70.40527	4.62E+01	2.76E+02	1.35E+02	0.847	1.197	1.956E-02	8.149E-04
70.71777	4.62E+01	2.76E+02	1.36E+02	0.847	1.197	1.964E-02	8.185E-04
71.03027	4.62E+01	2.76E+02	1.36E+02	0.847	1.197	1.973E-02	8.221E-04
71.34277	4.62E+01	2.76E+02	1.36E+02	0.847	1.197	1.982E-02	8.257E-04
71.65527	4.62E+01	2.76E+02	1.36E+02	0.846	1.197	1.990E-02	8.293E-04
71.96777	4.62E+01	2.76E+02	1.36E+02	0.846	1.197	1.999E-02	8.330E-04
72.28027	4.62E+01	2.76E+02	1.36E+02	0.846	1.197	2.008E-02	8.366E-04
72.59277	4.62E+01	2.76E+02	1.36E+02	0.846	1.196	2.016E-02	8.402E-04
72.90527	4.62E+01	2.76E+02	1.36E+02	0.846	1.196	2.025E-02	8.438E-04
73.21777	4.62E+01	2.76E+02	1.36E+02	0.846	1.197	2.034E-02	8.474E-04
73.53027	4.62E+01	2.76E+02	1.36E+02	0.846	1.197	2.043E-02	8.510E-04
73.84277	4.62E+01	2.76E+02	1.36E+02	0.846	1.196	2.051E-02	8.547E-04
74.15527	4.62E+01	2.76E+02	1.36E+02	0.846	1.196	2.060E-02	8.583E-04
74.46777	4.62E+01	2.76E+02	1.36E+02	0.846	1.196	2.069E-02	8.619E-04
74.78027	4.62E+01	2.76E+02	1.36E+02	0.846	1.196	2.077E-02	8.655E-04
75.09277	4.62E+01	2.76E+02	1.36E+02	0.846	1.196	2.086E-02	8.691E-04
75.40527	4.62E+01	2.76E+02	1.36E+02	0.846	1.196	2.095E-02	8.727E-04
75.71777	4.62E+01	2.76E+02	1.36E+02	0.845	1.196	2.103E-02	8.764E-04

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
76.03027	4.62E+01	2.76E+02	1.36E+02	0.845	1.196	2.112E-02	8.800E-04
76.34277	4.62E+01	2.76E+02	1.36E+02	0.846	1.196	2.121E-02	8.836E-04
76.65527	4.61E+01	2.76E+02	1.36E+02	0.845	1.195	2.129E-02	8.872E-04
76.96777	4.62E+01	2.76E+02	1.36E+02	0.845	1.196	2.138E-02	8.908E-04
77.28027	4.61E+01	2.76E+02	1.36E+02	0.845	1.195	2.147E-02	8.944E-04
77.59277	4.61E+01	2.76E+02	1.36E+02	0.845	1.195	2.155E-02	8.981E-04
77.90527	4.61E+01	2.76E+02	1.36E+02	0.845	1.195	2.164E-02	9.017E-04
78.21777	4.61E+01	2.76E+02	1.36E+02	0.845	1.195	2.173E-02	9.053E-04
78.53027	4.61E+01	2.76E+02	1.36E+02	0.845	1.195	2.181E-02	9.089E-04
78.84277	4.61E+01	2.76E+02	1.36E+02	0.845	1.195	2.190E-02	9.125E-04
79.15527	4.61E+01	2.76E+02	1.36E+02	0.845	1.195	2.199E-02	9.161E-04
79.46777	4.61E+01	2.76E+02	1.36E+02	0.845	1.195	2.207E-02	9.198E-04
79.78027	4.61E+01	2.76E+02	1.36E+02	0.845	1.194	2.216E-02	9.234E-04
80.09277	4.61E+01	2.76E+02	1.36E+02	0.845	1.194	2.225E-02	9.270E-04
80.40527	4.61E+01	2.76E+02	1.36E+02	0.844	1.194	2.233E-02	9.306E-04
80.71777	4.61E+01	2.76E+02	1.36E+02	0.845	1.194	2.242E-02	9.342E-04
81.03027	4.61E+01	2.76E+02	1.36E+02	0.844	1.194	2.251E-02	9.379E-04
81.34277	4.61E+01	2.76E+02	1.36E+02	0.844	1.194	2.260E-02	9.415E-04
81.65527	4.61E+01	2.76E+02	1.37E+02	0.844	1.194	2.268E-02	9.451E-04
81.96777	4.61E+01	2.76E+02	1.37E+02	0.844	1.194	2.277E-02	9.487E-04
82.28027	4.60E+01	2.76E+02	1.37E+02	0.844	1.194	2.286E-02	9.523E-04
82.59277	4.60E+01	2.76E+02	1.37E+02	0.844	1.194	2.294E-02	9.559E-04
82.90527	4.60E+01	2.76E+02	1.37E+02	0.844	1.193	2.303E-02	9.596E-04
83.21777	4.60E+01	2.76E+02	1.37E+02	0.844	1.193	2.312E-02	9.632E-04
83.53027	4.60E+01	2.76E+02	1.37E+02	0.844	1.193	2.320E-02	9.668E-04
83.84277	4.60E+01	2.76E+02	1.37E+02	0.844	1.193	2.329E-02	9.704E-04
84.15527	4.60E+01	2.76E+02	1.37E+02	0.844	1.193	2.338E-02	9.740E-04
84.46777	4.60E+01	2.76E+02	1.37E+02	0.844	1.193	2.346E-02	9.776E-04
84.78027	4.60E+01	2.76E+02	1.37E+02	0.843	1.193	2.355E-02	9.813E-04
85.09277	4.60E+01	2.76E+02	1.37E+02	0.843	1.193	2.364E-02	9.849E-04
85.40527	4.60E+01	2.76E+02	1.37E+02	0.843	1.193	2.372E-02	9.885E-04
85.71777	4.60E+01	2.76E+02	1.37E+02	0.843	1.192	2.381E-02	9.921E-04
86.03027	4.60E+01	2.76E+02	1.37E+02	0.843	1.192	2.390E-02	9.957E-04
86.34277	4.60E+01	2.76E+02	1.37E+02	0.843	1.192	2.398E-02	9.993E-04
86.65527	4.60E+01	2.76E+02	1.37E+02	0.843	1.192	2.407E-02	1.003E-03
86.96777	4.60E+01	2.76E+02	1.37E+02	0.843	1.192	2.416E-02	1.007E-03
87.28027	4.60E+01	2.76E+02	1.37E+02	0.843	1.192	2.424E-02	1.010E-03
87.59277	4.60E+01	2.76E+02	1.37E+02	0.843	1.192	2.433E-02	1.014E-03
87.90527	4.59E+01	2.76E+02	1.37E+02	0.843	1.192	2.442E-02	1.017E-03
88.21777	4.60E+01	2.76E+02	1.37E+02	0.843	1.192	2.450E-02	1.021E-03
88.53027	4.59E+01	2.76E+02	1.37E+02	0.842	1.191	2.459E-02	1.025E-03
88.84277	4.59E+01	2.76E+02	1.37E+02	0.842	1.191	2.468E-02	1.028E-03
89.15527	4.59E+01	2.76E+02	1.37E+02	0.842	1.191	2.477E-02	1.032E-03
89.46777	4.59E+01	2.76E+02	1.37E+02	0.842	1.191	2.485E-02	1.036E-03
89.78027	4.59E+01	2.76E+02	1.37E+02	0.842	1.191	2.494E-02	1.039E-03
90.09277	4.59E+01	2.76E+02	1.37E+02	0.842	1.191	2.503E-02	1.043E-03
90.40527	4.59E+01	2.76E+02	1.37E+02	0.842	1.191	2.511E-02	1.046E-03
90.71777	4.59E+01	2.76E+02	1.37E+02	0.842	1.190	2.520E-02	1.050E-03
91.03027	4.59E+01	2.76E+02	1.37E+02	0.842	1.190	2.529E-02	1.054E-03
91.34277	4.59E+01	2.76E+02	1.37E+02	0.842	1.190	2.537E-02	1.057E-03
91.65527	4.59E+01	2.76E+02	1.37E+02	0.842	1.190	2.546E-02	1.061E-03
91.96777	4.59E+01	2.76E+02	1.37E+02	0.842	1.190	2.555E-02	1.064E-03

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
92.28027	4.59E+01	2.76E+02	1.37E+02	0.841	1.190	2.563E-02	1.068E-03
92.59277	4.59E+01	2.76E+02	1.37E+02	0.841	1.190	2.572E-02	1.072E-03
92.90527	4.58E+01	2.76E+02	1.37E+02	0.841	1.190	2.581E-02	1.075E-03
93.21777	4.58E+01	2.76E+02	1.37E+02	0.841	1.190	2.589E-02	1.079E-03
93.53027	4.58E+01	2.76E+02	1.37E+02	0.841	1.190	2.598E-02	1.083E-03
93.84277	4.58E+01	2.76E+02	1.37E+02	0.841	1.190	2.607E-02	1.086E-03
94.15527	4.58E+01	2.76E+02	1.37E+02	0.841	1.190	2.615E-02	1.090E-03
94.46777	4.58E+01	2.76E+02	1.37E+02	0.841	1.189	2.624E-02	1.093E-03
94.78027	4.58E+01	2.76E+02	1.37E+02	0.841	1.189	2.633E-02	1.097E-03
95.09277	4.58E+01	2.76E+02	1.37E+02	0.841	1.189	2.641E-02	1.101E-03
95.40527	4.58E+01	2.76E+02	1.37E+02	0.841	1.189	2.650E-02	1.104E-03
95.71777	4.58E+01	2.76E+02	1.37E+02	0.841	1.189	2.659E-02	1.108E-03
96.03027	4.58E+01	2.76E+02	1.37E+02	0.841	1.189	2.668E-02	1.111E-03
96.34277	4.58E+01	2.76E+02	1.37E+02	0.840	1.188	2.676E-02	1.115E-03
96.65527	4.58E+01	2.76E+02	1.37E+02	0.840	1.188	2.685E-02	1.119E-03
96.96777	4.58E+01	2.76E+02	1.37E+02	0.840	1.188	2.694E-02	1.122E-03
97.28027	4.58E+01	2.76E+02	1.37E+02	0.840	1.188	2.702E-02	1.126E-03
97.59277	4.58E+01	2.76E+02	1.37E+02	0.840	1.188	2.711E-02	1.130E-03
97.90527	4.57E+01	2.75E+02	1.37E+02	0.840	1.188	2.720E-02	1.133E-03
98.21777	4.58E+01	2.76E+02	1.38E+02	0.840	1.188	2.728E-02	1.137E-03
98.53027	4.57E+01	2.75E+02	1.38E+02	0.840	1.187	2.737E-02	1.140E-03
98.84277	4.57E+01	2.75E+02	1.38E+02	0.840	1.187	2.746E-02	1.144E-03
99.15527	4.57E+01	2.75E+02	1.38E+02	0.840	1.187	2.754E-02	1.148E-03
99.46777	4.57E+01	2.75E+02	1.38E+02	0.839	1.187	2.763E-02	1.151E-03
99.78027	4.57E+01	2.75E+02	1.38E+02	0.839	1.187	2.772E-02	1.155E-03
101.499	4.57E+01	2.75E+02	1.38E+02	0.839	1.186	2.819E-02	1.175E-03
104.624	4.56E+01	2.75E+02	1.38E+02	0.838	1.185	2.906E-02	1.211E-03
107.749	4.55E+01	2.75E+02	1.38E+02	0.837	1.184	2.993E-02	1.247E-03
110.874	4.54E+01	2.75E+02	1.38E+02	0.836	1.182	3.080E-02	1.283E-03
113.999	4.55E+01	2.75E+02	1.38E+02	0.837	1.184	3.167E-02	1.319E-03
117.124	4.57E+01	2.75E+02	1.38E+02	0.839	1.186	3.253E-02	1.356E-03
120.249	4.58E+01	2.76E+02	1.38E+02	0.840	1.188	3.340E-02	1.392E-03
123.374	4.59E+01	2.76E+02	1.38E+02	0.841	1.190	3.427E-02	1.428E-03
126.499	4.60E+01	2.76E+02	1.38E+02	0.843	1.192	3.514E-02	1.464E-03
129.624	4.60E+01	2.76E+02	1.39E+02	0.843	1.192	3.601E-02	1.500E-03
132.749	4.59E+01	2.76E+02	1.39E+02	0.842	1.191	3.687E-02	1.536E-03
135.874	4.59E+01	2.76E+02	1.39E+02	0.842	1.191	3.774E-02	1.573E-03
138.999	4.59E+01	2.76E+02	1.39E+02	0.842	1.191	3.861E-02	1.609E-03
142.124	4.58E+01	2.76E+02	1.39E+02	0.841	1.189	3.948E-02	1.645E-03
145.249	4.57E+01	2.75E+02	1.39E+02	0.840	1.188	4.035E-02	1.681E-03
148.374	4.56E+01	2.75E+02	1.39E+02	0.839	1.186	4.122E-02	1.717E-03
151.499	4.55E+01	2.75E+02	1.39E+02	0.837	1.184	4.208E-02	1.753E-03
154.624	4.55E+01	2.75E+02	1.39E+02	0.837	1.184	4.295E-02	1.790E-03
157.749	4.55E+01	2.75E+02	1.39E+02	0.837	1.183	4.382E-02	1.826E-03
160.874	4.55E+01	2.75E+02	1.39E+02	0.836	1.182	4.469E-02	1.862E-03
163.999	4.54E+01	2.75E+02	1.39E+02	0.835	1.181	4.556E-02	1.898E-03
167.124	4.53E+01	2.75E+02	1.39E+02	0.834	1.180	4.642E-02	1.934E-03
170.249	4.53E+01	2.75E+02	1.40E+02	0.834	1.180	4.729E-02	1.970E-03
173.374	4.53E+01	2.75E+02	1.40E+02	0.834	1.180	4.816E-02	2.007E-03
176.499	4.53E+01	2.75E+02	1.40E+02	0.834	1.180	4.903E-02	2.043E-03
179.624	4.53E+01	2.75E+02	1.40E+02	0.834	1.180	4.990E-02	2.079E-03
182.749	4.53E+01	2.75E+02	1.40E+02	0.834	1.180	5.076E-02	2.115E-03

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
185.874	4.53E+01	2.75E+02	1.40E+02	0.833	1.179	5.163E-02	2.151E-03
188.999	4.52E+01	2.75E+02	1.40E+02	0.832	1.177	5.250E-02	2.187E-03
192.124	4.51E+01	2.75E+02	1.40E+02	0.831	1.175	5.337E-02	2.224E-03
195.249	4.50E+01	2.74E+02	1.40E+02	0.830	1.174	5.424E-02	2.260E-03
198.374	4.49E+01	2.74E+02	1.40E+02	0.829	1.172	5.510E-02	2.296E-03
201.499	4.48E+01	2.74E+02	1.40E+02	0.828	1.170	5.597E-02	2.332E-03
204.624	4.47E+01	2.74E+02	1.41E+02	0.826	1.169	5.684E-02	2.368E-03
207.749	4.47E+01	2.74E+02	1.41E+02	0.825	1.167	5.771E-02	2.405E-03
210.874	4.46E+01	2.74E+02	1.41E+02	0.824	1.165	5.858E-02	2.441E-03
213.999	4.45E+01	2.74E+02	1.41E+02	0.823	1.164	5.944E-02	2.477E-03
217.124	4.44E+01	2.74E+02	1.41E+02	0.821	1.162	6.031E-02	2.513E-03
220.249	4.43E+01	2.74E+02	1.41E+02	0.820	1.160	6.118E-02	2.549E-03
223.374	4.42E+01	2.73E+02	1.41E+02	0.819	1.159	6.205E-02	2.585E-03
226.499	4.42E+01	2.73E+02	1.41E+02	0.818	1.157	6.292E-02	2.622E-03
229.624	4.41E+01	2.73E+02	1.41E+02	0.817	1.155	6.378E-02	2.658E-03
232.749	4.40E+01	2.73E+02	1.41E+02	0.816	1.154	6.465E-02	2.694E-03
235.874	4.39E+01	2.73E+02	1.41E+02	0.814	1.152	6.552E-02	2.730E-03
238.999	4.38E+01	2.73E+02	1.41E+02	0.814	1.150	6.639E-02	2.766E-03
242.124	4.37E+01	2.73E+02	1.41E+02	0.812	1.149	6.726E-02	2.802E-03
245.249	4.37E+01	2.73E+02	1.41E+02	0.811	1.147	6.812E-02	2.839E-03
248.374	4.36E+01	2.73E+02	1.41E+02	0.810	1.146	6.899E-02	2.875E-03
251.499	4.35E+01	2.72E+02	1.41E+02	0.809	1.144	6.986E-02	2.911E-03
254.624	4.34E+01	2.72E+02	1.41E+02	0.808	1.142	7.073E-02	2.947E-03
257.749	4.33E+01	2.72E+02	1.41E+02	0.807	1.141	7.160E-02	2.983E-03
260.874	4.32E+01	2.72E+02	1.41E+02	0.805	1.139	7.247E-02	3.019E-03
263.999	4.32E+01	2.72E+02	1.41E+02	0.804	1.137	7.333E-02	3.056E-03
267.124	4.31E+01	2.72E+02	1.41E+02	0.803	1.136	7.420E-02	3.092E-03
270.249	4.30E+01	2.72E+02	1.42E+02	0.802	1.134	7.507E-02	3.128E-03
273.374	4.29E+01	2.72E+02	1.42E+02	0.801	1.133	7.594E-02	3.164E-03
276.499	4.28E+01	2.71E+02	1.42E+02	0.800	1.131	7.681E-02	3.200E-03
279.624	4.28E+01	2.71E+02	1.42E+02	0.799	1.129	7.767E-02	3.236E-03
282.749	4.27E+01	2.71E+02	1.42E+02	0.797	1.128	7.854E-02	3.273E-03
285.874	4.26E+01	2.71E+02	1.42E+02	0.796	1.126	7.941E-02	3.309E-03
288.999	4.25E+01	2.71E+02	1.42E+02	0.795	1.125	8.028E-02	3.345E-03
292.124	4.24E+01	2.71E+02	1.42E+02	0.794	1.123	8.115E-02	3.381E-03
295.249	4.24E+01	2.71E+02	1.42E+02	0.793	1.121	8.201E-02	3.417E-03
298.374	4.23E+01	2.71E+02	1.42E+02	0.792	1.120	8.288E-02	3.453E-03
301.499	4.22E+01	2.71E+02	1.42E+02	0.791	1.118	8.375E-02	3.490E-03
304.624	4.21E+01	2.70E+02	1.42E+02	0.789	1.116	8.462E-02	3.526E-03
307.749	4.21E+01	2.70E+02	1.42E+02	0.788	1.115	8.549E-02	3.562E-03
310.874	4.20E+01	2.70E+02	1.42E+02	0.787	1.113	8.635E-02	3.598E-03
313.999	4.19E+01	2.70E+02	1.42E+02	0.786	1.112	8.722E-02	3.634E-03
317.124	4.18E+01	2.70E+02	1.42E+02	0.785	1.110	8.809E-02	3.670E-03
320.249	4.17E+01	2.70E+02	1.42E+02	0.784	1.108	8.896E-02	3.707E-03
323.374	4.16E+01	2.70E+02	1.42E+02	0.782	1.106	8.983E-02	3.743E-03
326.499	4.16E+01	2.70E+02	1.42E+02	0.781	1.105	9.069E-02	3.779E-03
329.624	4.15E+01	2.70E+02	1.42E+02	0.780	1.104	9.156E-02	3.815E-03
332.749	4.14E+01	2.69E+02	1.42E+02	0.779	1.102	9.243E-02	3.851E-03
335.874	4.14E+01	2.69E+02	1.42E+02	0.778	1.101	9.330E-02	3.887E-03
338.999	4.13E+01	2.69E+02	1.42E+02	0.777	1.099	9.417E-02	3.924E-03
342.124	4.12E+01	2.69E+02	1.42E+02	0.776	1.098	9.503E-02	3.960E-03
345.249	4.12E+01	2.69E+02	1.42E+02	0.775	1.096	9.590E-02	3.996E-03

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
348.374	4.11E+01	2.69E+02	1.42E+02	0.774	1.095	9.677E-02	4.032E-03
351.499	4.09E+01	2.69E+02	1.42E+02	0.772	1.092	9.764E-02	4.068E-03
354.624	4.07E+01	2.68E+02	1.42E+02	0.769	1.087	9.851E-02	4.104E-03
357.749	4.04E+01	2.68E+02	1.42E+02	0.764	1.081	9.937E-02	4.141E-03
360.874	4.00E+01	2.67E+02	1.42E+02	0.759	1.073	1.002E-01	4.177E-03
363.999	3.97E+01	2.67E+02	1.42E+02	0.754	1.066	1.011E-01	4.213E-03
367.124	3.93E+01	2.66E+02	1.42E+02	0.747	1.057	1.020E-01	4.249E-03
370.249	3.88E+01	2.65E+02	1.42E+02	0.740	1.047	1.028E-01	4.285E-03
373.374	3.83E+01	2.65E+02	1.42E+02	0.733	1.036	1.037E-01	4.321E-03
376.499	3.78E+01	2.64E+02	1.42E+02	0.725	1.025	1.046E-01	4.358E-03
379.624	3.73E+01	2.63E+02	1.42E+02	0.717	1.014	1.055E-01	4.394E-03
382.749	**3.68E+01**	**2.62E+02**	**1.42E+02**	**0.708**	**1.002**	**1.063E-01**	**4.430E-03**
385.874	3.62E+01	2.61E+02	1.42E+02	0.700	0.989	1.072E-01	4.466E-03
388.999	3.57E+01	2.60E+02	1.42E+02	0.690	0.976	1.081E-01	4.502E-03
392.124	3.51E+01	2.59E+02	1.43E+02	0.681	0.963	1.089E-01	4.538E-03
395.249	3.45E+01	2.59E+02	1.43E+02	0.671	0.949	1.098E-01	4.575E-03
398.374	3.42E+01	2.57E+02	1.43E+02	0.665	0.941	1.107E-01	4.611E-03
401.499	3.38E+01	2.56E+02	1.43E+02	0.658	0.931	1.115E-01	4.647E-03
404.624	3.34E+01	2.55E+02	1.43E+02	0.651	0.921	1.124E-01	4.683E-03
407.749	3.30E+01	2.54E+02	1.43E+02	0.644	0.911	1.133E-01	4.719E-03
410.874	3.26E+01	2.52E+02	1.44E+02	0.637	0.901	1.141E-01	4.755E-03
413.999	3.22E+01	2.51E+02	1.44E+02	0.630	0.891	1.150E-01	4.792E-03
417.124	3.18E+01	2.50E+02	1.44E+02	0.623	0.881	1.159E-01	4.828E-03
420.249	3.14E+01	2.48E+02	1.44E+02	0.616	0.871	1.167E-01	4.864E-03
423.374	3.10E+01	2.47E+02	1.45E+02	0.608	0.860	1.176E-01	4.900E-03
426.499	3.06E+01	2.46E+02	1.45E+02	0.602	0.851	1.185E-01	4.936E-03
429.624	3.03E+01	2.44E+02	1.45E+02	0.594	0.841	1.193E-01	4.973E-03
432.749	2.99E+01	2.43E+02	1.45E+02	0.587	0.831	1.202E-01	5.009E-03
435.874	2.95E+01	2.42E+02	1.46E+02	0.581	0.821	1.211E-01	5.045E-03
438.999	2.92E+01	2.40E+02	1.46E+02	0.573	0.811	1.219E-01	5.081E-03
442.124	2.88E+01	2.39E+02	1.46E+02	0.567	0.801	1.228E-01	5.117E-03
445.249	2.85E+01	2.38E+02	1.47E+02	0.560	0.792	1.237E-01	5.153E-03
448.374	2.82E+01	2.36E+02	1.47E+02	0.553	0.782	1.245E-01	5.190E-03
451.499	2.78E+01	2.35E+02	1.47E+02	0.546	0.773	1.254E-01	5.226E-03
454.624	2.75E+01	2.34E+02	1.47E+02	0.540	0.763	1.263E-01	5.262E-03
457.749	2.72E+01	2.32E+02	1.48E+02	0.533	0.753	1.272E-01	5.298E-03
460.874	2.69E+01	2.31E+02	1.48E+02	0.526	0.744	1.280E-01	5.334E-03
463.999	2.66E+01	2.29E+02	1.48E+02	0.520	0.735	1.289E-01	5.370E-03
467.124	2.63E+01	2.28E+02	1.49E+02	0.513	0.726	1.298E-01	5.407E-03
470.249	2.60E+01	2.27E+02	1.49E+02	0.507	0.717	1.306E-01	5.443E-03
473.374	2.58E+01	2.26E+02	1.49E+02	0.501	0.709	1.315E-01	5.479E-03
476.499	2.55E+01	2.24E+02	1.49E+02	0.496	0.702	1.324E-01	5.515E-03
479.624	2.53E+01	2.23E+02	1.50E+02	0.491	0.695	1.332E-01	5.551E-03
482.749	2.51E+01	2.22E+02	1.50E+02	0.487	0.689	1.341E-01	5.587E-03
485.874	2.50E+01	2.22E+02	1.50E+02	0.483	0.683	1.350E-01	5.624E-03
488.999	2.48E+01	2.21E+02	1.51E+02	0.479	0.677	1.358E-01	5.660E-03
492.124	2.46E+01	2.20E+02	1.51E+02	0.475	0.672	1.367E-01	5.696E-03
495.249	2.45E+01	2.19E+02	1.51E+02	0.472	0.668	1.376E-01	5.732E-03
498.374	2.44E+01	2.19E+02	1.51E+02	0.469	0.664	1.384E-01	5.768E-03
501.499	2.43E+01	2.18E+02	1.52E+02	0.466	0.660	1.393E-01	5.804E-03
504.624	2.42E+01	2.17E+02	1.52E+02	0.464	0.656	1.402E-01	5.841E-03
507.749	2.41E+01	2.17E+02	1.52E+02	0.461	0.653	1.410E-01	5.877E-03

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
510.874	2.40E+01	2.16E+02	1.52E+02	0.459	0.649	1.419E-01	5.913E-03
513.999	2.39E+01	2.16E+02	1.52E+02	0.457	0.647	1.428E-01	5.949E-03
517.124	2.38E+01	2.15E+02	1.53E+02	0.455	0.644	1.436E-01	5.985E-03
520.249	2.38E+01	2.15E+02	1.53E+02	0.454	0.641	1.445E-01	6.021E-03
523.374	2.37E+01	2.14E+02	1.53E+02	0.452	0.639	1.454E-01	6.058E-03
526.499	2.36E+01	2.14E+02	1.53E+02	0.450	0.636	1.462E-01	6.094E-03
529.624	2.36E+01	2.14E+02	1.54E+02	0.449	0.635	1.471E-01	6.130E-03
532.749	2.35E+01	2.13E+02	1.54E+02	0.447	0.632	1.480E-01	6.166E-03
535.874	2.34E+01	2.13E+02	1.54E+02	0.445	0.630	1.489E-01	6.202E-03
538.999	2.34E+01	2.13E+02	1.54E+02	0.444	0.628	1.497E-01	6.238E-03
542.124	2.33E+01	2.12E+02	1.54E+02	0.443	0.626	1.506E-01	6.275E-03
545.249	2.33E+01	2.12E+02	1.54E+02	0.442	0.624	1.515E-01	6.311E-03
548.374	2.32E+01	2.12E+02	1.55E+02	0.441	0.623	1.523E-01	6.347E-03
551.499	2.32E+01	2.11E+02	1.55E+02	0.440	0.622	1.532E-01	6.383E-03
554.624	2.32E+01	2.11E+02	1.55E+02	0.438	0.620	1.541E-01	6.419E-03
557.749	2.31E+01	2.11E+02	1.55E+02	0.437	0.618	1.549E-01	6.455E-03
560.874	2.31E+01	2.11E+02	1.55E+02	0.436	0.617	1.558E-01	6.492E-03
563.999	2.30E+01	2.10E+02	1.55E+02	0.435	0.615	1.567E-01	6.528E-03
567.124	2.30E+01	2.10E+02	1.56E+02	0.434	0.614	1.575E-01	6.564E-03
570.249	2.30E+01	2.10E+02	1.56E+02	0.433	0.613	1.584E-01	6.600E-03
573.374	2.29E+01	2.10E+02	1.56E+02	0.432	0.611	1.593E-01	6.636E-03
576.499	2.29E+01	2.09E+02	1.56E+02	0.431	0.610	1.601E-01	6.672E-03
579.624	2.29E+01	2.09E+02	1.56E+02	0.430	0.609	1.610E-01	6.709E-03
582.749	2.28E+01	2.09E+02	1.56E+02	0.429	0.607	1.619E-01	6.745E-03
585.874	2.28E+01	2.09E+02	1.56E+02	0.429	0.606	1.627E-01	6.781E-03
588.999	2.27E+01	2.09E+02	1.57E+02	0.427	0.605	1.636E-01	6.817E-03
592.124	2.27E+01	2.08E+02	1.57E+02	0.427	0.603	1.645E-01	6.853E-03
595.249	2.27E+01	2.08E+02	1.57E+02	0.426	0.602	1.653E-01	6.889E-03
598.374	2.27E+01	2.08E+02	1.57E+02	0.425	0.601	1.662E-01	6.926E-03
601.4053	2.26E+01	2.08E+02	1.57E+02	0.424	0.600	1.671E-01	6.961E-03
604.5303	2.26E+01	2.08E+02	1.57E+02	0.423	0.598	1.679E-01	6.997E-03
607.6553	2.26E+01	2.07E+02	1.57E+02	0.422	0.597	1.688E-01	7.033E-03
610.7803	2.25E+01	2.07E+02	1.57E+02	0.422	0.596	1.697E-01	7.069E-03
613.9053	2.25E+01	2.07E+02	1.58E+02	0.421	0.595	1.705E-01	7.105E-03
617.0303	2.25E+01	2.07E+02	1.58E+02	0.420	0.594	1.714E-01	7.142E-03
627.0303	2.24E+01	2.06E+02	1.58E+02	0.417	0.590	1.742E-01	7.257E-03
652.4053	2.21E+01	2.05E+02	1.59E+02	0.410	0.580	1.812E-01	7.551E-03
677.2178	2.18E+01	2.03E+02	1.60E+02	0.403	0.569	1.881E-01	7.838E-03
702.6553	2.16E+01	2.02E+02	1.60E+02	0.396	0.560	1.952E-01	8.133E-03
727.7178	2.14E+01	2.00E+02	1.61E+02	0.390	0.552	2.021E-01	8.423E-03
752.4678	2.12E+01	1.99E+02	1.62E+02	0.385	0.545	2.090E-01	8.709E-03
776.4678	2.11E+01	1.98E+02	1.63E+02	0.381	0.539	2.157E-01	8.987E-03
801.0303	2.10E+01	1.98E+02	1.63E+02	0.378	0.535	2.225E-01	9.271E-03
825.0928	2.09E+01	1.97E+02	1.64E+02	0.375	0.530	2.292E-01	9.550E-03
850.0928	2.08E+01	1.96E+02	1.65E+02	0.373	0.527	2.361E-01	9.839E-03
874.7178	2.07E+01	1.96E+02	1.65E+02	0.370	0.524	2.430E-01	1.012E-02
899.2178	2.07E+01	1.95E+02	1.66E+02	0.369	0.521	2.498E-01	1.041E-02
924.2178	2.06E+01	1.95E+02	1.66E+02	0.367	0.519	2.567E-01	1.070E-02
948.9053	2.06E+01	1.95E+02	1.67E+02	0.366	0.517	2.636E-01	1.098E-02
973.3428	2.06E+01	1.94E+02	1.67E+02	0.365	0.516	2.704E-01	1.127E-02
997.9678	2.05E+01	1.94E+02	1.68E+02	0.364	0.515	2.772E-01	1.155E-02
1023.093	2.05E+01	1.94E+02	1.68E+02	0.363	0.514	2.842E-01	1.184E-02

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
1047.843	2.05E+01	1.94E+02	1.69E+02	0.363	0.513	2.911E-01	1.213E-02
1072.968	2.05E+01	1.94E+02	1.69E+02	0.362	0.513	2.980E-01	1.242E-02
1098.03	2.05E+01	1.93E+02	1.69E+02	0.362	0.512	3.050E-01	1.271E-02
1122.655	2.05E+01	1.93E+02	1.70E+02	0.362	0.512	3.118E-01	1.299E-02
1147.468	2.05E+01	1.93E+02	1.70E+02	0.362	0.512	3.187E-01	1.328E-02
1172.28	2.05E+01	1.93E+02	1.70E+02	0.361	0.511	3.256E-01	1.357E-02
1197.093	2.05E+01	1.93E+02	1.71E+02	0.361	0.511	3.325E-01	1.386E-02
1222.28	2.05E+01	1.93E+02	1.71E+02	0.361	0.511	3.395E-01	1.415E-02
1247.093	2.05E+01	1.93E+02	1.71E+02	0.361	0.511	3.464E-01	1.443E-02
1271.905	2.05E+01	1.93E+02	1.72E+02	0.362	0.512	3.533E-01	1.472E-02
1297.28	2.05E+01	1.93E+02	1.72E+02	0.361	0.511	3.604E-01	1.501E-02
1322.093	2.05E+01	1.93E+02	1.72E+02	0.362	0.512	3.672E-01	1.530E-02
1346.905	2.05E+01	1.93E+02	1.73E+02	0.362	0.512	3.741E-01	1.559E-02
1371.718	2.05E+01	1.93E+02	1.73E+02	0.362	0.512	3.810E-01	1.588E-02
1396.718	2.05E+01	1.93E+02	1.73E+02	0.362	0.512	3.880E-01	1.617E-02
1421.53	2.05E+01	1.93E+02	1.74E+02	0.362	0.513	3.949E-01	1.645E-02
1446.343	2.05E+01	1.93E+02	1.74E+02	0.363	0.513	4.018E-01	1.674E-02
1471.968	2.05E+01	1.93E+02	1.74E+02	0.362	0.513	4.089E-01	1.704E-02
1496.78	2.05E+01	1.93E+02	1.74E+02	0.363	0.513	4.158E-01	1.732E-02
1522.28	2.05E+01	1.93E+02	1.75E+02	0.363	0.513	4.229E-01	1.762E-02
1547.093	2.05E+01	1.93E+02	1.75E+02	0.363	0.513	4.297E-01	1.791E-02
1572.28	2.05E+01	1.93E+02	1.75E+02	0.363	0.514	4.367E-01	1.820E-02
1597.655	2.05E+01	1.93E+02	1.75E+02	0.363	0.514	4.438E-01	1.849E-02
1622.718	2.05E+01	1.93E+02	1.76E+02	0.364	0.514	4.508E-01	1.878E-02
1647.968	2.05E+01	1.93E+02	1.76E+02	0.364	0.514	4.578E-01	1.907E-02
1673.155	2.05E+01	1.93E+02	1.76E+02	0.364	0.515	4.648E-01	1.937E-02
1697.968	2.05E+01	1.93E+02	1.76E+02	0.364	0.515	4.717E-01	1.965E-02
1723.343	2.05E+01	1.93E+02	1.77E+02	0.364	0.515	4.787E-01	1.995E-02
1748.28	2.06E+01	1.93E+02	1.77E+02	0.365	0.516	4.856E-01	2.023E-02
1773.905	2.05E+01	1.93E+02	1.77E+02	0.364	0.515	4.928E-01	2.053E-02
1799.468	2.06E+01	1.93E+02	1.77E+02	0.365	0.516	4.999E-01	2.083E-02
1824.405	2.06E+01	1.93E+02	1.77E+02	0.365	0.516	5.068E-01	2.112E-02
1849.405	2.06E+01	1.93E+02	1.78E+02	0.365	0.517	5.137E-01	2.141E-02
1874.218	2.06E+01	1.93E+02	1.78E+02	0.365	0.517	5.206E-01	2.169E-02
1899.218	2.06E+01	1.93E+02	1.78E+02	0.365	0.517	5.276E-01	2.198E-02
1924.03	2.06E+01	1.93E+02	1.78E+02	0.366	0.517	5.345E-01	2.227E-02
1949.155	2.06E+01	1.93E+02	1.78E+02	0.366	0.517	5.414E-01	2.256E-02
1974.468	2.06E+01	1.93E+02	1.79E+02	0.366	0.517	5.485E-01	2.285E-02
1999.53	2.06E+01	1.93E+02	1.79E+02	0.366	0.518	5.554E-01	2.314E-02
2024.53	2.06E+01	1.93E+02	1.79E+02	0.366	0.518	5.624E-01	2.343E-02
2049.968	2.06E+01	1.93E+02	1.79E+02	0.366	0.518	5.694E-01	2.373E-02
2074.968	2.06E+01	1.93E+02	1.79E+02	0.366	0.518	5.764E-01	2.402E-02
2099.905	2.06E+01	1.93E+02	1.80E+02	0.367	0.519	5.833E-01	2.430E-02
2125.655	2.06E+01	1.93E+02	1.80E+02	0.367	0.519	5.905E-01	2.460E-02
2150.593	2.06E+01	1.93E+02	1.80E+02	0.367	0.520	5.974E-01	2.489E-02
2175.968	2.06E+01	1.93E+02	1.80E+02	0.367	0.520	6.044E-01	2.518E-02
2201.218	2.06E+01	1.93E+02	1.80E+02	0.367	0.520	6.114E-01	2.548E-02
2226.53	2.07E+01	1.93E+02	1.80E+02	0.368	0.520	6.185E-01	2.577E-02
2252.405	2.07E+01	1.93E+02	1.81E+02	0.368	0.521	6.257E-01	2.607E-02
2277.468	2.07E+01	1.93E+02	1.81E+02	0.369	0.521	6.326E-01	2.636E-02
2303.343	2.07E+01	1.93E+02	1.81E+02	0.369	0.521	6.398E-01	2.666E-02
2329.468	2.07E+01	1.93E+02	1.81E+02	0.369	0.522	6.471E-01	2.696E-02

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
2355.343	2.07E+01	1.93E+02	1.81E+02	0.369	0.522	6.543E-01	2.726E-02
2380.405	2.07E+01	1.93E+02	1.81E+02	0.370	0.523	6.612E-01	2.755E-02
2406.405	2.07E+01	1.93E+02	1.82E+02	0.370	0.523	6.684E-01	2.785E-02
2432.155	2.07E+01	1.93E+02	1.82E+02	0.370	0.524	6.756E-01	2.815E-02
2457.405	2.07E+01	1.93E+02	1.82E+02	0.371	0.524	6.826E-01	2.844E-02
2482.343	2.08E+01	1.93E+02	1.82E+02	0.371	0.525	6.895E-01	2.873E-02
2507.593	2.08E+01	1.93E+02	1.82E+02	0.371	0.525	6.966E-01	2.902E-02
2533.093	2.08E+01	1.93E+02	1.82E+02	0.371	0.525	7.036E-01	2.932E-02
2557.905	2.08E+01	1.93E+02	1.82E+02	0.372	0.526	7.105E-01	2.961E-02
2582.905	2.08E+01	1.93E+02	1.83E+02	0.372	0.527	7.175E-01	2.989E-02
2608.405	2.08E+01	1.93E+02	1.83E+02	0.373	0.527	7.246E-01	3.019E-02
2633.655	2.08E+01	1.93E+02	1.83E+02	0.373	0.527	7.316E-01	3.048E-02
2658.718	2.08E+01	1.93E+02	1.83E+02	0.373	0.528	7.385E-01	3.077E-02
2684.593	2.08E+01	1.93E+02	1.83E+02	0.374	0.528	7.457E-01	3.107E-02
2709.593	2.09E+01	1.93E+02	1.83E+02	0.374	0.529	7.527E-01	3.136E-02
2734.843	2.09E+01	1.94E+02	1.83E+02	0.374	0.529	7.597E-01	3.165E-02
2759.78	2.09E+01	1.94E+02	1.83E+02	0.374	0.530	7.666E-01	3.194E-02
2784.905	2.09E+01	1.94E+02	1.84E+02	0.375	0.530	7.736E-01	3.223E-02
2810.155	2.09E+01	1.94E+02	1.84E+02	0.375	0.530	7.806E-01	3.252E-02
2835.155	2.09E+01	1.94E+02	1.84E+02	0.375	0.531	7.875E-01	3.281E-02
2860.155	2.09E+01	1.94E+02	1.84E+02	0.376	0.531	7.945E-01	3.310E-02
2885.343	2.09E+01	1.94E+02	1.84E+02	0.376	0.532	8.015E-01	3.340E-02
2910.593	2.09E+01	1.94E+02	1.84E+02	0.376	0.532	8.085E-01	3.369E-02
2936.218	2.09E+01	1.94E+02	1.84E+02	0.377	0.533	8.156E-01	3.398E-02
2961.593	2.10E+01	1.94E+02	1.85E+02	0.377	0.533	8.227E-01	3.428E-02
2986.53	2.10E+01	1.94E+02	1.85E+02	0.377	0.534	8.296E-01	3.457E-02
3011.53	2.10E+01	1.94E+02	1.85E+02	0.378	0.534	8.365E-01	3.486E-02
3036.53	2.10E+01	1.94E+02	1.85E+02	0.378	0.535	8.435E-01	3.515E-02
3061.53	2.10E+01	1.94E+02	1.85E+02	0.378	0.535	8.504E-01	3.543E-02
3086.343	2.10E+01	1.94E+02	1.85E+02	0.379	0.536	8.573E-01	3.572E-02
3111.155	2.10E+01	1.94E+02	1.85E+02	0.380	0.537	8.642E-01	3.601E-02
3136.343	2.11E+01	1.94E+02	1.85E+02	0.380	0.538	8.712E-01	3.630E-02
3161.655	2.11E+01	1.94E+02	1.85E+02	0.381	0.539	8.782E-01	3.659E-02
3186.468	2.11E+01	1.94E+02	1.86E+02	0.381	0.539	8.851E-01	3.688E-02
3211.28	2.11E+01	1.94E+02	1.86E+02	0.382	0.540	8.920E-01	3.717E-02
3236.218	2.11E+01	1.94E+02	1.86E+02	0.382	0.541	8.989E-01	3.746E-02
3261.655	2.12E+01	1.94E+02	1.86E+02	0.383	0.541	9.060E-01	3.775E-02
3286.593	2.12E+01	1.94E+02	1.86E+02	0.383	0.542	9.129E-01	3.804E-02
3311.593	2.12E+01	1.94E+02	1.86E+02	0.384	0.543	9.199E-01	3.833E-02
3336.405	2.12E+01	1.94E+02	1.86E+02	0.384	0.544	9.268E-01	3.862E-02
3361.343	2.12E+01	1.94E+02	1.86E+02	0.385	0.544	9.337E-01	3.890E-02
3386.655	2.12E+01	1.94E+02	1.86E+02	0.385	0.545	9.407E-01	3.920E-02
3411.468	2.13E+01	1.94E+02	1.86E+02	0.386	0.546	9.476E-01	3.948E-02
3436.28	2.13E+01	1.94E+02	1.87E+02	0.386	0.546	9.545E-01	3.977E-02
3461.093	2.13E+01	1.95E+02	1.87E+02	0.387	0.547	9.614E-01	4.006E-02
3486.468	2.13E+01	1.95E+02	1.87E+02	0.387	0.548	9.685E-01	4.035E-02
3511.28	2.13E+01	1.95E+02	1.87E+02	0.388	0.549	9.754E-01	4.064E-02
3536.218	2.13E+01	1.95E+02	1.87E+02	0.388	0.549	9.823E-01	4.093E-02
3561.405	2.14E+01	1.95E+02	1.87E+02	0.389	0.550	9.893E-01	4.122E-02
3586.468	2.14E+01	1.95E+02	1.87E+02	0.389	0.551	9.962E-01	4.151E-02
3612.343	2.14E+01	1.95E+02	1.87E+02	0.390	0.551	1.003E+00	4.181E-02
3637.155	2.14E+01	1.95E+02	1.87E+02	0.390	0.551	1.010E+00	4.210E-02

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
3663.093	2.14E+01	1.95E+02	1.87E+02	0.391	0.552	1.018E+00	4.240E-02
3688.655	2.14E+01	1.95E+02	1.88E+02	0.391	0.553	1.025E+00	4.269E-02
3713.78	2.14E+01	1.95E+02	1.88E+02	0.391	0.554	1.032E+00	4.298E-02
3738.843	2.15E+01	1.95E+02	1.88E+02	0.392	0.554	1.039E+00	4.327E-02
3764.03	2.15E+01	1.95E+02	1.88E+02	0.392	0.555	1.046E+00	4.357E-02
3789.593	2.15E+01	1.95E+02	1.88E+02	0.393	0.556	1.053E+00	4.386E-02
3814.843	2.15E+01	1.95E+02	1.88E+02	0.393	0.556	1.060E+00	4.415E-02
3839.78	2.15E+01	1.95E+02	1.88E+02	0.393	0.556	1.067E+00	4.444E-02
3865.218	2.15E+01	1.95E+02	1.88E+02	0.394	0.557	1.074E+00	4.474E-02
3890.218	2.15E+01	1.95E+02	1.88E+02	0.394	0.558	1.081E+00	4.503E-02
3916.155	2.16E+01	1.95E+02	1.88E+02	0.395	0.558	1.088E+00	4.533E-02
3941.093	2.16E+01	1.95E+02	1.88E+02	0.395	0.559	1.095E+00	4.561E-02
3966.093	2.16E+01	1.95E+02	1.89E+02	0.395	0.559	1.102E+00	4.590E-02
3991.28	2.16E+01	1.95E+02	1.89E+02	0.396	0.560	1.109E+00	4.620E-02
4016.343	2.16E+01	1.95E+02	1.89E+02	0.396	0.560	1.116E+00	4.649E-02
4041.593	2.16E+01	1.95E+02	1.89E+02	0.397	0.561	1.123E+00	4.678E-02
4066.655	2.16E+01	1.95E+02	1.89E+02	0.397	0.562	1.130E+00	4.707E-02
4091.468	2.17E+01	1.95E+02	1.89E+02	0.397	0.562	1.137E+00	4.735E-02
4116.468	2.17E+01	1.95E+02	1.89E+02	0.398	0.562	1.143E+00	4.764E-02
4141.53	2.17E+01	1.95E+02	1.89E+02	0.398	0.563	1.150E+00	4.793E-02
4166.53	2.17E+01	1.95E+02	1.89E+02	0.399	0.564	1.157E+00	4.822E-02
4191.343	2.17E+01	1.95E+02	1.89E+02	0.399	0.564	1.164E+00	4.851E-02
4216.468	2.17E+01	1.95E+02	1.89E+02	0.399	0.565	1.171E+00	4.880E-02
4241.405	2.17E+01	1.95E+02	1.89E+02	0.400	0.566	1.178E+00	4.909E-02
4266.53	2.18E+01	1.95E+02	1.89E+02	0.400	0.566	1.185E+00	4.938E-02
4292.468	2.18E+01	1.96E+02	1.90E+02	0.401	0.566	1.192E+00	4.968E-02
4318.218	2.18E+01	1.96E+02	1.90E+02	0.401	0.567	1.200E+00	4.998E-02
4343.03	2.18E+01	1.96E+02	1.90E+02	0.401	0.568	1.206E+00	5.027E-02
4368.405	2.18E+01	1.96E+02	1.90E+02	0.402	0.568	1.213E+00	5.056E-02
4393.655	2.18E+01	1.96E+02	1.90E+02	0.402	0.568	1.220E+00	5.085E-02
4418.593	2.18E+01	1.96E+02	1.90E+02	0.403	0.569	1.227E+00	5.114E-02
4444.218	2.18E+01	1.96E+02	1.90E+02	0.403	0.570	1.235E+00	5.144E-02
4469.405	2.19E+01	1.96E+02	1.90E+02	0.403	0.570	1.242E+00	5.173E-02
4494.655	2.19E+01	1.96E+02	1.90E+02	0.404	0.571	1.249E+00	5.202E-02
4519.718	2.19E+01	1.96E+02	1.90E+02	0.404	0.572	1.255E+00	5.231E-02
4544.718	2.19E+01	1.96E+02	1.90E+02	0.405	0.572	1.262E+00	5.260E-02
4569.968	2.19E+01	1.96E+02	1.90E+02	0.405	0.572	1.269E+00	5.289E-02
4594.78	2.19E+01	1.96E+02	1.90E+02	0.405	0.573	1.276E+00	5.318E-02
4620.405	2.19E+01	1.96E+02	1.90E+02	0.405	0.573	1.283E+00	5.348E-02
4645.593	2.20E+01	1.96E+02	1.91E+02	0.406	0.574	1.290E+00	5.377E-02
4670.593	2.20E+01	1.96E+02	1.91E+02	0.406	0.574	1.297E+00	5.406E-02
4695.718	2.20E+01	1.96E+02	1.91E+02	0.406	0.575	1.304E+00	5.435E-02
4720.655	2.20E+01	1.96E+02	1.91E+02	0.407	0.576	1.311E+00	5.464E-02
4745.655	2.20E+01	1.96E+02	1.91E+02	0.407	0.576	1.318E+00	5.493E-02
4770.655	2.20E+01	1.96E+02	1.91E+02	0.408	0.576	1.325E+00	5.522E-02
4795.468	2.20E+01	1.96E+02	1.91E+02	0.408	0.577	1.332E+00	5.550E-02
4820.468	2.20E+01	1.96E+02	1.91E+02	0.408	0.578	1.339E+00	5.579E-02
4845.843	2.21E+01	1.96E+02	1.91E+02	0.409	0.578	1.346E+00	5.609E-02
4870.655	2.21E+01	1.96E+02	1.91E+02	0.409	0.579	1.353E+00	5.637E-02
4895.655	2.21E+01	1.96E+02	1.91E+02	0.410	0.579	1.360E+00	5.666E-02
4920.78	2.21E+01	1.96E+02	1.91E+02	0.410	0.579	1.367E+00	5.695E-02
4946.718	2.21E+01	1.96E+02	1.91E+02	0.410	0.580	1.374E+00	5.725E-02

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
4971.968	2.21E+01	1.97E+02	1.91E+02	0.410	0.580	1.381E+00	5.755E-02
4997.718	2.21E+01	1.97E+02	1.91E+02	0.411	0.581	1.388E+00	5.784E-02
5022.53	2.21E+01	1.97E+02	1.92E+02	0.411	0.582	1.395E+00	5.813E-02
5047.655	2.22E+01	1.97E+02	1.92E+02	0.411	0.582	1.402E+00	5.842E-02
5072.905	2.22E+01	1.97E+02	1.92E+02	0.412	0.582	1.409E+00	5.871E-02
5097.905	2.22E+01	1.97E+02	1.92E+02	0.412	0.582	1.416E+00	5.900E-02
5122.843	2.22E+01	1.97E+02	1.92E+02	0.412	0.583	1.423E+00	5.929E-02
5147.968	2.22E+01	1.97E+02	1.92E+02	0.413	0.583	1.430E+00	5.958E-02
5172.968	2.22E+01	1.97E+02	1.92E+02	0.413	0.584	1.437E+00	5.987E-02
5198.03	2.22E+01	1.97E+02	1.92E+02	0.413	0.585	1.444E+00	6.016E-02
5223.03	2.22E+01	1.97E+02	1.92E+02	0.414	0.585	1.451E+00	6.045E-02
5248.405	2.22E+01	1.97E+02	1.92E+02	0.414	0.585	1.458E+00	6.075E-02
5273.53	2.22E+01	1.97E+02	1.92E+02	0.414	0.585	1.465E+00	6.104E-02
5298.468	2.23E+01	1.97E+02	1.92E+02	0.415	0.586	1.472E+00	6.132E-02
5324.218	2.23E+01	1.97E+02	1.92E+02	0.415	0.587	1.479E+00	6.162E-02
5349.843	2.23E+01	1.97E+02	1.92E+02	0.415	0.587	1.486E+00	6.192E-02
5375.093	2.23E+01	1.97E+02	1.92E+02	0.415	0.587	1.493E+00	6.221E-02
5399.905	2.23E+01	1.97E+02	1.92E+02	0.416	0.588	1.500E+00	6.250E-02
5424.905	2.23E+01	1.97E+02	1.92E+02	0.416	0.588	1.507E+00	6.279E-02
5450.655	2.23E+01	1.97E+02	1.93E+02	0.416	0.588	1.514E+00	6.309E-02
5476.405	2.23E+01	1.97E+02	1.93E+02	0.416	0.589	1.521E+00	6.338E-02
5501.218	2.23E+01	1.97E+02	1.93E+02	0.417	0.589	1.528E+00	6.367E-02
5526.218	2.24E+01	1.97E+02	1.93E+02	0.417	0.590	1.535E+00	6.396E-02
5551.343	2.24E+01	1.97E+02	1.93E+02	0.417	0.590	1.542E+00	6.425E-02
5576.593	2.24E+01	1.97E+02	1.93E+02	0.417	0.590	1.549E+00	6.454E-02
5601.405	2.24E+01	1.97E+02	1.93E+02	0.418	0.591	1.556E+00	6.483E-02
5626.405	2.24E+01	1.97E+02	1.93E+02	0.418	0.591	1.563E+00	6.512E-02
5651.78	2.24E+01	1.97E+02	1.93E+02	0.418	0.591	1.570E+00	6.541E-02
5677.655	2.24E+01	1.97E+02	1.93E+02	0.418	0.592	1.577E+00	6.571E-02
5702.718	2.24E+01	1.97E+02	1.93E+02	0.419	0.592	1.584E+00	6.600E-02
5727.718	2.24E+01	1.97E+02	1.93E+02	0.419	0.592	1.591E+00	6.629E-02
5752.718	2.24E+01	1.97E+02	1.93E+02	0.419	0.593	1.598E+00	6.658E-02
5777.843	2.24E+01	1.97E+02	1.93E+02	0.419	0.593	1.605E+00	6.687E-02
5803.218	2.25E+01	1.98E+02	1.93E+02	0.420	0.594	1.612E+00	6.717E-02
5828.78	2.25E+01	1.98E+02	1.93E+02	0.420	0.594	1.619E+00	6.746E-02
5854.155	2.25E+01	1.98E+02	1.93E+02	0.420	0.594	1.626E+00	6.776E-02
5879.155	2.25E+01	1.98E+02	1.93E+02	0.420	0.595	1.633E+00	6.805E-02
5904.28	2.25E+01	1.98E+02	1.94E+02	0.420	0.595	1.640E+00	6.834E-02
5929.218	2.25E+01	1.98E+02	1.94E+02	0.421	0.595	1.647E+00	6.863E-02
5954.968	2.25E+01	1.98E+02	1.94E+02	0.421	0.596	1.654E+00	6.892E-02
5980.343	2.25E+01	1.98E+02	1.94E+02	0.421	0.596	1.661E+00	6.922E-02
6006.593	2.25E+01	1.98E+02	1.94E+02	0.422	0.596	1.668E+00	6.952E-02
6031.968	2.25E+01	1.98E+02	1.94E+02	0.422	0.597	1.676E+00	6.981E-02
6057.03	2.25E+01	1.98E+02	1.94E+02	0.422	0.597	1.683E+00	7.010E-02
6082.03	2.26E+01	1.98E+02	1.94E+02	0.422	0.597	1.689E+00	7.039E-02
6107.03	2.26E+01	1.98E+02	1.94E+02	0.423	0.598	1.696E+00	7.068E-02
6132.28	2.26E+01	1.98E+02	1.94E+02	0.423	0.598	1.703E+00	7.098E-02
6158.655	2.26E+01	1.98E+02	1.94E+02	0.423	0.598	1.711E+00	7.128E-02
6183.78	2.26E+01	1.98E+02	1.94E+02	0.423	0.598	1.718E+00	7.157E-02
6209.03	2.26E+01	1.98E+02	1.94E+02	0.423	0.598	1.725E+00	7.186E-02
6234.218	2.26E+01	1.98E+02	1.94E+02	0.424	0.599	1.732E+00	7.216E-02
6259.343	2.26E+01	1.98E+02	1.94E+02	0.424	0.600	1.739E+00	7.245E-02

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
6284.468	2.26E+01	1.98E+02	1.94E+02	0.424	0.600	1.746E+00	7.274E-02
6309.593	2.26E+01	1.98E+02	1.94E+02	0.424	0.600	1.753E+00	7.303E-02
6334.968	2.26E+01	1.98E+02	1.94E+02	0.425	0.600	1.760E+00	7.332E-02
6360.218	2.26E+01	1.98E+02	1.94E+02	0.425	0.601	1.767E+00	7.361E-02
6385.218	2.27E+01	1.98E+02	1.94E+02	0.425	0.601	1.774E+00	7.390E-02
6410.218	2.27E+01	1.98E+02	1.94E+02	0.425	0.601	1.781E+00	7.419E-02
6435.28	2.27E+01	1.98E+02	1.95E+02	0.426	0.602	1.788E+00	7.448E-02
6460.28	2.27E+01	1.98E+02	1.95E+02	0.426	0.602	1.795E+00	7.477E-02
6485.53	2.27E+01	1.98E+02	1.95E+02	0.426	0.602	1.802E+00	7.506E-02
6510.78	2.27E+01	1.98E+02	1.95E+02	0.426	0.603	1.809E+00	7.536E-02
6536.905	2.27E+01	1.98E+02	1.95E+02	0.426	0.603	1.816E+00	7.566E-02
6561.905	2.27E+01	1.98E+02	1.95E+02	0.427	0.603	1.823E+00	7.595E-02
6587.53	2.27E+01	1.98E+02	1.95E+02	0.427	0.603	1.830E+00	7.624E-02
6612.593	2.27E+01	1.98E+02	1.95E+02	0.427	0.604	1.837E+00	7.653E-02
6637.968	2.27E+01	1.98E+02	1.95E+02	0.427	0.605	1.844E+00	7.683E-02
6663.343	2.28E+01	1.98E+02	1.95E+02	0.428	0.605	1.851E+00	7.712E-02
6688.593	2.28E+01	1.99E+02	1.95E+02	0.428	0.605	1.858E+00	7.741E-02
6713.718	2.28E+01	1.99E+02	1.95E+02	0.428	0.605	1.865E+00	7.771E-02
6738.843	2.28E+01	1.99E+02	1.95E+02	0.428	0.606	1.872E+00	7.800E-02
6764.468	2.28E+01	1.99E+02	1.95E+02	0.428	0.606	1.879E+00	7.829E-02
6790.093	2.28E+01	1.99E+02	1.95E+02	0.429	0.606	1.886E+00	7.859E-02
6815.093	2.28E+01	1.99E+02	1.95E+02	0.429	0.606	1.893E+00	7.888E-02
6841.093	2.28E+01	1.99E+02	1.95E+02	0.429	0.607	1.900E+00	7.918E-02
6866.093	2.28E+01	1.99E+02	1.95E+02	0.429	0.607	1.907E+00	7.947E-02
6890.905	2.28E+01	1.99E+02	1.95E+02	0.430	0.608	1.914E+00	7.976E-02
6916.03	2.28E+01	1.99E+02	1.95E+02	0.430	0.608	1.921E+00	8.005E-02
6941.155	2.28E+01	1.99E+02	1.95E+02	0.430	0.608	1.928E+00	8.034E-02
6966.655	2.28E+01	1.99E+02	1.95E+02	0.430	0.608	1.935E+00	8.063E-02
6991.655	2.29E+01	1.99E+02	1.95E+02	0.430	0.609	1.942E+00	8.092E-02
7016.655	2.29E+01	1.99E+02	1.96E+02	0.430	0.609	1.949E+00	8.121E-02
7042.155	2.29E+01	1.99E+02	1.96E+02	0.431	0.609	1.956E+00	8.151E-02
7067.155	2.29E+01	1.99E+02	1.96E+02	0.431	0.609	1.963E+00	8.180E-02
7092.155	2.29E+01	1.99E+02	1.96E+02	0.431	0.609	1.970E+00	8.209E-02
7117.405	2.29E+01	1.99E+02	1.96E+02	0.431	0.610	1.977E+00	8.238E-02
7142.53	2.29E+01	1.99E+02	1.96E+02	0.431	0.610	1.984E+00	8.267E-02
7167.78	2.29E+01	1.99E+02	1.96E+02	0.431	0.610	1.991E+00	8.296E-02
7193.03	2.29E+01	1.99E+02	1.96E+02	0.432	0.611	1.998E+00	8.325E-02
7218.03	2.29E+01	1.99E+02	1.96E+02	0.432	0.611	2.005E+00	8.354E-02
7242.843	2.29E+01	1.99E+02	1.96E+02	0.432	0.611	2.012E+00	8.383E-02
7267.843	2.29E+01	1.99E+02	1.96E+02	0.432	0.611	2.019E+00	8.412E-02
7293.843	2.29E+01	1.99E+02	1.96E+02	0.432	0.612	2.026E+00	8.442E-02
7319.343	2.29E+01	1.99E+02	1.96E+02	0.433	0.612	2.033E+00	8.471E-02
7344.593	2.30E+01	1.99E+02	1.96E+02	0.433	0.612	2.040E+00	8.501E-02
7369.968	2.30E+01	1.99E+02	1.96E+02	0.433	0.612	2.047E+00	8.530E-02
7395.093	2.30E+01	1.99E+02	1.96E+02	0.433	0.613	2.054E+00	8.559E-02
7420.718	2.30E+01	1.99E+02	1.96E+02	0.433	0.613	2.061E+00	8.589E-02
7446.093	2.30E+01	1.99E+02	1.96E+02	0.434	0.613	2.068E+00	8.618E-02
7471.343	2.30E+01	1.99E+02	1.96E+02	0.434	0.613	2.075E+00	8.647E-02
7497.218	2.30E+01	1.99E+02	1.96E+02	0.434	0.613	2.083E+00	8.677E-02
7522.218	2.30E+01	1.99E+02	1.96E+02	0.434	0.614	2.090E+00	8.706E-02
7547.78	2.30E+01	1.99E+02	1.96E+02	0.434	0.614	2.097E+00	8.736E-02
7572.905	2.30E+01	1.99E+02	1.96E+02	0.435	0.615	2.104E+00	8.765E-02

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
7597.905	2.30E+01	1.99E+02	1.96E+02	0.435	0.615	2.111E+00	8.794E-02
7623.03	2.30E+01	1.99E+02	1.96E+02	0.435	0.615	2.118E+00	8.823E-02
7648.405	2.30E+01	1.99E+02	1.96E+02	0.435	0.615	2.125E+00	8.852E-02
7673.405	2.30E+01	1.99E+02	1.97E+02	0.435	0.615	2.132E+00	8.881E-02
7698.405	2.30E+01	2.00E+02	1.97E+02	0.435	0.616	2.138E+00	8.910E-02
7723.905	2.30E+01	2.00E+02	1.97E+02	0.435	0.616	2.146E+00	8.940E-02
7749.28	2.31E+01	2.00E+02	1.97E+02	0.436	0.616	2.153E+00	8.969E-02
7774.28	2.31E+01	2.00E+02	1.97E+02	0.436	0.616	2.160E+00	8.998E-02
7799.28	2.31E+01	2.00E+02	1.97E+02	0.436	0.616	2.166E+00	9.027E-02
7824.405	2.31E+01	2.00E+02	1.97E+02	0.436	0.617	2.173E+00	9.056E-02
7849.53	2.31E+01	2.00E+02	1.97E+02	0.436	0.617	2.180E+00	9.085E-02
7874.78	2.31E+01	2.00E+02	1.97E+02	0.436	0.617	2.187E+00	9.114E-02
7900.28	2.31E+01	2.00E+02	1.97E+02	0.436	0.617	2.195E+00	9.144E-02
7925.53	2.31E+01	2.00E+02	1.97E+02	0.437	0.618	2.202E+00	9.173E-02
7950.655	2.31E+01	2.00E+02	1.97E+02	0.437	0.618	2.209E+00	9.202E-02
7976.155	2.31E+01	2.00E+02	1.97E+02	0.437	0.618	2.216E+00	9.232E-02
8001.405	2.31E+01	2.00E+02	1.97E+02	0.437	0.618	2.223E+00	9.261E-02
8026.843	2.31E+01	2.00E+02	1.97E+02	0.437	0.619	2.230E+00	9.290E-02
8052.843	2.31E+01	2.00E+02	1.97E+02	0.438	0.619	2.237E+00	9.320E-02
8078.718	2.31E+01	2.00E+02	1.97E+02	0.438	0.619	2.244E+00	9.350E-02
8103.718	2.31E+01	2.00E+02	1.97E+02	0.438	0.619	2.251E+00	9.379E-02
8129.093	2.31E+01	2.00E+02	1.97E+02	0.438	0.619	2.258E+00	9.409E-02
8154.343	2.32E+01	2.00E+02	1.97E+02	0.438	0.620	2.265E+00	9.438E-02
8179.468	2.32E+01	2.00E+02	1.97E+02	0.438	0.620	2.272E+00	9.467E-02
8204.718	2.32E+01	2.00E+02	1.97E+02	0.438	0.620	2.279E+00	9.496E-02
8230.968	2.32E+01	2.00E+02	1.97E+02	0.438	0.620	2.286E+00	9.527E-02
8256.843	2.32E+01	2.00E+02	1.97E+02	0.439	0.620	2.294E+00	9.557E-02
8282.093	2.32E+01	2.00E+02	1.97E+02	0.439	0.620	2.301E+00	9.586E-02
8307.468	2.32E+01	2.00E+02	1.97E+02	0.439	0.621	2.308E+00	9.615E-02
8333.218	2.32E+01	2.00E+02	1.97E+02	0.439	0.621	2.315E+00	9.645E-02
8358.468	2.32E+01	2.00E+02	1.97E+02	0.439	0.621	2.322E+00	9.674E-02
8384.968	2.32E+01	2.00E+02	1.97E+02	0.440	0.622	2.329E+00	9.705E-02
8410.468	2.32E+01	2.00E+02	1.98E+02	0.440	0.622	2.336E+00	9.734E-02
8435.468	2.32E+01	2.00E+02	1.98E+02	0.440	0.622	2.343E+00	9.763E-02
8460.593	2.32E+01	2.00E+02	1.98E+02	0.440	0.622	2.350E+00	9.792E-02
8485.718	2.32E+01	2.00E+02	1.98E+02	0.440	0.622	2.357E+00	9.821E-02
8510.718	2.32E+01	2.00E+02	1.98E+02	0.440	0.622	2.364E+00	9.850E-02
8536.843	2.32E+01	2.00E+02	1.98E+02	0.440	0.623	2.371E+00	9.881E-02
8562.218	2.32E+01	2.00E+02	1.98E+02	0.440	0.623	2.378E+00	9.910E-02
8587.718	2.32E+01	2.00E+02	1.98E+02	0.441	0.623	2.385E+00	9.939E-02
8613.093	2.32E+01	2.00E+02	1.98E+02	0.441	0.623	2.393E+00	9.969E-02
8638.093	2.33E+01	2.00E+02	1.98E+02	0.441	0.623	2.399E+00	9.998E-02
8663.093	2.33E+01	2.00E+02	1.98E+02	0.441	0.623	2.406E+00	1.003E-01
8688.718	2.33E+01	2.00E+02	1.98E+02	0.441	0.624	2.414E+00	1.006E-01
8713.968	2.33E+01	2.00E+02	1.98E+02	0.441	0.624	2.421E+00	1.009E-01
8739.343	2.33E+01	2.00E+02	1.98E+02	0.441	0.624	2.428E+00	1.011E-01
8764.968	2.33E+01	2.00E+02	1.98E+02	0.441	0.624	2.435E+00	1.014E-01
8791.468	2.33E+01	2.00E+02	1.98E+02	0.442	0.624	2.442E+00	1.018E-01
8816.718	2.33E+01	2.00E+02	1.98E+02	0.442	0.624	2.449E+00	1.020E-01
8841.843	2.33E+01	2.00E+02	1.98E+02	0.442	0.625	2.456E+00	1.023E-01
8866.843	2.33E+01	2.00E+02	1.98E+02	0.442	0.625	2.463E+00	1.026E-01
8891.968	2.33E+01	2.00E+02	1.98E+02	0.442	0.625	2.470E+00	1.029E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
8916.968	2.33E+01	2.00E+02	1.98E+02	0.442	0.625	2.477E+00	1.032E-01
8941.78	2.33E+01	2.01E+02	1.98E+02	0.443	0.626	2.484E+00	1.035E-01
8967.155	2.33E+01	2.01E+02	1.98E+02	0.443	0.626	2.491E+00	1.038E-01
8992.53	2.33E+01	2.01E+02	1.98E+02	0.443	0.626	2.498E+00	1.041E-01
9017.655	2.33E+01	2.01E+02	1.98E+02	0.443	0.626	2.505E+00	1.044E-01
9042.78	2.33E+01	2.01E+02	1.98E+02	0.443	0.627	2.512E+00	1.047E-01
9068.155	2.33E+01	2.01E+02	1.98E+02	0.443	0.627	2.519E+00	1.050E-01
9093.155	2.34E+01	2.01E+02	1.98E+02	0.443	0.627	2.526E+00	1.052E-01
9118.655	2.34E+01	2.01E+02	1.98E+02	0.443	0.627	2.533E+00	1.055E-01
9143.78	2.34E+01	2.01E+02	1.98E+02	0.444	0.627	2.540E+00	1.058E-01
9169.155	2.34E+01	2.01E+02	1.98E+02	0.444	0.627	2.547E+00	1.061E-01
9194.405	2.34E+01	2.01E+02	1.98E+02	0.444	0.628	2.554E+00	1.064E-01
9219.78	2.34E+01	2.01E+02	1.98E+02	0.444	0.628	2.561E+00	1.067E-01
9244.78	2.34E+01	2.01E+02	1.98E+02	0.444	0.628	2.568E+00	1.070E-01
9269.905	2.34E+01	2.01E+02	1.99E+02	0.444	0.628	2.575E+00	1.073E-01
9295.655	2.34E+01	2.01E+02	1.99E+02	0.444	0.628	2.582E+00	1.076E-01
9320.905	2.34E+01	2.01E+02	1.99E+02	0.444	0.628	2.589E+00	1.079E-01
9345.905	2.34E+01	2.01E+02	1.99E+02	0.444	0.628	2.596E+00	1.082E-01
9370.905	2.34E+01	2.01E+02	1.99E+02	0.445	0.629	2.603E+00	1.085E-01
9397.03	2.34E+01	2.01E+02	1.99E+02	0.445	0.629	2.610E+00	1.088E-01
9422.155	2.34E+01	2.01E+02	1.99E+02	0.445	0.629	2.617E+00	1.091E-01
9447.78	2.34E+01	2.01E+02	1.99E+02	0.445	0.629	2.624E+00	1.093E-01
9473.03	2.34E+01	2.01E+02	1.99E+02	0.445	0.629	2.631E+00	1.096E-01
9499.28	2.34E+01	2.01E+02	1.99E+02	0.445	0.630	2.639E+00	1.099E-01
9524.53	2.34E+01	2.01E+02	1.99E+02	0.445	0.630	2.646E+00	1.102E-01
9550.155	2.34E+01	2.01E+02	1.99E+02	0.445	0.630	2.653E+00	1.105E-01
9575.53	2.34E+01	2.01E+02	1.99E+02	0.445	0.630	2.660E+00	1.108E-01
9600.53	2.34E+01	2.01E+02	1.99E+02	0.445	0.630	2.667E+00	1.111E-01
9625.53	2.34E+01	2.01E+02	1.99E+02	0.446	0.630	2.674E+00	1.114E-01
9650.53	2.34E+01	2.01E+02	1.99E+02	0.446	0.630	2.681E+00	1.117E-01
9675.53	2.35E+01	2.01E+02	1.99E+02	0.446	0.631	2.688E+00	1.120E-01
9700.53	2.35E+01	2.01E+02	1.99E+02	0.446	0.631	2.695E+00	1.123E-01
9725.78	2.35E+01	2.01E+02	1.99E+02	0.446	0.631	2.702E+00	1.126E-01
9750.78	2.35E+01	2.01E+02	1.99E+02	0.446	0.631	2.709E+00	1.129E-01
9776.03	2.35E+01	2.01E+02	1.99E+02	0.446	0.631	2.716E+00	1.131E-01
9801.78	2.35E+01	2.01E+02	1.99E+02	0.446	0.631	2.723E+00	1.134E-01
9826.78	2.35E+01	2.01E+02	1.99E+02	0.446	0.631	2.730E+00	1.137E-01
9851.905	2.35E+01	2.01E+02	1.99E+02	0.447	0.632	2.737E+00	1.140E-01
9877.53	2.35E+01	2.01E+02	1.99E+02	0.447	0.632	2.744E+00	1.143E-01
9902.53	2.35E+01	2.01E+02	1.99E+02	0.447	0.632	2.751E+00	1.146E-01
9927.53	2.35E+01	2.01E+02	1.99E+02	0.447	0.632	2.758E+00	1.149E-01
9952.655	2.35E+01	2.01E+02	1.99E+02	0.447	0.632	2.765E+00	1.152E-01
9978.155	2.35E+01	2.01E+02	1.99E+02	0.447	0.632	2.772E+00	1.155E-01
10003.28	2.35E+01	2.01E+02	1.99E+02	0.447	0.632	2.779E+00	1.158E-01
10028.28	2.35E+01	2.01E+02	1.99E+02	0.447	0.632	2.786E+00	1.161E-01
10053.41	2.35E+01	2.01E+02	1.99E+02	0.447	0.633	2.793E+00	1.164E-01
10078.53	2.35E+01	2.01E+02	1.99E+02	0.447	0.633	2.800E+00	1.166E-01
10103.53	2.35E+01	2.01E+02	1.99E+02	0.447	0.633	2.807E+00	1.169E-01
10129.03	2.35E+01	2.01E+02	1.99E+02	0.448	0.633	2.814E+00	1.172E-01
10154.03	2.35E+01	2.01E+02	1.99E+02	0.448	0.633	2.821E+00	1.175E-01
10179.03	2.35E+01	2.01E+02	1.99E+02	0.448	0.633	2.828E+00	1.178E-01
10204.03	2.35E+01	2.01E+02	1.99E+02	0.448	0.634	2.834E+00	1.181E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
10229.53	2.35E+01	2.01E+02	1.99E+02	0.448	0.634	2.842E+00	1.184E-01
10254.66	2.35E+01	2.01E+02	1.99E+02	0.448	0.634	2.849E+00	1.187E-01
10279.91	2.35E+01	2.01E+02	2.00E+02	0.448	0.634	2.856E+00	1.190E-01
10305.66	2.36E+01	2.01E+02	2.00E+02	0.448	0.634	2.863E+00	1.193E-01
10330.66	2.36E+01	2.01E+02	2.00E+02	0.448	0.634	2.870E+00	1.196E-01
10356.91	2.36E+01	2.01E+02	2.00E+02	0.448	0.634	2.877E+00	1.199E-01
10382.16	2.36E+01	2.01E+02	2.00E+02	0.449	0.635	2.884E+00	1.202E-01
10408.03	2.36E+01	2.01E+02	2.00E+02	0.449	0.635	2.891E+00	1.205E-01
10433.16	2.36E+01	2.01E+02	2.00E+02	0.449	0.635	2.898E+00	1.208E-01
10458.41	2.36E+01	2.01E+02	2.00E+02	0.449	0.635	2.905E+00	1.210E-01
10483.41	2.36E+01	2.01E+02	2.00E+02	0.449	0.635	2.912E+00	1.213E-01
10509.03	2.36E+01	2.02E+02	2.00E+02	0.449	0.635	2.919E+00	1.216E-01
10534.03	2.36E+01	2.02E+02	2.00E+02	0.449	0.635	2.926E+00	1.219E-01
10559.03	2.36E+01	2.02E+02	2.00E+02	0.449	0.636	2.933E+00	1.222E-01
10584.03	2.36E+01	2.02E+02	2.00E+02	0.449	0.636	2.940E+00	1.225E-01
10609.16	2.36E+01	2.02E+02	2.00E+02	0.449	0.636	2.947E+00	1.228E-01
10634.16	2.36E+01	2.02E+02	2.00E+02	0.450	0.636	2.954E+00	1.231E-01
10659.16	2.36E+01	2.02E+02	2.00E+02	0.450	0.636	2.961E+00	1.234E-01
10684.16	2.36E+01	2.02E+02	2.00E+02	0.450	0.636	2.968E+00	1.237E-01
10709.53	2.36E+01	2.02E+02	2.00E+02	0.450	0.636	2.975E+00	1.240E-01
10735.16	2.36E+01	2.02E+02	2.00E+02	0.450	0.636	2.982E+00	1.242E-01
10760.78	2.36E+01	2.02E+02	2.00E+02	0.450	0.637	2.989E+00	1.245E-01
10786.28	2.36E+01	2.02E+02	2.00E+02	0.450	0.637	2.996E+00	1.248E-01
10811.28	2.36E+01	2.02E+02	2.00E+02	0.450	0.637	3.003E+00	1.251E-01
10836.66	2.36E+01	2.02E+02	2.00E+02	0.451	0.637	3.010E+00	1.254E-01
10861.66	2.36E+01	2.02E+02	2.00E+02	0.451	0.637	3.017E+00	1.257E-01
10887.03	2.36E+01	2.02E+02	2.00E+02	0.451	0.637	3.024E+00	1.260E-01
10912.16	2.36E+01	2.02E+02	2.00E+02	0.451	0.637	3.031E+00	1.263E-01
10937.16	2.36E+01	2.02E+02	2.00E+02	0.451	0.637	3.038E+00	1.266E-01
10962.53	2.37E+01	2.02E+02	2.00E+02	0.451	0.638	3.045E+00	1.269E-01
10987.91	2.37E+01	2.02E+02	2.00E+02	0.451	0.638	3.052E+00	1.272E-01
11013.91	2.37E+01	2.02E+02	2.00E+02	0.451	0.638	3.059E+00	1.275E-01
11039.66	2.37E+01	2.02E+02	2.00E+02	0.451	0.638	3.067E+00	1.278E-01
11064.78	2.37E+01	2.02E+02	2.00E+02	0.451	0.638	3.074E+00	1.281E-01
11089.78	2.37E+01	2.02E+02	2.00E+02	0.451	0.638	3.080E+00	1.284E-01
11114.91	2.37E+01	2.02E+02	2.00E+02	0.452	0.639	3.087E+00	1.286E-01
11140.03	2.37E+01	2.02E+02	2.00E+02	0.452	0.639	3.094E+00	1.289E-01
11165.78	2.37E+01	2.02E+02	2.00E+02	0.452	0.639	3.102E+00	1.292E-01
11190.78	2.37E+01	2.02E+02	2.00E+02	0.452	0.639	3.109E+00	1.295E-01
11216.03	2.37E+01	2.02E+02	2.00E+02	0.452	0.639	3.116E+00	1.298E-01
11241.03	2.37E+01	2.02E+02	2.00E+02	0.452	0.639	3.123E+00	1.301E-01
11266.03	2.37E+01	2.02E+02	2.00E+02	0.452	0.639	3.129E+00	1.304E-01
11292.03	2.37E+01	2.02E+02	2.00E+02	0.452	0.639	3.137E+00	1.307E-01
11317.28	2.37E+01	2.02E+02	2.00E+02	0.452	0.639	3.144E+00	1.310E-01
11342.53	2.37E+01	2.02E+02	2.00E+02	0.452	0.640	3.151E+00	1.313E-01
11368.03	2.37E+01	2.02E+02	2.00E+02	0.452	0.640	3.158E+00	1.316E-01
11393.03	2.37E+01	2.02E+02	2.00E+02	0.453	0.640	3.165E+00	1.319E-01
11418.53	2.37E+01	2.02E+02	2.00E+02	0.453	0.640	3.172E+00	1.322E-01
11443.91	2.37E+01	2.02E+02	2.00E+02	0.453	0.640	3.179E+00	1.325E-01
11470.03	2.37E+01	2.02E+02	2.00E+02	0.453	0.640	3.186E+00	1.328E-01
11495.41	2.37E+01	2.02E+02	2.01E+02	0.453	0.640	3.193E+00	1.330E-01
11520.41	2.37E+01	2.02E+02	2.01E+02	0.453	0.640	3.200E+00	1.333E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
11545.66	2.37E+01	2.02E+02	2.01E+02	0.453	0.641	3.207E+00	1.336E-01
11571.03	2.37E+01	2.02E+02	2.01E+02	0.453	0.641	3.214E+00	1.339E-01
11596.53	2.37E+01	2.02E+02	2.01E+02	0.453	0.641	3.221E+00	1.342E-01
11622.91	2.37E+01	2.02E+02	2.01E+02	0.453	0.641	3.229E+00	1.345E-01
11649.03	2.37E+01	2.02E+02	2.01E+02	0.453	0.641	3.236E+00	1.348E-01
11674.03	2.37E+01	2.02E+02	2.01E+02	0.453	0.641	3.243E+00	1.351E-01
11699.03	2.38E+01	2.02E+02	2.01E+02	0.454	0.641	3.250E+00	1.354E-01
11724.03	2.38E+01	2.02E+02	2.01E+02	0.454	0.641	3.257E+00	1.357E-01
11749.28	2.38E+01	2.02E+02	2.01E+02	0.454	0.641	3.264E+00	1.360E-01
11774.66	2.38E+01	2.02E+02	2.01E+02	0.454	0.641	3.271E+00	1.363E-01
11799.78	2.38E+01	2.02E+02	2.01E+02	0.454	0.642	3.278E+00	1.366E-01
11826.03	2.38E+01	2.02E+02	2.01E+02	0.454	0.642	3.285E+00	1.369E-01
11851.91	2.38E+01	2.02E+02	2.01E+02	0.454	0.642	3.292E+00	1.372E-01
11877.28	2.38E+01	2.02E+02	2.01E+02	0.454	0.642	3.299E+00	1.375E-01
11902.78	2.38E+01	2.02E+02	2.01E+02	0.454	0.642	3.306E+00	1.378E-01
11928.41	2.38E+01	2.02E+02	2.01E+02	0.454	0.642	3.313E+00	1.381E-01
11953.41	2.38E+01	2.02E+02	2.01E+02	0.454	0.642	3.320E+00	1.383E-01
11978.41	2.38E+01	2.02E+02	2.01E+02	0.454	0.642	3.327E+00	1.386E-01
12003.91	2.38E+01	2.02E+02	2.01E+02	0.454	0.642	3.334E+00	1.389E-01
12029.41	2.38E+01	2.02E+02	2.01E+02	0.455	0.643	3.342E+00	1.392E-01
12054.41	2.38E+01	2.02E+02	2.01E+02	0.455	0.643	3.348E+00	1.395E-01
12079.41	2.38E+01	2.02E+02	2.01E+02	0.455	0.643	3.355E+00	1.398E-01
12105.53	2.38E+01	2.02E+02	2.01E+02	0.455	0.643	3.363E+00	1.401E-01
12130.91	2.38E+01	2.02E+02	2.01E+02	0.455	0.643	3.370E+00	1.404E-01
12156.03	2.38E+01	2.02E+02	2.01E+02	0.455	0.643	3.377E+00	1.407E-01
12181.28	2.38E+01	2.02E+02	2.01E+02	0.455	0.643	3.384E+00	1.410E-01
12206.28	2.38E+01	2.02E+02	2.01E+02	0.455	0.643	3.391E+00	1.413E-01
12231.28	2.38E+01	2.02E+02	2.01E+02	0.455	0.643	3.398E+00	1.416E-01
12256.28	2.38E+01	2.02E+02	2.01E+02	0.455	0.643	3.405E+00	1.419E-01
12281.66	2.38E+01	2.02E+02	2.01E+02	0.455	0.643	3.412E+00	1.421E-01
12306.66	2.38E+01	2.02E+02	2.01E+02	0.455	0.644	3.419E+00	1.424E-01
12331.91	2.38E+01	2.02E+02	2.01E+02	0.455	0.644	3.426E+00	1.427E-01
12357.66	2.38E+01	2.02E+02	2.01E+02	0.455	0.644	3.433E+00	1.430E-01
12383.03	2.38E+01	2.02E+02	2.01E+02	0.456	0.644	3.440E+00	1.433E-01
12408.03	2.38E+01	2.02E+02	2.01E+02	0.456	0.644	3.447E+00	1.436E-01
12433.03	2.38E+01	2.02E+02	2.01E+02	0.456	0.644	3.454E+00	1.439E-01
12458.16	2.38E+01	2.02E+02	2.01E+02	0.456	0.644	3.461E+00	1.442E-01
12483.16	2.38E+01	2.02E+02	2.01E+02	0.456	0.645	3.468E+00	1.445E-01
12508.28	2.38E+01	2.02E+02	2.01E+02	0.456	0.645	3.475E+00	1.448E-01
12533.28	2.38E+01	2.03E+02	2.01E+02	0.456	0.645	3.481E+00	1.451E-01
12558.28	2.38E+01	2.03E+02	2.01E+02	0.456	0.645	3.488E+00	1.454E-01
12583.66	2.39E+01	2.03E+02	2.01E+02	0.456	0.645	3.495E+00	1.456E-01
12608.78	2.39E+01	2.03E+02	2.01E+02	0.456	0.645	3.502E+00	1.459E-01
12633.78	2.39E+01	2.03E+02	2.01E+02	0.456	0.645	3.509E+00	1.462E-01
12658.78	2.39E+01	2.03E+02	2.01E+02	0.456	0.645	3.516E+00	1.465E-01
12684.66	2.39E+01	2.03E+02	2.01E+02	0.456	0.645	3.524E+00	1.468E-01
12709.91	2.39E+01	2.03E+02	2.01E+02	0.456	0.645	3.531E+00	1.471E-01
12735.53	2.39E+01	2.03E+02	2.01E+02	0.456	0.645	3.538E+00	1.474E-01
12760.91	2.39E+01	2.03E+02	2.01E+02	0.456	0.645	3.545E+00	1.477E-01
12786.16	2.39E+01	2.03E+02	2.01E+02	0.457	0.646	3.552E+00	1.480E-01
12811.66	2.39E+01	2.03E+02	2.01E+02	0.457	0.646	3.559E+00	1.483E-01
12836.91	2.39E+01	2.03E+02	2.01E+02	0.457	0.646	3.566E+00	1.486E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
12862.41	2.39E+01	2.03E+02	2.01E+02	0.457	0.646	3.573E+00	1.489E-01
12887.41	2.39E+01	2.03E+02	2.01E+02	0.457	0.646	3.580E+00	1.492E-01
12913.03	2.39E+01	2.03E+02	2.01E+02	0.457	0.646	3.587E+00	1.495E-01
12938.16	2.39E+01	2.03E+02	2.01E+02	0.457	0.646	3.594E+00	1.497E-01
12963.16	2.39E+01	2.03E+02	2.01E+02	0.457	0.646	3.601E+00	1.500E-01
12989.03	2.39E+01	2.03E+02	2.01E+02	0.457	0.646	3.608E+00	1.503E-01
13014.28	2.39E+01	2.03E+02	2.01E+02	0.457	0.646	3.615E+00	1.506E-01
13039.28	2.39E+01	2.03E+02	2.02E+02	0.457	0.646	3.622E+00	1.509E-01
13064.41	2.39E+01	2.03E+02	2.02E+02	0.457	0.646	3.629E+00	1.512E-01
13089.91	2.39E+01	2.03E+02	2.02E+02	0.457	0.646	3.636E+00	1.515E-01
13114.91	2.39E+01	2.03E+02	2.02E+02	0.457	0.647	3.643E+00	1.518E-01
13139.91	2.39E+01	2.03E+02	2.02E+02	0.457	0.647	3.650E+00	1.521E-01
13164.91	2.39E+01	2.03E+02	2.02E+02	0.457	0.647	3.657E+00	1.524E-01
13190.28	2.39E+01	2.03E+02	2.02E+02	0.458	0.647	3.664E+00	1.527E-01
13215.53	2.39E+01	2.03E+02	2.02E+02	0.458	0.647	3.671E+00	1.530E-01
13240.78	2.39E+01	2.03E+02	2.02E+02	0.458	0.647	3.678E+00	1.532E-01
13265.78	2.39E+01	2.03E+02	2.02E+02	0.458	0.647	3.685E+00	1.535E-01
13290.91	2.39E+01	2.03E+02	2.02E+02	0.458	0.647	3.692E+00	1.538E-01
13316.03	2.39E+01	2.03E+02	2.02E+02	0.458	0.647	3.699E+00	1.541E-01
13341.03	2.39E+01	2.03E+02	2.02E+02	0.458	0.647	3.706E+00	1.544E-01
13366.41	2.39E+01	2.03E+02	2.02E+02	0.458	0.647	3.713E+00	1.547E-01
13391.53	2.39E+01	2.03E+02	2.02E+02	0.458	0.647	3.720E+00	1.550E-01
13416.53	2.39E+01	2.03E+02	2.02E+02	0.458	0.647	3.727E+00	1.553E-01
13441.53	2.39E+01	2.03E+02	2.02E+02	0.458	0.648	3.734E+00	1.556E-01
13466.53	2.39E+01	2.03E+02	2.02E+02	0.458	0.648	3.741E+00	1.559E-01
13491.78	2.39E+01	2.03E+02	2.02E+02	0.458	0.648	3.748E+00	1.562E-01
13517.03	2.39E+01	2.03E+02	2.02E+02	0.458	0.648	3.755E+00	1.564E-01
13542.91	2.39E+01	2.03E+02	2.02E+02	0.458	0.648	3.762E+00	1.567E-01
13568.41	2.39E+01	2.03E+02	2.02E+02	0.458	0.648	3.769E+00	1.570E-01
13593.41	2.39E+01	2.03E+02	2.02E+02	0.458	0.648	3.776E+00	1.573E-01
13618.53	2.39E+01	2.03E+02	2.02E+02	0.458	0.648	3.783E+00	1.576E-01
13643.78	2.39E+01	2.03E+02	2.02E+02	0.458	0.648	3.790E+00	1.579E-01
13668.59	2.40E+01	2.03E+02	2.02E+02	0.459	0.648	3.797E+00	1.582E-01
13693.59	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.804E+00	1.585E-01
13719.34	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.811E+00	1.588E-01
13744.34	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.818E+00	1.591E-01
13769.72	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.825E+00	1.594E-01
13794.72	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.832E+00	1.597E-01
13819.72	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.839E+00	1.600E-01
13845.22	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.846E+00	1.602E-01
13870.22	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.853E+00	1.605E-01
13895.47	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.860E+00	1.608E-01
13920.47	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.867E+00	1.611E-01
13945.59	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.874E+00	1.614E-01
13970.72	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.881E+00	1.617E-01
13995.72	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.888E+00	1.620E-01
14021.09	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.895E+00	1.623E-01
14046.34	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.902E+00	1.626E-01
14071.34	2.40E+01	2.03E+02	2.02E+02	0.459	0.649	3.909E+00	1.629E-01
14096.59	2.40E+01	2.03E+02	2.02E+02	0.459	0.650	3.916E+00	1.632E-01
14121.97	2.40E+01	2.03E+02	2.02E+02	0.459	0.650	3.923E+00	1.634E-01
14146.97	2.40E+01	2.03E+02	2.02E+02	0.459	0.650	3.930E+00	1.637E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
14172.59	2.40E+01	2.03E+02	2.02E+02	0.459	0.650	3.937E+00	1.640E-01
14197.72	2.40E+01	2.03E+02	2.02E+02	0.459	0.650	3.944E+00	1.643E-01
14223.22	2.40E+01	2.03E+02	2.02E+02	0.459	0.650	3.951E+00	1.646E-01
14248.22	2.40E+01	2.03E+02	2.02E+02	0.459	0.650	3.958E+00	1.649E-01
14273.22	2.40E+01	2.03E+02	2.02E+02	0.460	0.650	3.965E+00	1.652E-01
14298.47	2.40E+01	2.03E+02	2.02E+02	0.460	0.650	3.972E+00	1.655E-01
14323.47	2.40E+01	2.03E+02	2.02E+02	0.460	0.650	3.979E+00	1.658E-01
14348.59	2.40E+01	2.03E+02	2.02E+02	0.460	0.650	3.986E+00	1.661E-01
14373.72	2.40E+01	2.03E+02	2.02E+02	0.460	0.650	3.993E+00	1.664E-01
14399.09	2.40E+01	2.03E+02	2.02E+02	0.460	0.650	4.000E+00	1.667E-01
14424.03	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.007E+00	1.669E-01
14449.03	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.014E+00	1.672E-01
14474.03	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.021E+00	1.675E-01
14499.03	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.028E+00	1.678E-01
14524.16	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.034E+00	1.681E-01
14549.41	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.042E+00	1.684E-01
14574.41	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.048E+00	1.687E-01
14599.66	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.055E+00	1.690E-01
14624.66	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.062E+00	1.693E-01
14649.66	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.069E+00	1.696E-01
14674.66	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.076E+00	1.698E-01
14700.28	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.083E+00	1.701E-01
14725.78	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.090E+00	1.704E-01
14751.16	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.098E+00	1.707E-01
14776.66	2.40E+01	2.03E+02	2.02E+02	0.460	0.651	4.105E+00	1.710E-01
14801.78	2.40E+01	2.03E+02	2.02E+02	0.461	0.652	4.112E+00	1.713E-01
14826.91	2.40E+01	2.03E+02	2.02E+02	0.461	0.652	4.119E+00	1.716E-01
14851.91	2.40E+01	2.03E+02	2.02E+02	0.461	0.652	4.126E+00	1.719E-01
14877.16	2.40E+01	2.03E+02	2.02E+02	0.461	0.652	4.133E+00	1.722E-01
14902.28	2.40E+01	2.03E+02	2.02E+02	0.461	0.652	4.140E+00	1.725E-01
14927.66	2.40E+01	2.03E+02	2.02E+02	0.461	0.652	4.147E+00	1.728E-01
14952.91	2.40E+01	2.03E+02	2.02E+02	0.461	0.652	4.154E+00	1.731E-01
14978.03	2.40E+01	2.03E+02	2.02E+02	0.461	0.652	4.161E+00	1.734E-01
15003.16	2.40E+01	2.03E+02	2.02E+02	0.461	0.652	4.168E+00	1.736E-01
15028.66	2.41E+01	2.03E+02	2.02E+02	0.461	0.652	4.175E+00	1.739E-01
15053.78	2.41E+01	2.03E+02	2.02E+02	0.461	0.652	4.182E+00	1.742E-01
15078.78	2.41E+01	2.03E+02	2.02E+02	0.461	0.652	4.189E+00	1.745E-01
15103.91	2.41E+01	2.03E+02	2.02E+02	0.461	0.652	4.196E+00	1.748E-01
15128.72	2.41E+01	2.03E+02	2.02E+02	0.461	0.652	4.202E+00	1.751E-01
15153.84	2.41E+01	2.03E+02	2.02E+02	0.461	0.652	4.209E+00	1.754E-01
15178.84	2.41E+01	2.03E+02	2.02E+02	0.461	0.652	4.216E+00	1.757E-01
15203.97	2.41E+01	2.03E+02	2.02E+02	0.461	0.652	4.223E+00	1.760E-01
15229.34	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	4.230E+00	1.763E-01
15254.72	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	4.237E+00	1.766E-01
15279.97	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	4.244E+00	1.769E-01
15304.97	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	4.251E+00	1.771E-01
15330.59	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	4.258E+00	1.774E-01
15355.59	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	4.265E+00	1.777E-01
15380.84	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	4.272E+00	1.780E-01
15405.84	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	4.279E+00	1.783E-01
15431.34	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.286E+00	1.786E-01
15456.72	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.294E+00	1.789E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
15481.72	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.300E+00	1.792E-01
15507.34	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.308E+00	1.795E-01
15532.34	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.315E+00	1.798E-01
15557.72	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.322E+00	1.801E-01
15583.09	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.329E+00	1.804E-01
15608.72	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.336E+00	1.807E-01
15634.09	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.343E+00	1.810E-01
15659.34	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.350E+00	1.812E-01
15685.22	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.357E+00	1.815E-01
15710.34	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.364E+00	1.818E-01
15735.47	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.371E+00	1.821E-01
15761.09	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.378E+00	1.824E-01
15786.22	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.385E+00	1.827E-01
15811.22	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	4.392E+00	1.830E-01
15836.03	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	4.399E+00	1.833E-01
15861.53	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	4.406E+00	1.836E-01
15886.53	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	4.413E+00	1.839E-01
15911.53	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	4.420E+00	1.842E-01
15936.91	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	4.427E+00	1.845E-01
15961.91	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	4.434E+00	1.847E-01
15986.91	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	4.441E+00	1.850E-01
16012.28	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	4.448E+00	1.853E-01
16037.66	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	4.455E+00	1.856E-01
16062.91	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	4.462E+00	1.859E-01
16088.03	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.469E+00	1.862E-01
16113.16	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.476E+00	1.865E-01
16138.28	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.483E+00	1.868E-01
16164.66	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.490E+00	1.871E-01
16189.66	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.497E+00	1.874E-01
16214.66	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.504E+00	1.877E-01
16240.28	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.511E+00	1.880E-01
16265.78	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.518E+00	1.883E-01
16291.16	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.525E+00	1.886E-01
16316.53	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.532E+00	1.888E-01
16341.91	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.539E+00	1.891E-01
16367.41	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.547E+00	1.894E-01
16392.53	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.553E+00	1.897E-01
16419.16	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	4.561E+00	1.900E-01
16443.97	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.568E+00	1.903E-01
16469.72	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.575E+00	1.906E-01
16494.72	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.582E+00	1.909E-01
16520.34	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.589E+00	1.912E-01
16545.47	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.596E+00	1.915E-01
16570.72	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.603E+00	1.918E-01
16596.34	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.610E+00	1.921E-01
16621.34	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.617E+00	1.924E-01
16646.47	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.624E+00	1.927E-01
16671.59	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.631E+00	1.930E-01
16696.97	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	4.638E+00	1.933E-01
16721.97	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	4.645E+00	1.935E-01
16747.84	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	4.652E+00	1.938E-01
16773.09	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	4.659E+00	1.941E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
16798.59	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	4.666E+00	1.944E-01
16823.59	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	4.673E+00	1.947E-01
16849.09	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	4.680E+00	1.950E-01
16874.34	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	4.687E+00	1.953E-01
16899.47	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	4.694E+00	1.956E-01
16924.72	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	4.701E+00	1.959E-01
16950.03	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.708E+00	1.962E-01
16975.03	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.715E+00	1.965E-01
17000.03	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.722E+00	1.968E-01
17025.78	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.729E+00	1.971E-01
17050.78	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.736E+00	1.973E-01
17076.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.743E+00	1.976E-01
17101.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.750E+00	1.979E-01
17127.28	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.758E+00	1.982E-01
17152.28	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.765E+00	1.985E-01
17178.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.772E+00	1.988E-01
17203.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.779E+00	1.991E-01
17228.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.786E+00	1.994E-01
17253.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.793E+00	1.997E-01
17278.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.800E+00	2.000E-01
17303.78	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.807E+00	2.003E-01
17328.78	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.814E+00	2.006E-01
17354.03	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.821E+00	2.009E-01
17379.66	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.828E+00	2.012E-01
17405.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.835E+00	2.014E-01
17430.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.842E+00	2.017E-01
17455.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	4.849E+00	2.020E-01
17481.28	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.856E+00	2.023E-01
17506.91	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.863E+00	2.026E-01
17531.91	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.870E+00	2.029E-01
17557.16	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.877E+00	2.032E-01
17583.16	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.884E+00	2.035E-01
17608.53	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.891E+00	2.038E-01
17633.53	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.898E+00	2.041E-01
17658.53	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.905E+00	2.044E-01
17683.78	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.912E+00	2.047E-01
17709.16	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.919E+00	2.050E-01
17734.28	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.926E+00	2.053E-01
17759.78	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.933E+00	2.056E-01
17784.78	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.940E+00	2.058E-01
17809.91	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.947E+00	2.061E-01
17835.66	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.954E+00	2.064E-01
17860.78	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.961E+00	2.067E-01
17886.16	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.968E+00	2.070E-01
17911.66	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.975E+00	2.073E-01
17936.91	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.982E+00	2.076E-01
17962.03	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.989E+00	2.079E-01
17987.41	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	4.997E+00	2.082E-01
18012.91	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.004E+00	2.085E-01
18038.28	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.011E+00	2.088E-01
18063.66	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.018E+00	2.091E-01
18088.66	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.025E+00	2.094E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
18113.91	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.032E+00	2.097E-01
18138.91	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.039E+00	2.099E-01
18164.53	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.046E+00	2.102E-01
18189.53	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.053E+00	2.105E-01
18214.53	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.060E+00	2.108E-01
18239.78	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.067E+00	2.111E-01
18264.78	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.074E+00	2.114E-01
18290.66	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.081E+00	2.117E-01
18315.66	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.088E+00	2.120E-01
18340.78	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.095E+00	2.123E-01
18365.78	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.102E+00	2.126E-01
18391.03	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.109E+00	2.129E-01
18416.41	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.116E+00	2.132E-01
18441.41	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.123E+00	2.134E-01
18466.41	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.130E+00	2.137E-01
18491.41	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.137E+00	2.140E-01
18516.53	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.143E+00	2.143E-01
18541.66	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.150E+00	2.146E-01
18566.66	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.157E+00	2.149E-01
18592.03	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.164E+00	2.152E-01
18617.03	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.171E+00	2.155E-01
18642.16	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.178E+00	2.158E-01
18668.16	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.186E+00	2.161E-01
18693.53	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.193E+00	2.164E-01
18718.91	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.200E+00	2.167E-01
18743.66	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.207E+00	2.169E-01
18768.78	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.214E+00	2.172E-01
18793.91	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.221E+00	2.175E-01
18818.91	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.227E+00	2.178E-01
18843.91	2.42E+01	2.04E+02	2.03E+02	0.464	0.656	5.234E+00	2.181E-01
18868.72	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.241E+00	2.184E-01
18894.22	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.248E+00	2.187E-01
18919.22	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.255E+00	2.190E-01
18944.34	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.262E+00	2.193E-01
18969.34	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.269E+00	2.196E-01
18994.34	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.276E+00	2.198E-01
19019.72	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.283E+00	2.201E-01
19044.84	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.290E+00	2.204E-01
19070.09	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.297E+00	2.207E-01
19095.34	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.304E+00	2.210E-01
19120.34	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.311E+00	2.213E-01
19145.34	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.318E+00	2.216E-01
19170.59	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.325E+00	2.219E-01
19195.59	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.332E+00	2.222E-01
19220.59	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.339E+00	2.225E-01
19246.47	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.346E+00	2.228E-01
19272.09	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.353E+00	2.231E-01
19297.84	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.361E+00	2.234E-01
19322.97	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.367E+00	2.236E-01
19347.97	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.374E+00	2.239E-01
19373.22	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.381E+00	2.242E-01
19398.34	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.388E+00	2.245E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
19423.34	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.395E+00	2.248E-01
19448.34	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.402E+00	2.251E-01
19473.34	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.409E+00	2.254E-01
19498.59	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.416E+00	2.257E-01
19524.22	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.423E+00	2.260E-01
19549.47	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.430E+00	2.263E-01
19574.59	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.437E+00	2.266E-01
19599.84	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.444E+00	2.269E-01
19625.22	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.451E+00	2.271E-01
19650.22	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.458E+00	2.274E-01
19675.84	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.466E+00	2.277E-01
19701.34	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.473E+00	2.280E-01
19726.97	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.480E+00	2.283E-01
19752.72	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.487E+00	2.286E-01
19777.84	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.494E+00	2.289E-01
19803.09	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.501E+00	2.292E-01
19828.34	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.508E+00	2.295E-01
19853.34	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.515E+00	2.298E-01
19878.47	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.522E+00	2.301E-01
19903.72	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.529E+00	2.304E-01
19929.09	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.536E+00	2.307E-01
19954.84	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.543E+00	2.310E-01
19979.84	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.550E+00	2.312E-01
20011.09	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.559E+00	2.316E-01
20049.97	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.569E+00	2.321E-01
20087.59	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.580E+00	2.325E-01
20125.84	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.591E+00	2.329E-01
20163.34	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.601E+00	2.334E-01
20200.97	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.611E+00	2.338E-01
20239.09	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.622E+00	2.342E-01
20276.72	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.632E+00	2.347E-01
20314.34	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.643E+00	2.351E-01
20352.22	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.653E+00	2.356E-01
20390.22	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.664E+00	2.360E-01
20428.22	2.42E+01	2.04E+02	2.03E+02	0.464	0.657	5.675E+00	2.364E-01
20466.28	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.685E+00	2.369E-01
20504.66	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.696E+00	2.373E-01
20542.16	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.706E+00	2.378E-01
20580.66	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.717E+00	2.382E-01
20618.16	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.727E+00	2.386E-01
20655.66	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.738E+00	2.391E-01
20693.28	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.748E+00	2.395E-01
20730.91	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.759E+00	2.399E-01
20768.78	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.769E+00	2.404E-01
20806.28	2.42E+01	2.04E+02	2.03E+02	0.465	0.657	5.780E+00	2.408E-01
20844.03	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.790E+00	2.413E-01
20881.53	2.42E+01	2.03E+02	2.03E+02	0.465	0.657	5.800E+00	2.417E-01
20919.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.811E+00	2.421E-01
20956.91	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.821E+00	2.426E-01
20994.66	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.832E+00	2.430E-01
21032.91	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.842E+00	2.434E-01
21070.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.853E+00	2.439E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
21108.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.863E+00	2.443E-01
21146.28	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.874E+00	2.447E-01
21184.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.885E+00	2.452E-01
21222.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.895E+00	2.456E-01
21259.66	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.905E+00	2.461E-01
21297.66	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.916E+00	2.465E-01
21335.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.927E+00	2.469E-01
21373.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.937E+00	2.474E-01
21411.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.948E+00	2.478E-01
21448.66	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.958E+00	2.482E-01
21487.28	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	5.969E+00	2.487E-01
21525.28	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	5.979E+00	2.491E-01
21562.91	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	5.990E+00	2.496E-01
21600.78	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.000E+00	2.500E-01
21639.78	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.011E+00	2.505E-01
21677.78	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.022E+00	2.509E-01
21715.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.032E+00	2.513E-01
21753.34	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.043E+00	2.518E-01
21791.22	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.053E+00	2.522E-01
21829.84	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.064E+00	2.527E-01
21867.34	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.074E+00	2.531E-01
21905.47	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.085E+00	2.535E-01
21942.97	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.095E+00	2.540E-01
21981.09	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.106E+00	2.544E-01
22018.59	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.116E+00	2.548E-01
22057.34	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.127E+00	2.553E-01
22095.72	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.138E+00	2.557E-01
22133.59	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.148E+00	2.562E-01
22171.59	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.159E+00	2.566E-01
22210.47	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.170E+00	2.571E-01
22248.72	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.180E+00	2.575E-01
22286.22	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.191E+00	2.579E-01
22324.22	2.42E+01	2.03E+02	2.03E+02	0.464	0.657	6.201E+00	2.584E-01
22362.34	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.212E+00	2.588E-01
22400.22	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.222E+00	2.593E-01
22438.72	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.233E+00	2.597E-01
22476.97	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.244E+00	2.602E-01
22514.84	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.254E+00	2.606E-01
22553.09	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.265E+00	2.610E-01
22591.09	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.275E+00	2.615E-01
22628.97	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.286E+00	2.619E-01
22666.72	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.296E+00	2.623E-01
22704.72	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.307E+00	2.628E-01
22742.34	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.317E+00	2.632E-01
22779.84	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.328E+00	2.637E-01
22817.72	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.338E+00	2.641E-01
22855.84	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.349E+00	2.645E-01
22893.59	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.359E+00	2.650E-01
22931.03	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.370E+00	2.654E-01
22968.66	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.380E+00	2.658E-01
23006.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.391E+00	2.663E-01
23043.91	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.401E+00	2.667E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
23081.53	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.412E+00	2.671E-01
23119.53	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.422E+00	2.676E-01
23157.28	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.433E+00	2.680E-01
23196.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.443E+00	2.685E-01
23234.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.454E+00	2.689E-01
23271.66	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.464E+00	2.693E-01
23309.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.475E+00	2.698E-01
23347.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.485E+00	2.702E-01
23385.53	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.496E+00	2.707E-01
23423.03	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.506E+00	2.711E-01
23460.53	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.517E+00	2.715E-01
23498.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.527E+00	2.720E-01
23535.66	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.538E+00	2.724E-01
23573.16	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.548E+00	2.728E-01
23610.66	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.559E+00	2.733E-01
23649.03	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.569E+00	2.737E-01
23686.91	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.580E+00	2.742E-01
23725.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.590E+00	2.746E-01
23763.53	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.601E+00	2.750E-01
23801.28	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.611E+00	2.755E-01
23839.03	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.622E+00	2.759E-01
23877.41	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.633E+00	2.764E-01
23915.53	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.643E+00	2.768E-01
23953.03	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.654E+00	2.772E-01
23990.84	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.664E+00	2.777E-01
24028.84	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.675E+00	2.781E-01
24066.72	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.685E+00	2.785E-01
24105.22	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.696E+00	2.790E-01
24142.72	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.706E+00	2.794E-01
24180.72	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.717E+00	2.799E-01
24218.34	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.727E+00	2.803E-01
24255.97	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.738E+00	2.807E-01
24293.84	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.748E+00	2.812E-01
24331.47	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.759E+00	2.816E-01
24369.72	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.769E+00	2.821E-01
24407.47	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.780E+00	2.825E-01
24445.22	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.790E+00	2.829E-01
24483.09	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.801E+00	2.834E-01
24520.59	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.811E+00	2.838E-01
24558.59	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.822E+00	2.842E-01
24596.47	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.832E+00	2.847E-01
24634.47	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.843E+00	2.851E-01
24672.59	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.853E+00	2.856E-01
24710.72	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.864E+00	2.860E-01
24748.72	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.875E+00	2.864E-01
24786.22	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.885E+00	2.869E-01
24824.09	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.896E+00	2.873E-01
24862.09	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.906E+00	2.878E-01
24900.34	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.917E+00	2.882E-01
24938.09	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.927E+00	2.886E-01
24977.03	2.42E+01	2.03E+02	2.03E+02	0.464	0.656	6.938E+00	2.891E-01
25014.78	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.949E+00	2.895E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
25052.28	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.959E+00	2.900E-01
25090.16	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.969E+00	2.904E-01
25127.66	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.980E+00	2.908E-01
25165.16	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	6.990E+00	2.913E-01
25203.53	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	7.001E+00	2.917E-01
25241.41	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	7.012E+00	2.921E-01
25278.91	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	7.022E+00	2.926E-01
25316.78	2.42E+01	2.03E+02	2.03E+02	0.463	0.655	7.032E+00	2.930E-01
25354.53	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.043E+00	2.935E-01
25393.16	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.054E+00	2.939E-01
25431.16	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.064E+00	2.943E-01
25468.91	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.075E+00	2.948E-01
25506.91	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.085E+00	2.952E-01
25544.41	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.096E+00	2.957E-01
25582.16	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.106E+00	2.961E-01
25620.66	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.117E+00	2.965E-01
25659.28	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.128E+00	2.970E-01
25697.16	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.138E+00	2.974E-01
25735.41	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.149E+00	2.979E-01
25773.09	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.159E+00	2.983E-01
25810.72	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.170E+00	2.987E-01
25848.72	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.180E+00	2.992E-01
25886.22	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.191E+00	2.996E-01
25924.22	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.201E+00	3.000E-01
25962.22	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.212E+00	3.005E-01
25999.84	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.222E+00	3.009E-01
26037.59	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.233E+00	3.014E-01
26077.09	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.244E+00	3.018E-01
26115.72	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.254E+00	3.023E-01
26153.34	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.265E+00	3.027E-01
26190.84	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.275E+00	3.031E-01
26229.09	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.286E+00	3.036E-01
26266.97	2.41E+01	2.03E+02	2.03E+02	0.463	0.655	7.296E+00	3.040E-01
26304.84	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.307E+00	3.045E-01
26342.34	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.317E+00	3.049E-01
26380.34	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.328E+00	3.053E-01
26417.97	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.338E+00	3.058E-01
26455.59	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.349E+00	3.062E-01
26493.09	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.359E+00	3.066E-01
26530.59	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.370E+00	3.071E-01
26568.47	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.380E+00	3.075E-01
26605.91	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.391E+00	3.079E-01
26644.16	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.401E+00	3.084E-01
26682.41	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.412E+00	3.088E-01
26721.03	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.423E+00	3.093E-01
26759.41	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.433E+00	3.097E-01
26796.91	2.41E+01	2.03E+02	2.03E+02	0.463	0.654	7.444E+00	3.101E-01
26835.53	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.454E+00	3.106E-01
26873.03	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.465E+00	3.110E-01
26911.03	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.475E+00	3.115E-01
26948.53	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.486E+00	3.119E-01
26986.66	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.496E+00	3.123E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
27024.16	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.507E+00	3.128E-01
27061.91	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.517E+00	3.132E-01
27099.66	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.528E+00	3.137E-01
27138.16	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.538E+00	3.141E-01
27175.66	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.549E+00	3.145E-01
27213.78	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.559E+00	3.150E-01
27251.28	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.570E+00	3.154E-01
27289.78	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.580E+00	3.159E-01
27327.59	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.591E+00	3.163E-01
27365.84	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.602E+00	3.167E-01
27403.84	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.612E+00	3.172E-01
27441.59	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.623E+00	3.176E-01
27479.47	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.633E+00	3.180E-01
27516.97	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.644E+00	3.185E-01
27554.72	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.654E+00	3.189E-01
27593.22	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.665E+00	3.194E-01
27630.72	2.41E+01	2.03E+02	2.03E+02	0.462	0.654	7.675E+00	3.198E-01
27668.22	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.686E+00	3.202E-01
27706.34	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.696E+00	3.207E-01
27744.22	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.707E+00	3.211E-01
27782.22	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.717E+00	3.216E-01
27820.72	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.728E+00	3.220E-01
27858.34	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.738E+00	3.224E-01
27896.59	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.749E+00	3.229E-01
27934.72	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.760E+00	3.233E-01
27972.03	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.770E+00	3.238E-01
28010.03	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.781E+00	3.242E-01
28047.91	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.791E+00	3.246E-01
28086.41	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.802E+00	3.251E-01
28124.28	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.812E+00	3.255E-01
28162.03	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.823E+00	3.259E-01
28199.91	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.833E+00	3.264E-01
28237.78	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.844E+00	3.268E-01
28276.78	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.855E+00	3.273E-01
28314.66	2.41E+01	2.03E+02	2.03E+02	0.462	0.653	7.865E+00	3.277E-01
28353.16	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	7.876E+00	3.282E-01
28391.03	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	7.886E+00	3.286E-01
28428.66	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	7.897E+00	3.290E-01
28466.28	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	7.907E+00	3.295E-01
28504.53	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	7.918E+00	3.299E-01
28542.66	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	7.929E+00	3.304E-01
28580.66	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	7.939E+00	3.308E-01
28617.97	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	7.949E+00	3.312E-01
28655.84	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	7.960E+00	3.317E-01
28693.59	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	7.970E+00	3.321E-01
28731.59	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	7.981E+00	3.325E-01
28769.47	2.41E+01	2.03E+02	2.03E+02	0.461	0.653	7.992E+00	3.330E-01
28807.72	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.002E+00	3.334E-01
28845.84	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.013E+00	3.339E-01
28883.72	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.023E+00	3.343E-01
28921.84	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.034E+00	3.347E-01
28959.84	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.044E+00	3.352E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
28997.72	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.055E+00	3.356E-01
29035.34	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.065E+00	3.361E-01
29073.09	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.076E+00	3.365E-01
29111.22	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.086E+00	3.369E-01
29149.34	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.097E+00	3.374E-01
29187.22	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.108E+00	3.378E-01
29225.41	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.118E+00	3.383E-01
29263.66	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.129E+00	3.387E-01
29301.28	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.139E+00	3.391E-01
29339.03	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.150E+00	3.396E-01
29376.66	2.41E+01	2.03E+02	2.03E+02	0.461	0.652	8.160E+00	3.400E-01
29414.16	2.40E+01	2.03E+02	2.03E+02	0.461	0.652	8.171E+00	3.404E-01
29452.03	2.40E+01	2.03E+02	2.03E+02	0.461	0.652	8.181E+00	3.409E-01
29489.91	2.40E+01	2.03E+02	2.03E+02	0.461	0.652	8.192E+00	3.413E-01
29527.41	2.40E+01	2.03E+02	2.03E+02	0.461	0.652	8.202E+00	3.418E-01
29565.53	2.40E+01	2.03E+02	2.03E+02	0.461	0.652	8.213E+00	3.422E-01
29603.03	2.40E+01	2.02E+02	2.03E+02	0.461	0.652	8.223E+00	3.426E-01
29641.66	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.234E+00	3.431E-01
29679.78	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.244E+00	3.435E-01
29717.78	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.255E+00	3.440E-01
29755.41	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.265E+00	3.444E-01
29793.28	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.276E+00	3.448E-01
29830.59	2.40E+01	2.02E+02	2.03E+02	0.461	0.652	8.286E+00	3.453E-01
29868.72	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.297E+00	3.457E-01
29906.47	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.307E+00	3.461E-01
29944.22	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.318E+00	3.466E-01
29982.09	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.328E+00	3.470E-01
30020.34	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.339E+00	3.475E-01
30058.34	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.350E+00	3.479E-01
30096.72	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.360E+00	3.483E-01
30134.34	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.371E+00	3.488E-01
30172.47	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.381E+00	3.492E-01
30210.22	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.392E+00	3.497E-01
30247.72	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.402E+00	3.501E-01
30285.59	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.413E+00	3.505E-01
30323.47	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.423E+00	3.510E-01
30360.97	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.434E+00	3.514E-01
30398.72	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.444E+00	3.518E-01
30436.78	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.455E+00	3.523E-01
30474.78	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.465E+00	3.527E-01
30512.53	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.476E+00	3.532E-01
30550.53	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.486E+00	3.536E-01
30588.66	2.40E+01	2.02E+02	2.03E+02	0.460	0.651	8.497E+00	3.540E-01
30626.28	2.40E+01	2.02E+02	2.03E+02	0.460	0.650	8.507E+00	3.545E-01
30663.78	2.40E+01	2.02E+02	2.03E+02	0.460	0.650	8.518E+00	3.549E-01
30701.66	2.40E+01	2.02E+02	2.03E+02	0.460	0.650	8.528E+00	3.553E-01
30739.16	2.40E+01	2.02E+02	2.03E+02	0.460	0.650	8.539E+00	3.558E-01
30777.16	2.40E+01	2.02E+02	2.03E+02	0.460	0.650	8.549E+00	3.562E-01
30815.16	2.40E+01	2.02E+02	2.03E+02	0.459	0.650	8.560E+00	3.567E-01
30852.91	2.40E+01	2.02E+02	2.03E+02	0.459	0.650	8.570E+00	3.571E-01
30890.78	2.40E+01	2.02E+02	2.03E+02	0.459	0.650	8.581E+00	3.575E-01
30929.03	2.40E+01	2.02E+02	2.03E+02	0.459	0.650	8.591E+00	3.580E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
30967.28	2.40E+01	2.02E+02	2.03E+02	0.459	0.650	8.602E+00	3.584E-01
31004.84	2.40E+01	2.02E+02	2.03E+02	0.459	0.650	8.612E+00	3.589E-01
31043.34	2.40E+01	2.02E+02	2.03E+02	0.459	0.650	8.623E+00	3.593E-01
31081.22	2.40E+01	2.02E+02	2.03E+02	0.459	0.650	8.634E+00	3.597E-01
31119.34	2.40E+01	2.02E+02	2.03E+02	0.459	0.650	8.644E+00	3.602E-01
31157.22	2.40E+01	2.02E+02	2.03E+02	0.459	0.650	8.655E+00	3.606E-01
31195.72	2.40E+01	2.02E+02	2.03E+02	0.459	0.649	8.665E+00	3.611E-01
31233.97	2.40E+01	2.02E+02	2.03E+02	0.459	0.649	8.676E+00	3.615E-01
31271.47	2.40E+01	2.02E+02	2.03E+02	0.459	0.649	8.687E+00	3.619E-01
31309.09	2.40E+01	2.02E+02	2.03E+02	0.459	0.649	8.697E+00	3.624E-01
31346.84	2.40E+01	2.02E+02	2.03E+02	0.459	0.649	8.707E+00	3.628E-01
31384.59	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.718E+00	3.632E-01
31422.72	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.729E+00	3.637E-01
31460.22	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.739E+00	3.641E-01
31497.84	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.749E+00	3.646E-01
31535.41	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.760E+00	3.650E-01
31574.28	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.771E+00	3.654E-01
31612.41	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.781E+00	3.659E-01
31650.03	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.792E+00	3.663E-01
31687.53	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.802E+00	3.668E-01
31725.53	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.813E+00	3.672E-01
31763.03	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.823E+00	3.676E-01
31800.91	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.834E+00	3.681E-01
31838.91	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.844E+00	3.685E-01
31876.66	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.855E+00	3.689E-01
31915.03	2.40E+01	2.02E+02	2.02E+02	0.459	0.649	8.865E+00	3.694E-01
31952.91	2.40E+01	2.02E+02	2.02E+02	0.459	0.648	8.876E+00	3.698E-01
31991.16	2.40E+01	2.02E+02	2.02E+02	0.459	0.648	8.886E+00	3.703E-01
32028.66	2.40E+01	2.02E+02	2.02E+02	0.459	0.648	8.897E+00	3.707E-01
32066.16	2.40E+01	2.02E+02	2.02E+02	0.459	0.648	8.907E+00	3.711E-01
32103.72	2.40E+01	2.02E+02	2.02E+02	0.459	0.648	8.918E+00	3.716E-01
32142.09	2.40E+01	2.02E+02	2.02E+02	0.459	0.648	8.928E+00	3.720E-01
32179.59	2.40E+01	2.02E+02	2.02E+02	0.459	0.648	8.939E+00	3.724E-01
32218.59	2.40E+01	2.02E+02	2.02E+02	0.459	0.648	8.950E+00	3.729E-01
32256.59	2.40E+01	2.02E+02	2.02E+02	0.459	0.648	8.960E+00	3.733E-01
32294.59	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	8.971E+00	3.738E-01
32332.59	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	8.981E+00	3.742E-01
32370.59	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	8.992E+00	3.747E-01
32408.22	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	9.002E+00	3.751E-01
32446.22	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	9.013E+00	3.755E-01
32484.09	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	9.023E+00	3.760E-01
32521.59	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	9.034E+00	3.764E-01
32559.72	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	9.044E+00	3.768E-01
32597.47	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	9.055E+00	3.773E-01
32635.09	2.39E+01	2.02E+02	2.02E+02	0.458	0.647	9.065E+00	3.777E-01
32673.53	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	9.076E+00	3.782E-01
32711.78	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	9.087E+00	3.786E-01
32749.78	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	9.097E+00	3.790E-01
32788.28	2.39E+01	2.02E+02	2.02E+02	0.458	0.648	9.108E+00	3.795E-01
32826.28	2.39E+01	2.02E+02	2.02E+02	0.458	0.647	9.118E+00	3.799E-01
32863.91	2.39E+01	2.02E+02	2.02E+02	0.458	0.647	9.129E+00	3.804E-01
32901.91	2.39E+01	2.02E+02	2.02E+02	0.458	0.647	9.139E+00	3.808E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
32939.91	2.39E+01	2.02E+02	2.02E+02	0.458	0.647	9.150E+00	3.812E-01
32978.03	2.39E+01	2.02E+02	2.02E+02	0.458	0.647	9.161E+00	3.817E-01
33015.53	2.39E+01	2.02E+02	2.02E+02	0.458	0.647	9.171E+00	3.821E-01
33053.16	2.39E+01	2.02E+02	2.02E+02	0.458	0.647	9.181E+00	3.826E-01
33091.03	2.39E+01	2.02E+02	2.02E+02	0.458	0.647	9.192E+00	3.830E-01
33129.28	2.39E+01	2.02E+02	2.02E+02	0.457	0.647	9.203E+00	3.834E-01
33167.28	2.39E+01	2.02E+02	2.02E+02	0.457	0.647	9.213E+00	3.839E-01
33204.59	2.39E+01	2.02E+02	2.02E+02	0.458	0.647	9.223E+00	3.843E-01
33242.09	2.39E+01	2.02E+02	2.02E+02	0.458	0.647	9.234E+00	3.847E-01
33280.84	2.39E+01	2.02E+02	2.02E+02	0.457	0.647	9.245E+00	3.852E-01
33320.09	2.39E+01	2.02E+02	2.02E+02	0.457	0.647	9.256E+00	3.856E-01
33357.59	2.39E+01	2.02E+02	2.02E+02	0.457	0.647	9.266E+00	3.861E-01
33395.22	2.39E+01	2.02E+02	2.02E+02	0.457	0.647	9.276E+00	3.865E-01
33433.34	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.287E+00	3.870E-01
33471.09	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.298E+00	3.874E-01
33509.09	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.308E+00	3.878E-01
33546.97	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.319E+00	3.883E-01
33585.22	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.329E+00	3.887E-01
33622.72	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.340E+00	3.892E-01
33660.59	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.350E+00	3.896E-01
33698.34	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.361E+00	3.900E-01
33735.84	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.371E+00	3.905E-01
33773.53	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.382E+00	3.909E-01
33811.03	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.392E+00	3.913E-01
33848.66	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.402E+00	3.918E-01
33886.41	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.413E+00	3.922E-01
33924.28	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.423E+00	3.926E-01
33961.78	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.434E+00	3.931E-01
33999.41	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.444E+00	3.935E-01
34037.53	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.455E+00	3.940E-01
34075.28	2.39E+01	2.02E+02	2.02E+02	0.456	0.645	9.465E+00	3.944E-01
34113.16	2.39E+01	2.02E+02	2.02E+02	0.457	0.646	9.476E+00	3.948E-01
34151.28	2.39E+01	2.02E+02	2.02E+02	0.456	0.645	9.486E+00	3.953E-01
34188.78	2.39E+01	2.01E+02	2.02E+02	0.456	0.645	9.497E+00	3.957E-01
34226.66	2.39E+01	2.01E+02	2.02E+02	0.456	0.645	9.507E+00	3.961E-01
34264.16	2.39E+01	2.01E+02	2.02E+02	0.456	0.645	9.518E+00	3.966E-01
34301.59	2.39E+01	2.01E+02	2.02E+02	0.456	0.645	9.528E+00	3.970E-01
34339.84	2.39E+01	2.01E+02	2.02E+02	0.456	0.645	9.539E+00	3.975E-01
34377.47	2.39E+01	2.01E+02	2.02E+02	0.456	0.645	9.549E+00	3.979E-01
34415.59	2.39E+01	2.01E+02	2.02E+02	0.456	0.645	9.560E+00	3.983E-01
34453.72	2.39E+01	2.01E+02	2.02E+02	0.456	0.645	9.570E+00	3.988E-01
34491.47	2.39E+01	2.01E+02	2.02E+02	0.456	0.645	9.581E+00	3.992E-01
34529.09	2.39E+01	2.01E+02	2.02E+02	0.456	0.645	9.591E+00	3.996E-01
34566.84	2.38E+01	2.01E+02	2.02E+02	0.456	0.645	9.602E+00	4.001E-01
34604.34	2.38E+01	2.01E+02	2.02E+02	0.456	0.645	9.612E+00	4.005E-01
34642.22	2.38E+01	2.01E+02	2.02E+02	0.456	0.645	9.623E+00	4.010E-01
34679.84	2.38E+01	2.01E+02	2.02E+02	0.456	0.645	9.633E+00	4.014E-01
34717.59	2.38E+01	2.01E+02	2.02E+02	0.456	0.645	9.644E+00	4.018E-01
34755.09	2.38E+01	2.01E+02	2.02E+02	0.456	0.644	9.654E+00	4.023E-01
34793.09	2.38E+01	2.01E+02	2.02E+02	0.456	0.644	9.665E+00	4.027E-01
34831.03	2.38E+01	2.01E+02	2.02E+02	0.456	0.645	9.675E+00	4.031E-01
34868.53	2.38E+01	2.01E+02	2.02E+02	0.456	0.644	9.686E+00	4.036E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
34906.03	2.38E+01	2.01E+02	2.02E+02	0.456	0.644	9.696E+00	4.040E-01
34943.91	2.38E+01	2.01E+02	2.02E+02	0.456	0.644	9.707E+00	4.044E-01
34981.91	2.38E+01	2.01E+02	2.02E+02	0.456	0.644	9.717E+00	4.049E-01
35020.16	2.38E+01	2.01E+02	2.02E+02	0.456	0.644	9.728E+00	4.053E-01
35057.66	2.38E+01	2.01E+02	2.02E+02	0.455	0.644	9.738E+00	4.058E-01
35095.78	2.38E+01	2.01E+02	2.02E+02	0.455	0.644	9.749E+00	4.062E-01
35134.03	2.38E+01	2.01E+02	2.02E+02	0.455	0.644	9.759E+00	4.066E-01
35171.91	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.770E+00	4.071E-01
35209.91	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.781E+00	4.075E-01
35247.91	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.791E+00	4.080E-01
35285.78	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.802E+00	4.084E-01
35323.28	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.812E+00	4.088E-01
35360.84	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.822E+00	4.093E-01
35398.34	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.833E+00	4.097E-01
35435.97	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.843E+00	4.101E-01
35473.59	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.854E+00	4.106E-01
35511.09	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.864E+00	4.110E-01
35549.34	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.875E+00	4.115E-01
35587.34	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.885E+00	4.119E-01
35625.22	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.896E+00	4.123E-01
35663.09	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.906E+00	4.128E-01
35701.34	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.917E+00	4.132E-01
35739.59	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.928E+00	4.137E-01
35777.09	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.938E+00	4.141E-01
35814.59	2.38E+01	2.01E+02	2.02E+02	0.454	0.642	9.948E+00	4.145E-01
35852.66	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.959E+00	4.150E-01
35891.16	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.970E+00	4.154E-01
35929.03	2.38E+01	2.01E+02	2.02E+02	0.455	0.643	9.980E+00	4.158E-01
35966.91	2.38E+01	2.01E+02	2.02E+02	0.454	0.642	9.991E+00	4.163E-01
36004.91	2.38E+01	2.01E+02	2.02E+02	0.454	0.642	1.000E+01	4.167E-01
36042.53	2.38E+01	2.01E+02	2.02E+02	0.454	0.642	1.001E+01	4.172E-01
36080.16	2.38E+01	2.01E+02	2.02E+02	0.454	0.642	1.002E+01	4.176E-01
36118.16	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.003E+01	4.180E-01
36156.16	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.004E+01	4.185E-01
36193.78	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.005E+01	4.189E-01
36231.66	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.006E+01	4.193E-01
36269.41	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.007E+01	4.198E-01
36307.16	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.009E+01	4.202E-01
36345.41	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.010E+01	4.207E-01
36382.84	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.011E+01	4.211E-01
36420.59	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.012E+01	4.215E-01
36459.09	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.013E+01	4.220E-01
36496.84	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.014E+01	4.224E-01
36534.47	2.38E+01	2.01E+02	2.01E+02	0.454	0.642	1.015E+01	4.229E-01
36572.47	2.38E+01	2.01E+02	2.01E+02	0.454	0.641	1.016E+01	4.233E-01
36610.59	2.38E+01	2.01E+02	2.01E+02	0.454	0.641	1.017E+01	4.237E-01
36648.09	2.38E+01	2.01E+02	2.01E+02	0.454	0.641	1.018E+01	4.242E-01
36686.22	2.38E+01	2.01E+02	2.01E+02	0.454	0.641	1.019E+01	4.246E-01
36724.47	2.37E+01	2.01E+02	2.01E+02	0.453	0.641	1.020E+01	4.251E-01
36761.97	2.37E+01	2.01E+02	2.01E+02	0.453	0.641	1.021E+01	4.255E-01
36799.59	2.37E+01	2.01E+02	2.01E+02	0.453	0.641	1.022E+01	4.259E-01
36837.72	2.37E+01	2.01E+02	2.01E+02	0.453	0.641	1.023E+01	4.264E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
36875.28	2.37E+01	2.01E+02	2.01E+02	0.453	0.641	1.024E+01	4.268E-01
36912.78	2.37E+01	2.01E+02	2.01E+02	0.453	0.641	1.025E+01	4.272E-01
36950.28	2.37E+01	2.01E+02	2.01E+02	0.453	0.641	1.026E+01	4.277E-01
36988.16	2.37E+01	2.01E+02	2.01E+02	0.453	0.641	1.027E+01	4.281E-01
37025.78	2.37E+01	2.01E+02	2.01E+02	0.453	0.641	1.028E+01	4.285E-01
37063.78	2.37E+01	2.01E+02	2.01E+02	0.453	0.641	1.030E+01	4.290E-01
37102.03	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.031E+01	4.294E-01
37139.53	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.032E+01	4.299E-01
37177.28	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.033E+01	4.303E-01
37215.66	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.034E+01	4.307E-01
37253.53	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.035E+01	4.312E-01
37291.91	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.036E+01	4.316E-01
37329.78	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.037E+01	4.321E-01
37367.47	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.038E+01	4.325E-01
37405.09	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.039E+01	4.329E-01
37442.59	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.040E+01	4.334E-01
37480.22	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.041E+01	4.338E-01
37518.22	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.042E+01	4.342E-01
37555.97	2.37E+01	2.01E+02	2.01E+02	0.453	0.640	1.043E+01	4.347E-01
37593.59	2.37E+01	2.01E+02	2.01E+02	0.452	0.640	1.044E+01	4.351E-01
37631.84	2.37E+01	2.01E+02	2.01E+02	0.452	0.640	1.045E+01	4.356E-01
37669.72	2.37E+01	2.01E+02	2.01E+02	0.452	0.639	1.046E+01	4.360E-01
37707.59	2.37E+01	2.01E+02	2.01E+02	0.452	0.639	1.047E+01	4.364E-01
37745.72	2.37E+01	2.01E+02	2.01E+02	0.452	0.639	1.048E+01	4.369E-01
37783.22	2.37E+01	2.01E+02	2.01E+02	0.452	0.639	1.050E+01	4.373E-01
37820.97	2.37E+01	2.01E+02	2.01E+02	0.452	0.639	1.051E+01	4.377E-01
37858.28	2.37E+01	2.01E+02	2.01E+02	0.452	0.639	1.052E+01	4.382E-01
37895.78	2.37E+01	2.01E+02	2.01E+02	0.452	0.639	1.053E+01	4.386E-01
37933.53	2.37E+01	2.01E+02	2.01E+02	0.452	0.639	1.054E+01	4.390E-01
37971.91	2.37E+01	2.01E+02	2.01E+02	0.452	0.639	1.055E+01	4.395E-01
38010.28	2.37E+01	2.00E+02	2.01E+02	0.452	0.639	1.056E+01	4.399E-01
38048.41	2.37E+01	2.00E+02	2.01E+02	0.452	0.639	1.057E+01	4.404E-01
38086.66	2.37E+01	2.00E+02	2.01E+02	0.452	0.639	1.058E+01	4.408E-01
38125.03	2.37E+01	2.00E+02	2.01E+02	0.452	0.639	1.059E+01	4.413E-01
38162.78	2.37E+01	2.00E+02	2.01E+02	0.452	0.639	1.060E+01	4.417E-01
38200.78	2.37E+01	2.00E+02	2.01E+02	0.452	0.639	1.061E+01	4.421E-01
38238.53	2.37E+01	2.00E+02	2.01E+02	0.451	0.638	1.062E+01	4.426E-01
38276.78	2.37E+01	2.00E+02	2.01E+02	0.451	0.638	1.063E+01	4.430E-01
38314.47	2.37E+01	2.00E+02	2.01E+02	0.452	0.639	1.064E+01	4.435E-01
38352.09	2.37E+01	2.00E+02	2.01E+02	0.452	0.639	1.065E+01	4.439E-01
38389.59	2.37E+01	2.00E+02	2.01E+02	0.451	0.638	1.066E+01	4.443E-01
38427.09	2.37E+01	2.00E+02	2.01E+02	0.451	0.638	1.067E+01	4.448E-01
38464.59	2.37E+01	2.00E+02	2.01E+02	0.451	0.638	1.068E+01	4.452E-01
38503.22	2.37E+01	2.00E+02	2.01E+02	0.451	0.638	1.070E+01	4.456E-01
38541.34	2.37E+01	2.00E+02	2.01E+02	0.451	0.638	1.071E+01	4.461E-01
38579.22	2.37E+01	2.00E+02	2.01E+02	0.451	0.638	1.072E+01	4.465E-01
38617.22	2.37E+01	2.00E+02	2.01E+02	0.451	0.638	1.073E+01	4.470E-01
38654.72	2.37E+01	2.00E+02	2.01E+02	0.451	0.638	1.074E+01	4.474E-01
38692.34	2.36E+01	2.00E+02	2.01E+02	0.451	0.637	1.075E+01	4.478E-01
38730.09	2.36E+01	2.00E+02	2.01E+02	0.451	0.637	1.076E+01	4.483E-01
38767.91	2.37E+01	2.00E+02	2.01E+02	0.451	0.638	1.077E+01	4.487E-01
38805.66	2.36E+01	2.00E+02	2.01E+02	0.451	0.637	1.078E+01	4.491E-01

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
38843.16	2.36E+01	2.00E+02	2.01E+02	0.451	0.637	1.079E+01	4.496E-01
38880.78	2.36E+01	2.00E+02	2.01E+02	0.451	0.637	1.080E+01	4.500E-01
38918.78	2.36E+01	2.00E+02	2.01E+02	0.451	0.637	1.081E+01	4.504E-01
38957.41	2.36E+01	2.00E+02	2.01E+02	0.451	0.637	1.082E+01	4.509E-01
38995.53	2.36E+01	2.00E+02	2.01E+02	0.451	0.637	1.083E+01	4.513E-01
39033.28	2.36E+01	2.00E+02	2.01E+02	0.451	0.637	1.084E+01	4.518E-01
39070.91	2.36E+01	2.00E+02	2.01E+02	0.450	0.637	1.085E+01	4.522E-01
39108.78	2.36E+01	2.00E+02	2.01E+02	0.450	0.637	1.086E+01	4.526E-01
39147.53	2.36E+01	2.00E+02	2.01E+02	0.450	0.637	1.087E+01	4.531E-01
39185.53	2.36E+01	2.00E+02	2.01E+02	0.450	0.637	1.088E+01	4.535E-01
39222.84	2.36E+01	2.00E+02	2.01E+02	0.450	0.637	1.090E+01	4.540E-01
39260.97	2.36E+01	2.00E+02	2.01E+02	0.450	0.637	1.091E+01	4.544E-01
39298.72	2.36E+01	2.00E+02	2.01E+02	0.450	0.637	1.092E+01	4.548E-01
39336.47	2.36E+01	2.00E+02	2.01E+02	0.450	0.637	1.093E+01	4.553E-01
39373.97	2.36E+01	2.00E+02	2.01E+02	0.450	0.636	1.094E+01	4.557E-01
39411.97	2.36E+01	2.00E+02	2.01E+02	0.450	0.636	1.095E+01	4.562E-01
39449.97	2.36E+01	2.00E+02	2.01E+02	0.450	0.636	1.096E+01	4.566E-01
39487.47	2.36E+01	2.00E+02	2.01E+02	0.450	0.636	1.097E+01	4.570E-01
39526.22	2.36E+01	2.00E+02	2.01E+02	0.450	0.636	1.098E+01	4.575E-01
39563.97	2.36E+01	2.00E+02	2.01E+02	0.450	0.636	1.099E+01	4.579E-01
39601.84	2.36E+01	2.00E+02	2.01E+02	0.450	0.636	1.100E+01	4.584E-01
39639.59	2.36E+01	2.00E+02	2.01E+02	0.449	0.636	1.101E+01	4.588E-01
39677.91	2.36E+01	2.00E+02	2.01E+02	0.450	0.636	1.102E+01	4.592E-01
39715.66	2.36E+01	2.00E+02	2.01E+02	0.450	0.636	1.103E+01	4.597E-01
39753.41	2.36E+01	2.00E+02	2.01E+02	0.449	0.636	1.104E+01	4.601E-01
39791.03	2.36E+01	2.00E+02	2.01E+02	0.449	0.636	1.105E+01	4.605E-01
39828.91	2.36E+01	2.00E+02	2.01E+02	0.449	0.636	1.106E+01	4.610E-01
39866.41	2.36E+01	2.00E+02	2.01E+02	0.449	0.636	1.107E+01	4.614E-01
39904.53	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.108E+01	4.619E-01
39942.03	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.110E+01	4.623E-01
39980.28	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.111E+01	4.627E-01
40018.53	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.112E+01	4.632E-01
40056.41	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.113E+01	4.636E-01
40094.66	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.114E+01	4.641E-01
40132.72	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.115E+01	4.645E-01
40170.97	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.116E+01	4.649E-01
40209.09	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.117E+01	4.654E-01
40246.59	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.118E+01	4.658E-01
40284.22	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.119E+01	4.663E-01
40321.97	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.120E+01	4.667E-01
40359.59	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.121E+01	4.671E-01
40398.09	2.36E+01	2.00E+02	2.00E+02	0.449	0.635	1.122E+01	4.676E-01
40435.84	2.36E+01	2.00E+02	2.00E+02	0.448	0.634	1.123E+01	4.680E-01
40473.47	2.36E+01	2.00E+02	2.00E+02	0.448	0.634	1.124E+01	4.684E-01
40511.34	2.36E+01	2.00E+02	2.00E+02	0.448	0.634	1.125E+01	4.689E-01
40549.47	2.36E+01	2.00E+02	2.00E+02	0.448	0.634	1.126E+01	4.693E-01
40587.03	2.36E+01	2.00E+02	2.00E+02	0.448	0.634	1.127E+01	4.698E-01
40625.28	2.36E+01	2.00E+02	2.00E+02	0.448	0.634	1.128E+01	4.702E-01
40662.91	2.36E+01	2.00E+02	2.00E+02	0.448	0.634	1.130E+01	4.706E-01
40700.41	2.35E+01	2.00E+02	2.00E+02	0.448	0.634	1.131E+01	4.711E-01
40737.91	2.35E+01	2.00E+02	2.00E+02	0.448	0.634	1.132E+01	4.715E-01
40775.53	2.35E+01	2.00E+02	2.00E+02	0.448	0.634	1.133E+01	4.719E-01

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
40813.03	2.35E+01	2.00E+02	2.00E+02	0.448	0.634	1.134E+01	4.724E-01
40851.03	2.35E+01	2.00E+02	2.00E+02	0.448	0.634	1.135E+01	4.728E-01
40888.78	2.35E+01	2.00E+02	2.00E+02	0.448	0.634	1.136E+01	4.732E-01
40926.66	2.35E+01	2.00E+02	2.00E+02	0.448	0.634	1.137E+01	4.737E-01
40965.41	2.35E+01	2.00E+02	2.00E+02	0.448	0.634	1.138E+01	4.741E-01
41002.91	2.35E+01	2.00E+02	2.00E+02	0.448	0.633	1.139E+01	4.746E-01
41040.53	2.35E+01	2.00E+02	2.00E+02	0.448	0.633	1.140E+01	4.750E-01
41078.72	2.35E+01	2.00E+02	2.00E+02	0.448	0.634	1.141E+01	4.754E-01
41116.47	2.35E+01	2.00E+02	2.00E+02	0.448	0.634	1.142E+01	4.759E-01
41154.47	2.35E+01	2.00E+02	2.00E+02	0.448	0.633	1.143E+01	4.763E-01
41191.97	2.35E+01	2.00E+02	2.00E+02	0.448	0.633	1.144E+01	4.768E-01
41229.72	2.35E+01	2.00E+02	2.00E+02	0.448	0.633	1.145E+01	4.772E-01
41267.34	2.35E+01	2.00E+02	2.00E+02	0.448	0.633	1.146E+01	4.776E-01
41305.22	2.35E+01	2.00E+02	2.00E+02	0.447	0.633	1.147E+01	4.781E-01
41343.72	2.35E+01	2.00E+02	2.00E+02	0.447	0.633	1.148E+01	4.785E-01
41381.34	2.35E+01	2.00E+02	2.00E+02	0.447	0.633	1.149E+01	4.790E-01
41418.97	2.35E+01	2.00E+02	2.00E+02	0.447	0.632	1.151E+01	4.794E-01
41457.34	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.152E+01	4.798E-01
41495.09	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.153E+01	4.803E-01
41532.72	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.154E+01	4.807E-01
41570.41	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.155E+01	4.811E-01
41608.28	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.156E+01	4.816E-01
41646.16	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.157E+01	4.820E-01
41684.53	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.158E+01	4.825E-01
41722.28	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.159E+01	4.829E-01
41760.66	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.160E+01	4.833E-01
41798.78	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.161E+01	4.838E-01
41837.03	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.162E+01	4.842E-01
41875.41	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.163E+01	4.847E-01
41913.03	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.164E+01	4.851E-01
41950.66	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.165E+01	4.855E-01
41989.28	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.166E+01	4.860E-01
42026.91	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.167E+01	4.864E-01
42064.47	2.35E+01	1.99E+02	2.00E+02	0.447	0.632	1.168E+01	4.869E-01
42101.97	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.169E+01	4.873E-01
42140.22	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.171E+01	4.877E-01
42178.84	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.172E+01	4.882E-01
42217.22	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.173E+01	4.886E-01
42256.09	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.174E+01	4.891E-01
42294.59	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.175E+01	4.895E-01
42332.84	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.176E+01	4.900E-01
42370.47	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.177E+01	4.904E-01
42408.34	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.178E+01	4.908E-01
42446.22	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.179E+01	4.913E-01
42484.22	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.180E+01	4.917E-01
42522.53	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.181E+01	4.922E-01
42560.03	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.182E+01	4.926E-01
42597.66	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.183E+01	4.930E-01
42635.28	2.35E+01	1.99E+02	2.00E+02	0.446	0.631	1.184E+01	4.935E-01
42673.03	2.34E+01	1.99E+02	2.00E+02	0.446	0.630	1.185E+01	4.939E-01
42711.91	2.34E+01	1.99E+02	2.00E+02	0.446	0.630	1.186E+01	4.944E-01
42749.78	2.34E+01	1.99E+02	2.00E+02	0.446	0.630	1.187E+01	4.948E-01

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
42787.91	2.34E+01	1.99E+02	2.00E+02	0.446	0.630	1.189E+01	4.952E-01
42826.91	2.34E+01	1.99E+02	2.00E+02	0.446	0.630	1.190E+01	4.957E-01
42864.78	2.34E+01	1.99E+02	2.00E+02	0.445	0.630	1.191E+01	4.961E-01
42903.16	2.34E+01	1.99E+02	2.00E+02	0.445	0.630	1.192E+01	4.966E-01
42940.66	2.34E+01	1.99E+02	2.00E+02	0.445	0.630	1.193E+01	4.970E-01
42978.59	2.34E+01	1.99E+02	2.00E+02	0.445	0.630	1.194E+01	4.974E-01
43016.47	2.34E+01	1.99E+02	2.00E+02	0.445	0.630	1.195E+01	4.979E-01
43054.84	2.34E+01	1.99E+02	2.00E+02	0.445	0.630	1.196E+01	4.983E-01
43093.22	2.34E+01	1.99E+02	2.00E+02	0.445	0.630	1.197E+01	4.988E-01
43131.09	2.34E+01	1.99E+02	2.00E+02	0.445	0.630	1.198E+01	4.992E-01
43169.22	2.34E+01	1.99E+02	2.00E+02	0.445	0.630	1.199E+01	4.996E-01
43207.22	2.34E+01	1.99E+02	2.00E+02	0.445	0.630	1.200E+01	5.001E-01
43245.34	2.34E+01	1.99E+02	2.00E+02	0.445	0.630	1.201E+01	5.005E-01
43283.59	2.34E+01	1.99E+02	2.00E+02	0.445	0.629	1.202E+01	5.010E-01
43321.59	2.34E+01	1.99E+02	2.00E+02	0.445	0.629	1.203E+01	5.014E-01
43359.09	2.34E+01	1.99E+02	2.00E+02	0.445	0.629	1.204E+01	5.018E-01
43397.22	2.34E+01	1.99E+02	2.00E+02	0.445	0.629	1.205E+01	5.023E-01
43435.22	2.34E+01	1.99E+02	1.99E+02	0.445	0.629	1.207E+01	5.027E-01
43473.53	2.34E+01	1.99E+02	1.99E+02	0.445	0.629	1.208E+01	5.032E-01
43511.03	2.34E+01	1.99E+02	1.99E+02	0.445	0.629	1.209E+01	5.036E-01
43549.41	2.34E+01	1.99E+02	1.99E+02	0.445	0.629	1.210E+01	5.040E-01
43588.03	2.34E+01	1.99E+02	1.99E+02	0.445	0.629	1.211E+01	5.045E-01
43625.66	2.34E+01	1.99E+02	1.99E+02	0.445	0.629	1.212E+01	5.049E-01
43663.16	2.34E+01	1.99E+02	1.99E+02	0.445	0.629	1.213E+01	5.054E-01
43701.28	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.214E+01	5.058E-01
43739.53	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.215E+01	5.062E-01
43777.28	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.216E+01	5.067E-01
43814.91	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.217E+01	5.071E-01
43853.03	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.218E+01	5.076E-01
43890.53	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.219E+01	5.080E-01
43928.03	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.220E+01	5.084E-01
43965.97	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.221E+01	5.089E-01
44003.97	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.222E+01	5.093E-01
44041.84	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.223E+01	5.097E-01
44079.72	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.224E+01	5.102E-01
44118.09	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.226E+01	5.106E-01
44155.59	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.227E+01	5.111E-01
44194.09	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.228E+01	5.115E-01
44231.84	2.34E+01	1.99E+02	1.99E+02	0.444	0.628	1.229E+01	5.119E-01
44269.34	2.34E+01	1.99E+02	1.99E+02	0.444	0.627	1.230E+01	5.124E-01
44307.84	2.34E+01	1.99E+02	1.99E+02	0.444	0.627	1.231E+01	5.128E-01
44345.34	2.34E+01	1.99E+02	1.99E+02	0.444	0.627	1.232E+01	5.133E-01
44382.84	2.34E+01	1.99E+02	1.99E+02	0.443	0.627	1.233E+01	5.137E-01
44420.59	2.34E+01	1.99E+02	1.99E+02	0.443	0.627	1.234E+01	5.141E-01
44458.66	2.34E+01	1.99E+02	1.99E+02	0.444	0.627	1.235E+01	5.146E-01
44496.91	2.34E+01	1.99E+02	1.99E+02	0.444	0.627	1.236E+01	5.150E-01
44534.91	2.34E+01	1.99E+02	1.99E+02	0.444	0.627	1.237E+01	5.155E-01
44573.28	2.34E+01	1.99E+02	1.99E+02	0.443	0.627	1.238E+01	5.159E-01
44610.91	2.34E+01	1.99E+02	1.99E+02	0.443	0.627	1.239E+01	5.163E-01
44648.78	2.34E+01	1.99E+02	1.99E+02	0.443	0.627	1.240E+01	5.168E-01
44686.28	2.34E+01	1.99E+02	1.99E+02	0.443	0.627	1.241E+01	5.172E-01
44724.16	2.33E+01	1.99E+02	1.99E+02	0.443	0.627	1.242E+01	5.176E-01

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
44762.16	2.33E+01	1.99E+02	1.99E+02	0.443	0.627	1.243E+01	5.181E-01
44800.03	2.33E+01	1.99E+02	1.99E+02	0.443	0.627	1.244E+01	5.185E-01
44837.91	2.33E+01	1.99E+02	1.99E+02	0.443	0.627	1.245E+01	5.190E-01
44875.78	2.33E+01	1.99E+02	1.99E+02	0.443	0.626	1.247E+01	5.194E-01
44913.28	2.33E+01	1.99E+02	1.99E+02	0.443	0.626	1.248E+01	5.198E-01
44950.72	2.33E+01	1.99E+02	1.99E+02	0.443	0.627	1.249E+01	5.203E-01
44988.34	2.33E+01	1.98E+02	1.99E+02	0.443	0.626	1.250E+01	5.207E-01
45025.97	2.33E+01	1.98E+02	1.99E+02	0.443	0.626	1.251E+01	5.211E-01
45063.47	2.33E+01	1.98E+02	1.99E+02	0.443	0.626	1.252E+01	5.216E-01
45101.34	2.33E+01	1.98E+02	1.99E+02	0.443	0.626	1.253E+01	5.220E-01
45139.09	2.33E+01	1.98E+02	1.99E+02	0.443	0.626	1.254E+01	5.224E-01
45177.09	2.33E+01	1.98E+02	1.99E+02	0.443	0.626	1.255E+01	5.229E-01
45214.59	2.33E+01	1.98E+02	1.99E+02	0.443	0.626	1.256E+01	5.233E-01
45252.34	2.33E+01	1.98E+02	1.99E+02	0.443	0.626	1.257E+01	5.238E-01
45290.34	2.33E+01	1.98E+02	1.99E+02	0.442	0.626	1.258E+01	5.242E-01
45328.09	2.33E+01	1.98E+02	1.99E+02	0.442	0.626	1.259E+01	5.246E-01
45365.59	2.33E+01	1.98E+02	1.99E+02	0.442	0.626	1.260E+01	5.251E-01
45403.34	2.33E+01	1.98E+02	1.99E+02	0.442	0.626	1.261E+01	5.255E-01
45441.53	2.33E+01	1.98E+02	1.99E+02	0.442	0.626	1.262E+01	5.259E-01
45479.53	2.33E+01	1.98E+02	1.99E+02	0.442	0.626	1.263E+01	5.264E-01
45517.16	2.33E+01	1.98E+02	1.99E+02	0.442	0.626	1.264E+01	5.268E-01
45555.16	2.33E+01	1.98E+02	1.99E+02	0.442	0.626	1.265E+01	5.273E-01
45592.78	2.33E+01	1.98E+02	1.99E+02	0.442	0.625	1.266E+01	5.277E-01
45630.53	2.33E+01	1.98E+02	1.99E+02	0.442	0.625	1.268E+01	5.281E-01
45668.41	2.33E+01	1.98E+02	1.99E+02	0.442	0.625	1.269E+01	5.286E-01
45705.91	2.33E+01	1.98E+02	1.99E+02	0.442	0.625	1.270E+01	5.290E-01
45744.53	2.33E+01	1.98E+02	1.99E+02	0.442	0.625	1.271E+01	5.295E-01
45782.53	2.33E+01	1.98E+02	1.99E+02	0.442	0.625	1.272E+01	5.299E-01
45820.41	2.33E+01	1.98E+02	1.99E+02	0.442	0.625	1.273E+01	5.303E-01
45858.03	2.33E+01	1.98E+02	1.99E+02	0.442	0.625	1.274E+01	5.308E-01
45895.53	2.33E+01	1.98E+02	1.99E+02	0.442	0.624	1.275E+01	5.312E-01
45934.09	2.33E+01	1.98E+02	1.99E+02	0.442	0.625	1.276E+01	5.316E-01
45971.97	2.33E+01	1.98E+02	1.99E+02	0.442	0.625	1.277E+01	5.321E-01
46010.22	2.33E+01	1.98E+02	1.99E+02	0.442	0.624	1.278E+01	5.325E-01
46047.97	2.33E+01	1.98E+02	1.99E+02	0.442	0.624	1.279E+01	5.330E-01
46086.59	2.33E+01	1.98E+02	1.99E+02	0.442	0.624	1.280E+01	5.334E-01
46124.72	2.33E+01	1.98E+02	1.99E+02	0.442	0.624	1.281E+01	5.339E-01
46162.34	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.282E+01	5.343E-01
46200.22	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.283E+01	5.347E-01
46238.22	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.284E+01	5.352E-01
46276.09	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.285E+01	5.356E-01
46313.59	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.286E+01	5.360E-01
46352.09	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.288E+01	5.365E-01
46390.16	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.289E+01	5.369E-01
46428.41	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.290E+01	5.374E-01
46466.91	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.291E+01	5.378E-01
46505.16	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.292E+01	5.383E-01
46542.78	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.293E+01	5.387E-01
46581.03	2.33E+01	1.98E+02	1.99E+02	0.441	0.624	1.294E+01	5.391E-01
46618.53	2.33E+01	1.98E+02	1.99E+02	0.441	0.623	1.295E+01	5.396E-01
46656.66	2.33E+01	1.98E+02	1.99E+02	0.441	0.623	1.296E+01	5.400E-01
46694.66	2.33E+01	1.98E+02	1.99E+02	0.441	0.623	1.297E+01	5.404E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
46733.28	2.32E+01	1.98E+02	1.99E+02	0.441	0.623	1.298E+01	5.409E-01
46771.41	2.32E+01	1.98E+02	1.99E+02	0.441	0.623	1.299E+01	5.413E-01
46808.91	2.32E+01	1.98E+02	1.99E+02	0.441	0.623	1.300E+01	5.418E-01
46846.91	2.32E+01	1.98E+02	1.99E+02	0.441	0.623	1.301E+01	5.422E-01
46884.97	2.32E+01	1.98E+02	1.99E+02	0.441	0.623	1.302E+01	5.427E-01
46922.97	2.32E+01	1.98E+02	1.99E+02	0.441	0.623	1.303E+01	5.431E-01
46960.47	2.32E+01	1.98E+02	1.99E+02	0.441	0.623	1.304E+01	5.435E-01
46998.47	2.32E+01	1.98E+02	1.98E+02	0.441	0.623	1.306E+01	5.440E-01
47036.84	2.32E+01	1.98E+02	1.98E+02	0.440	0.623	1.307E+01	5.444E-01
47074.59	2.32E+01	1.98E+02	1.98E+02	0.440	0.623	1.308E+01	5.448E-01
47112.34	2.32E+01	1.98E+02	1.98E+02	0.440	0.623	1.309E+01	5.453E-01
47149.97	2.32E+01	1.98E+02	1.98E+02	0.440	0.623	1.310E+01	5.457E-01
47187.84	2.32E+01	1.98E+02	1.98E+02	0.440	0.623	1.311E+01	5.462E-01
47225.59	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.312E+01	5.466E-01
47263.59	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.313E+01	5.470E-01
47301.59	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.314E+01	5.475E-01
47339.41	2.32E+01	1.98E+02	1.98E+02	0.440	0.623	1.315E+01	5.479E-01
47377.66	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.316E+01	5.484E-01
47415.16	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.317E+01	5.488E-01
47452.78	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.318E+01	5.492E-01
47490.66	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.319E+01	5.497E-01
47528.66	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.320E+01	5.501E-01
47566.41	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.321E+01	5.505E-01
47604.66	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.322E+01	5.510E-01
47642.16	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.323E+01	5.514E-01
47680.28	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.324E+01	5.519E-01
47718.16	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.326E+01	5.523E-01
47755.66	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.327E+01	5.527E-01
47793.78	2.32E+01	1.98E+02	1.98E+02	0.439	0.621	1.328E+01	5.532E-01
47831.09	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.329E+01	5.536E-01
47868.59	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.330E+01	5.540E-01
47907.22	2.32E+01	1.98E+02	1.98E+02	0.440	0.622	1.331E+01	5.545E-01
47945.09	2.32E+01	1.98E+02	1.98E+02	0.439	0.621	1.332E+01	5.549E-01
47982.72	2.32E+01	1.98E+02	1.98E+02	0.439	0.621	1.333E+01	5.554E-01
48020.84	2.32E+01	1.98E+02	1.98E+02	0.439	0.621	1.334E+01	5.558E-01
48058.47	2.32E+01	1.98E+02	1.98E+02	0.439	0.621	1.335E+01	5.562E-01
48095.97	2.32E+01	1.98E+02	1.98E+02	0.439	0.621	1.336E+01	5.567E-01
48133.59	2.32E+01	1.98E+02	1.98E+02	0.439	0.621	1.337E+01	5.571E-01
48171.22	2.32E+01	1.98E+02	1.98E+02	0.439	0.621	1.338E+01	5.575E-01
48208.84	2.32E+01	1.98E+02	1.98E+02	0.439	0.620	1.339E+01	5.580E-01
48246.59	2.32E+01	1.98E+02	1.98E+02	0.439	0.620	1.340E+01	5.584E-01
48284.47	2.32E+01	1.98E+02	1.98E+02	0.439	0.620	1.341E+01	5.588E-01
48322.72	2.32E+01	1.98E+02	1.98E+02	0.439	0.620	1.342E+01	5.593E-01
48360.91	2.32E+01	1.98E+02	1.98E+02	0.439	0.621	1.343E+01	5.597E-01
48398.66	2.32E+01	1.98E+02	1.98E+02	0.439	0.620	1.344E+01	5.602E-01
48437.78	2.32E+01	1.98E+02	1.98E+02	0.439	0.620	1.345E+01	5.606E-01
48475.53	2.32E+01	1.98E+02	1.98E+02	0.439	0.620	1.347E+01	5.611E-01
48513.53	2.32E+01	1.98E+02	1.98E+02	0.438	0.620	1.348E+01	5.615E-01
48551.28	2.32E+01	1.98E+02	1.98E+02	0.438	0.620	1.349E+01	5.619E-01
48589.41	2.32E+01	1.97E+02	1.98E+02	0.438	0.620	1.350E+01	5.624E-01
48627.16	2.32E+01	1.97E+02	1.98E+02	0.438	0.620	1.351E+01	5.628E-01
48664.78	2.32E+01	1.97E+02	1.98E+02	0.438	0.620	1.352E+01	5.632E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
48702.66	2.32E+01	1.97E+02	1.98E+02	0.438	0.620	1.353E+01	5.637E-01
48740.53	2.32E+01	1.97E+02	1.98E+02	0.438	0.620	1.354E+01	5.641E-01
48778.66	2.32E+01	1.97E+02	1.98E+02	0.438	0.620	1.355E+01	5.646E-01
48815.97	2.32E+01	1.97E+02	1.98E+02	0.438	0.620	1.356E+01	5.650E-01
48853.72	2.32E+01	1.97E+02	1.98E+02	0.438	0.620	1.357E+01	5.654E-01
48891.97	2.32E+01	1.97E+02	1.98E+02	0.438	0.620	1.358E+01	5.659E-01
48929.97	2.31E+01	1.97E+02	1.98E+02	0.438	0.619	1.359E+01	5.663E-01
48967.72	2.31E+01	1.97E+02	1.98E+02	0.438	0.619	1.360E+01	5.668E-01
49006.47	2.31E+01	1.97E+02	1.98E+02	0.438	0.619	1.361E+01	5.672E-01
49044.72	2.31E+01	1.97E+02	1.98E+02	0.438	0.619	1.362E+01	5.676E-01
49082.84	2.31E+01	1.97E+02	1.98E+02	0.438	0.619	1.363E+01	5.681E-01
49121.22	2.31E+01	1.97E+02	1.98E+02	0.438	0.619	1.364E+01	5.685E-01
49158.72	2.31E+01	1.97E+02	1.98E+02	0.438	0.619	1.366E+01	5.690E-01
49196.22	2.31E+01	1.97E+02	1.98E+02	0.438	0.619	1.367E+01	5.694E-01
49235.22	2.31E+01	1.97E+02	1.98E+02	0.438	0.619	1.368E+01	5.699E-01
49273.34	2.31E+01	1.97E+02	1.98E+02	0.437	0.619	1.369E+01	5.703E-01
49310.66	2.31E+01	1.97E+02	1.98E+02	0.438	0.619	1.370E+01	5.707E-01
49348.28	2.31E+01	1.97E+02	1.98E+02	0.438	0.619	1.371E+01	5.712E-01
49386.03	2.31E+01	1.97E+02	1.98E+02	0.437	0.619	1.372E+01	5.716E-01
49423.91	2.31E+01	1.97E+02	1.98E+02	0.437	0.619	1.373E+01	5.720E-01
49461.53	2.31E+01	1.97E+02	1.98E+02	0.437	0.619	1.374E+01	5.725E-01
49499.16	2.31E+01	1.97E+02	1.98E+02	0.437	0.619	1.375E+01	5.729E-01
49536.66	2.31E+01	1.97E+02	1.98E+02	0.437	0.619	1.376E+01	5.733E-01
49574.53	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.377E+01	5.738E-01
49612.41	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.378E+01	5.742E-01
49650.16	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.379E+01	5.747E-01
49687.78	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.380E+01	5.751E-01
49725.41	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.381E+01	5.755E-01
49762.91	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.382E+01	5.760E-01
49800.72	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.383E+01	5.764E-01
49838.47	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.384E+01	5.768E-01
49875.97	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.385E+01	5.773E-01
49913.97	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.386E+01	5.777E-01
49951.84	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.388E+01	5.781E-01
49989.84	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.389E+01	5.786E-01
50027.97	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.390E+01	5.790E-01
50065.84	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.391E+01	5.795E-01
50103.72	2.31E+01	1.97E+02	1.98E+02	0.437	0.618	1.392E+01	5.799E-01
50142.59	2.31E+01	1.97E+02	1.98E+02	0.436	0.617	1.393E+01	5.804E-01
50180.22	2.31E+01	1.97E+02	1.98E+02	0.436	0.617	1.394E+01	5.808E-01
50217.72	2.31E+01	1.97E+02	1.98E+02	0.436	0.617	1.395E+01	5.812E-01
50255.84	2.31E+01	1.97E+02	1.98E+02	0.436	0.617	1.396E+01	5.817E-01
50293.41	2.31E+01	1.97E+02	1.98E+02	0.436	0.617	1.397E+01	5.821E-01
50331.41	2.31E+01	1.97E+02	1.98E+02	0.436	0.617	1.398E+01	5.825E-01
50369.41	2.31E+01	1.97E+02	1.98E+02	0.436	0.617	1.399E+01	5.830E-01
50407.66	2.31E+01	1.97E+02	1.98E+02	0.436	0.617	1.400E+01	5.834E-01
50445.16	2.31E+01	1.97E+02	1.98E+02	0.436	0.617	1.401E+01	5.839E-01
50482.66	2.31E+01	1.97E+02	1.98E+02	0.436	0.617	1.402E+01	5.843E-01
50520.91	2.31E+01	1.97E+02	1.98E+02	0.436	0.617	1.403E+01	5.847E-01
50558.66	2.31E+01	1.97E+02	1.97E+02	0.436	0.616	1.404E+01	5.852E-01
50597.03	2.31E+01	1.97E+02	1.97E+02	0.436	0.616	1.405E+01	5.856E-01
50634.91	2.31E+01	1.97E+02	1.97E+02	0.436	0.616	1.407E+01	5.861E-01

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
50672.41	2.31E+01	1.97E+02	1.97E+02	0.436	0.616	1.408E+01	5.865E-01
50710.41	2.31E+01	1.97E+02	1.97E+02	0.436	0.616	1.409E+01	5.869E-01
50748.53	2.31E+01	1.97E+02	1.97E+02	0.436	0.616	1.410E+01	5.874E-01
50786.09	2.31E+01	1.97E+02	1.97E+02	0.436	0.616	1.411E+01	5.878E-01
50824.59	2.31E+01	1.97E+02	1.97E+02	0.436	0.616	1.412E+01	5.882E-01
50862.72	2.31E+01	1.97E+02	1.97E+02	0.436	0.616	1.413E+01	5.887E-01
50901.34	2.31E+01	1.97E+02	1.97E+02	0.436	0.616	1.414E+01	5.891E-01
50939.84	2.31E+01	1.97E+02	1.97E+02	0.436	0.616	1.415E+01	5.896E-01
50978.22	2.30E+01	1.97E+02	1.97E+02	0.435	0.616	1.416E+01	5.900E-01
51016.47	2.30E+01	1.97E+02	1.97E+02	0.435	0.616	1.417E+01	5.905E-01
51053.97	2.30E+01	1.97E+02	1.97E+02	0.435	0.616	1.418E+01	5.909E-01
51091.59	2.30E+01	1.97E+02	1.97E+02	0.435	0.616	1.419E+01	5.913E-01
51129.22	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.420E+01	5.918E-01
51167.47	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.421E+01	5.922E-01
51205.34	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.422E+01	5.927E-01
51243.16	2.30E+01	1.97E+02	1.97E+02	0.435	0.616	1.423E+01	5.931E-01
51280.66	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.424E+01	5.935E-01
51318.91	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.426E+01	5.940E-01
51356.41	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.427E+01	5.944E-01
51394.03	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.428E+01	5.948E-01
51431.66	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.429E+01	5.953E-01
51469.53	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.430E+01	5.957E-01
51508.03	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.431E+01	5.962E-01
51546.41	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.432E+01	5.966E-01
51584.03	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.433E+01	5.970E-01
51621.53	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.434E+01	5.975E-01
51659.53	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.435E+01	5.979E-01
51697.66	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.436E+01	5.984E-01
51735.59	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.437E+01	5.988E-01
51773.34	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.438E+01	5.992E-01
51811.09	2.30E+01	1.97E+02	1.97E+02	0.435	0.615	1.439E+01	5.997E-01
51848.59	2.30E+01	1.97E+02	1.97E+02	0.434	0.614	1.440E+01	6.001E-01
51887.09	2.30E+01	1.97E+02	1.97E+02	0.434	0.614	1.441E+01	6.005E-01
51925.72	2.30E+01	1.97E+02	1.97E+02	0.434	0.614	1.442E+01	6.010E-01
51963.34	2.30E+01	1.97E+02	1.97E+02	0.434	0.614	1.443E+01	6.014E-01
52001.22	2.30E+01	1.97E+02	1.97E+02	0.434	0.614	1.444E+01	6.019E-01
52039.22	2.30E+01	1.97E+02	1.97E+02	0.434	0.614	1.446E+01	6.023E-01
52077.09	2.30E+01	1.96E+02	1.97E+02	0.434	0.614	1.447E+01	6.027E-01
52114.72	2.30E+01	1.96E+02	1.97E+02	0.434	0.614	1.448E+01	6.032E-01
52152.22	2.30E+01	1.96E+02	1.97E+02	0.434	0.613	1.449E+01	6.036E-01
52189.97	2.30E+01	1.96E+02	1.97E+02	0.434	0.613	1.450E+01	6.041E-01
52227.53	2.30E+01	1.96E+02	1.97E+02	0.434	0.614	1.451E+01	6.045E-01
52265.91	2.30E+01	1.96E+02	1.97E+02	0.434	0.613	1.452E+01	6.049E-01
52303.41	2.30E+01	1.96E+02	1.97E+02	0.434	0.613	1.453E+01	6.054E-01
52340.91	2.30E+01	1.96E+02	1.97E+02	0.434	0.613	1.454E+01	6.058E-01
52378.66	2.30E+01	1.96E+02	1.97E+02	0.434	0.613	1.455E+01	6.062E-01
52416.53	2.30E+01	1.96E+02	1.97E+02	0.434	0.613	1.456E+01	6.067E-01
52454.53	2.30E+01	1.96E+02	1.97E+02	0.434	0.613	1.457E+01	6.071E-01
52492.16	2.30E+01	1.96E+02	1.97E+02	0.434	0.613	1.458E+01	6.075E-01
52529.78	2.30E+01	1.96E+02	1.97E+02	0.434	0.613	1.459E+01	6.080E-01
52567.78	2.30E+01	1.96E+02	1.97E+02	0.434	0.613	1.460E+01	6.084E-01
52605.78	2.30E+01	1.96E+02	1.97E+02	0.433	0.613	1.461E+01	6.089E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
52643.28	2.30E+01	1.96E+02	1.97E+02	0.433	0.613	1.462E+01	6.093E-01
52681.78	2.30E+01	1.96E+02	1.97E+02	0.433	0.613	1.463E+01	6.097E-01
52719.47	2.30E+01	1.96E+02	1.97E+02	0.433	0.613	1.464E+01	6.102E-01
52758.34	2.30E+01	1.96E+02	1.97E+02	0.433	0.613	1.466E+01	6.106E-01
52796.09	2.30E+01	1.96E+02	1.97E+02	0.433	0.613	1.467E+01	6.111E-01
52833.97	2.30E+01	1.96E+02	1.97E+02	0.433	0.613	1.468E+01	6.115E-01
52871.84	2.30E+01	1.96E+02	1.97E+02	0.433	0.612	1.469E+01	6.119E-01
52910.09	2.30E+01	1.96E+02	1.97E+02	0.433	0.612	1.470E+01	6.124E-01
52948.09	2.30E+01	1.96E+02	1.97E+02	0.433	0.612	1.471E+01	6.128E-01
52985.59	2.30E+01	1.96E+02	1.97E+02	0.433	0.612	1.472E+01	6.133E-01
53023.72	2.29E+01	1.96E+02	1.97E+02	0.433	0.612	1.473E+01	6.137E-01
53061.97	2.29E+01	1.96E+02	1.97E+02	0.433	0.612	1.474E+01	6.141E-01
53099.59	2.29E+01	1.96E+02	1.97E+02	0.433	0.612	1.475E+01	6.146E-01
53137.09	2.29E+01	1.96E+02	1.97E+02	0.432	0.612	1.476E+01	6.150E-01
53174.78	2.29E+01	1.96E+02	1.97E+02	0.433	0.612	1.477E+01	6.154E-01
53212.41	2.29E+01	1.96E+02	1.97E+02	0.433	0.612	1.478E+01	6.159E-01
53251.03	2.29E+01	1.96E+02	1.97E+02	0.432	0.612	1.479E+01	6.163E-01
53288.53	2.29E+01	1.96E+02	1.97E+02	0.432	0.612	1.480E+01	6.168E-01
53326.41	2.29E+01	1.96E+02	1.97E+02	0.432	0.612	1.481E+01	6.172E-01
53364.41	2.29E+01	1.96E+02	1.97E+02	0.432	0.612	1.482E+01	6.176E-01
53402.28	2.29E+01	1.96E+02	1.97E+02	0.432	0.612	1.483E+01	6.181E-01
53440.41	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.484E+01	6.185E-01
53478.03	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.486E+01	6.190E-01
53516.28	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.487E+01	6.194E-01
53554.53	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.488E+01	6.198E-01
53592.41	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.489E+01	6.203E-01
53629.84	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.490E+01	6.207E-01
53667.72	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.491E+01	6.212E-01
53705.59	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.492E+01	6.216E-01
53744.72	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.493E+01	6.220E-01
53782.97	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.494E+01	6.225E-01
53821.47	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.495E+01	6.229E-01
53858.97	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.496E+01	6.234E-01
53896.47	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.497E+01	6.238E-01
53933.97	2.29E+01	1.96E+02	1.97E+02	0.432	0.611	1.498E+01	6.242E-01
53972.22	2.29E+01	1.96E+02	1.97E+02	0.431	0.610	1.499E+01	6.247E-01
54009.97	2.29E+01	1.96E+02	1.97E+02	0.431	0.610	1.500E+01	6.251E-01
54047.84	2.29E+01	1.96E+02	1.96E+02	0.431	0.610	1.501E+01	6.256E-01
54085.41	2.29E+01	1.96E+02	1.96E+02	0.432	0.611	1.502E+01	6.260E-01
54123.03	2.29E+01	1.96E+02	1.96E+02	0.432	0.611	1.503E+01	6.264E-01
54160.66	2.29E+01	1.96E+02	1.96E+02	0.431	0.610	1.504E+01	6.269E-01
54198.53	2.29E+01	1.96E+02	1.96E+02	0.431	0.610	1.506E+01	6.273E-01
54236.66	2.29E+01	1.96E+02	1.96E+02	0.431	0.610	1.507E+01	6.277E-01
54275.03	2.29E+01	1.96E+02	1.96E+02	0.431	0.610	1.508E+01	6.282E-01
54312.53	2.29E+01	1.96E+02	1.96E+02	0.431	0.610	1.509E+01	6.286E-01
54350.78	2.29E+01	1.96E+02	1.96E+02	0.431	0.610	1.510E+01	6.291E-01
54388.78	2.29E+01	1.96E+02	1.96E+02	0.431	0.610	1.511E+01	6.295E-01
54426.78	2.29E+01	1.96E+02	1.96E+02	0.431	0.609	1.512E+01	6.299E-01
54464.78	2.29E+01	1.96E+02	1.96E+02	0.431	0.609	1.513E+01	6.304E-01
54502.41	2.29E+01	1.96E+02	1.96E+02	0.431	0.609	1.514E+01	6.308E-01
54540.03	2.29E+01	1.96E+02	1.96E+02	0.431	0.609	1.515E+01	6.313E-01
54577.34	2.29E+01	1.96E+02	1.96E+02	0.431	0.609	1.516E+01	6.317E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
54614.97	2.29E+01	1.96E+02	1.96E+02	0.431	0.609	1.517E+01	6.321E-01
54653.22	2.29E+01	1.96E+02	1.96E+02	0.431	0.609	1.518E+01	6.326E-01
54691.34	2.29E+01	1.96E+02	1.96E+02	0.431	0.609	1.519E+01	6.330E-01
54729.22	2.29E+01	1.96E+02	1.96E+02	0.431	0.609	1.520E+01	6.334E-01
54767.22	2.29E+01	1.96E+02	1.96E+02	0.431	0.609	1.521E+01	6.339E-01
54806.59	2.29E+01	1.96E+02	1.96E+02	0.431	0.609	1.522E+01	6.343E-01
54844.59	2.29E+01	1.96E+02	1.96E+02	0.430	0.609	1.523E+01	6.348E-01
54882.34	2.29E+01	1.96E+02	1.96E+02	0.430	0.609	1.525E+01	6.352E-01
54920.22	2.29E+01	1.96E+02	1.96E+02	0.430	0.609	1.526E+01	6.357E-01
54957.72	2.29E+01	1.96E+02	1.96E+02	0.430	0.609	1.527E+01	6.361E-01
54995.22	2.28E+01	1.96E+02	1.96E+02	0.430	0.608	1.528E+01	6.365E-01
55033.03	2.29E+01	1.96E+02	1.96E+02	0.430	0.609	1.529E+01	6.370E-01
55071.28	2.29E+01	1.96E+02	1.96E+02	0.430	0.609	1.530E+01	6.374E-01
55109.66	2.29E+01	1.96E+02	1.96E+02	0.430	0.609	1.531E+01	6.378E-01
55147.66	2.28E+01	1.96E+02	1.96E+02	0.430	0.608	1.532E+01	6.383E-01
55185.41	2.28E+01	1.96E+02	1.96E+02	0.430	0.608	1.533E+01	6.387E-01
55223.41	2.28E+01	1.96E+02	1.96E+02	0.430	0.608	1.534E+01	6.392E-01
55261.41	2.28E+01	1.96E+02	1.96E+02	0.430	0.608	1.535E+01	6.396E-01
55299.41	2.28E+01	1.96E+02	1.96E+02	0.430	0.608	1.536E+01	6.400E-01
55337.28	2.28E+01	1.96E+02	1.96E+02	0.430	0.608	1.537E+01	6.405E-01
55375.16	2.28E+01	1.96E+02	1.96E+02	0.430	0.608	1.538E+01	6.409E-01
55412.91	2.28E+01	1.95E+02	1.96E+02	0.430	0.608	1.539E+01	6.414E-01
55450.78	2.28E+01	1.95E+02	1.96E+02	0.430	0.608	1.540E+01	6.418E-01
55489.22	2.28E+01	1.95E+02	1.96E+02	0.430	0.608	1.541E+01	6.422E-01
55527.47	2.28E+01	1.95E+02	1.96E+02	0.430	0.608	1.542E+01	6.427E-01
55565.72	2.28E+01	1.95E+02	1.96E+02	0.430	0.608	1.543E+01	6.431E-01
55603.59	2.28E+01	1.95E+02	1.96E+02	0.430	0.608	1.545E+01	6.436E-01
55641.09	2.28E+01	1.95E+02	1.96E+02	0.430	0.608	1.546E+01	6.440E-01
55678.97	2.28E+01	1.95E+02	1.96E+02	0.429	0.607	1.547E+01	6.444E-01
55716.47	2.28E+01	1.95E+02	1.96E+02	0.429	0.607	1.548E+01	6.449E-01
55754.59	2.28E+01	1.95E+02	1.96E+02	0.429	0.607	1.549E+01	6.453E-01
55792.72	2.28E+01	1.95E+02	1.96E+02	0.429	0.607	1.550E+01	6.457E-01
55830.72	2.28E+01	1.95E+02	1.96E+02	0.429	0.607	1.551E+01	6.462E-01
55868.97	2.28E+01	1.95E+02	1.96E+02	0.429	0.607	1.552E+01	6.466E-01
55906.72	2.28E+01	1.95E+02	1.96E+02	0.429	0.607	1.553E+01	6.471E-01
55944.66	2.28E+01	1.95E+02	1.96E+02	0.429	0.607	1.554E+01	6.475E-01
55982.16	2.28E+01	1.95E+02	1.96E+02	0.429	0.607	1.555E+01	6.479E-01
56019.91	2.28E+01	1.95E+02	1.96E+02	0.429	0.607	1.556E+01	6.484E-01
56057.78	2.28E+01	1.95E+02	1.96E+02	0.429	0.607	1.557E+01	6.488E-01
56095.28	2.28E+01	1.95E+02	1.96E+02	0.429	0.606	1.558E+01	6.493E-01
56132.91	2.28E+01	1.95E+02	1.96E+02	0.429	0.606	1.559E+01	6.497E-01
56171.03	2.28E+01	1.95E+02	1.96E+02	0.429	0.606	1.560E+01	6.501E-01
56209.66	2.28E+01	1.95E+02	1.96E+02	0.429	0.606	1.561E+01	6.506E-01
56247.41	2.28E+01	1.95E+02	1.96E+02	0.429	0.606	1.562E+01	6.510E-01
56285.03	2.28E+01	1.95E+02	1.96E+02	0.429	0.606	1.563E+01	6.514E-01
56322.78	2.28E+01	1.95E+02	1.96E+02	0.429	0.606	1.565E+01	6.519E-01
56360.41	2.28E+01	1.95E+02	1.96E+02	0.428	0.606	1.566E+01	6.523E-01
56398.28	2.28E+01	1.95E+02	1.96E+02	0.428	0.606	1.567E+01	6.528E-01
56435.59	2.28E+01	1.95E+02	1.96E+02	0.429	0.606	1.568E+01	6.532E-01
56473.59	2.28E+01	1.95E+02	1.96E+02	0.429	0.606	1.569E+01	6.536E-01
56511.84	2.28E+01	1.95E+02	1.96E+02	0.428	0.606	1.570E+01	6.541E-01
56549.59	2.28E+01	1.95E+02	1.96E+02	0.428	0.606	1.571E+01	6.545E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
56587.84	2.28E+01	1.95E+02	1.96E+02	0.428	0.606	1.572E+01	6.550E-01
56625.72	2.28E+01	1.95E+02	1.96E+02	0.428	0.606	1.573E+01	6.554E-01
56663.59	2.28E+01	1.95E+02	1.96E+02	0.428	0.605	1.574E+01	6.558E-01
56701.34	2.28E+01	1.95E+02	1.96E+02	0.428	0.605	1.575E+01	6.563E-01
56739.59	2.28E+01	1.95E+02	1.96E+02	0.428	0.605	1.576E+01	6.567E-01
56777.09	2.28E+01	1.95E+02	1.96E+02	0.428	0.605	1.577E+01	6.571E-01
56814.97	2.28E+01	1.95E+02	1.96E+02	0.428	0.605	1.578E+01	6.576E-01
56853.47	2.28E+01	1.95E+02	1.96E+02	0.428	0.605	1.579E+01	6.580E-01
56891.66	2.28E+01	1.95E+02	1.96E+02	0.428	0.605	1.580E+01	6.585E-01
56929.41	2.28E+01	1.95E+02	1.96E+02	0.428	0.605	1.581E+01	6.589E-01
56968.16	2.28E+01	1.95E+02	1.96E+02	0.428	0.605	1.582E+01	6.594E-01
57006.03	2.28E+01	1.95E+02	1.96E+02	0.428	0.605	1.584E+01	6.598E-01
57044.03	2.27E+01	1.95E+02	1.96E+02	0.427	0.605	1.585E+01	6.602E-01
57082.28	2.27E+01	1.95E+02	1.96E+02	0.427	0.605	1.586E+01	6.607E-01
57119.91	2.27E+01	1.95E+02	1.96E+02	0.427	0.605	1.587E+01	6.611E-01
57157.53	2.27E+01	1.95E+02	1.96E+02	0.427	0.605	1.588E+01	6.615E-01
57195.16	2.27E+01	1.95E+02	1.96E+02	0.427	0.604	1.589E+01	6.620E-01
57233.16	2.27E+01	1.95E+02	1.96E+02	0.427	0.604	1.590E+01	6.624E-01
57270.78	2.27E+01	1.95E+02	1.96E+02	0.427	0.604	1.591E+01	6.629E-01
57308.53	2.27E+01	1.95E+02	1.96E+02	0.427	0.604	1.592E+01	6.633E-01
57346.22	2.27E+01	1.95E+02	1.96E+02	0.427	0.604	1.593E+01	6.637E-01
57383.72	2.27E+01	1.95E+02	1.95E+02	0.427	0.604	1.594E+01	6.642E-01
57421.22	2.27E+01	1.95E+02	1.95E+02	0.427	0.604	1.595E+01	6.646E-01
57458.97	2.27E+01	1.95E+02	1.95E+02	0.427	0.604	1.596E+01	6.650E-01
57496.59	2.27E+01	1.95E+02	1.95E+02	0.427	0.604	1.597E+01	6.655E-01
57534.34	2.27E+01	1.95E+02	1.95E+02	0.427	0.604	1.598E+01	6.659E-01
57572.34	2.27E+01	1.95E+02	1.95E+02	0.427	0.604	1.599E+01	6.663E-01
57610.09	2.27E+01	1.95E+02	1.95E+02	0.427	0.603	1.600E+01	6.668E-01
57648.09	2.27E+01	1.95E+02	1.95E+02	0.427	0.603	1.601E+01	6.672E-01
57686.47	2.27E+01	1.95E+02	1.95E+02	0.427	0.603	1.602E+01	6.677E-01
57723.97	2.27E+01	1.95E+02	1.95E+02	0.427	0.603	1.603E+01	6.681E-01
57761.59	2.27E+01	1.95E+02	1.95E+02	0.426	0.603	1.604E+01	6.685E-01
57799.03	2.27E+01	1.95E+02	1.95E+02	0.427	0.603	1.606E+01	6.690E-01
57836.78	2.27E+01	1.95E+02	1.95E+02	0.427	0.603	1.607E+01	6.694E-01
57875.03	2.27E+01	1.95E+02	1.95E+02	0.426	0.603	1.608E+01	6.698E-01
57913.28	2.27E+01	1.95E+02	1.95E+02	0.426	0.603	1.609E+01	6.703E-01
57950.78	2.27E+01	1.95E+02	1.95E+02	0.426	0.603	1.610E+01	6.707E-01
57988.28	2.27E+01	1.95E+02	1.95E+02	0.426	0.603	1.611E+01	6.712E-01
58025.91	2.27E+01	1.95E+02	1.95E+02	0.426	0.603	1.612E+01	6.716E-01
58063.66	2.27E+01	1.95E+02	1.95E+02	0.426	0.603	1.613E+01	6.720E-01
58102.03	2.27E+01	1.95E+02	1.95E+02	0.426	0.603	1.614E+01	6.725E-01
58139.53	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.615E+01	6.729E-01
58177.41	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.616E+01	6.733E-01
58215.41	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.617E+01	6.738E-01
58253.41	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.618E+01	6.742E-01
58290.72	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.619E+01	6.747E-01
58328.34	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.620E+01	6.751E-01
58365.84	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.621E+01	6.755E-01
58403.59	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.622E+01	6.760E-01
58441.59	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.623E+01	6.764E-01
58479.22	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.624E+01	6.768E-01
58516.84	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.625E+01	6.773E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
58554.97	2.27E+01	1.95E+02	1.95E+02	0.426	0.602	1.627E+01	6.777E-01
58593.72	2.27E+01	1.95E+02	1.95E+02	0.425	0.602	1.628E+01	6.782E-01
58631.59	2.27E+01	1.94E+02	1.95E+02	0.425	0.602	1.629E+01	6.786E-01
58669.34	2.27E+01	1.94E+02	1.95E+02	0.425	0.602	1.630E+01	6.790E-01
58706.84	2.27E+01	1.94E+02	1.95E+02	0.425	0.601	1.631E+01	6.795E-01
58744.16	2.27E+01	1.94E+02	1.95E+02	0.425	0.602	1.632E+01	6.799E-01
58782.16	2.27E+01	1.94E+02	1.95E+02	0.425	0.602	1.633E+01	6.803E-01
58820.16	2.27E+01	1.94E+02	1.95E+02	0.425	0.602	1.634E+01	6.808E-01
58858.66	2.27E+01	1.94E+02	1.95E+02	0.425	0.601	1.635E+01	6.812E-01
58896.41	2.27E+01	1.94E+02	1.95E+02	0.425	0.601	1.636E+01	6.817E-01
58934.03	2.27E+01	1.94E+02	1.95E+02	0.425	0.601	1.637E+01	6.821E-01
58972.03	2.27E+01	1.94E+02	1.95E+02	0.425	0.601	1.638E+01	6.825E-01
59009.66	2.26E+01	1.94E+02	1.95E+02	0.425	0.601	1.639E+01	6.830E-01
59047.66	2.26E+01	1.94E+02	1.95E+02	0.425	0.601	1.640E+01	6.834E-01
59085.28	2.26E+01	1.94E+02	1.95E+02	0.425	0.601	1.641E+01	6.839E-01
59123.41	2.26E+01	1.94E+02	1.95E+02	0.425	0.600	1.642E+01	6.843E-01
59161.03	2.26E+01	1.94E+02	1.95E+02	0.425	0.600	1.643E+01	6.847E-01
59198.66	2.26E+01	1.94E+02	1.95E+02	0.425	0.600	1.644E+01	6.852E-01
59236.09	2.26E+01	1.94E+02	1.95E+02	0.425	0.601	1.645E+01	6.856E-01
59273.59	2.26E+01	1.94E+02	1.95E+02	0.425	0.600	1.646E+01	6.860E-01
59311.22	2.26E+01	1.94E+02	1.95E+02	0.425	0.600	1.648E+01	6.865E-01
59348.97	2.26E+01	1.94E+02	1.95E+02	0.425	0.600	1.649E+01	6.869E-01
59386.84	2.26E+01	1.94E+02	1.95E+02	0.424	0.600	1.650E+01	6.873E-01
59424.72	2.26E+01	1.94E+02	1.95E+02	0.424	0.600	1.651E+01	6.878E-01
59462.47	2.26E+01	1.94E+02	1.95E+02	0.424	0.600	1.652E+01	6.882E-01
59501.09	2.26E+01	1.94E+02	1.95E+02	0.424	0.600	1.653E+01	6.887E-01
59539.22	2.26E+01	1.94E+02	1.95E+02	0.424	0.600	1.654E+01	6.891E-01
59577.22	2.26E+01	1.94E+02	1.95E+02	0.424	0.600	1.655E+01	6.896E-01
59614.97	2.26E+01	1.94E+02	1.95E+02	0.424	0.600	1.656E+01	6.900E-01
59652.41	2.26E+01	1.94E+02	1.95E+02	0.424	0.600	1.657E+01	6.904E-01
59690.41	2.26E+01	1.94E+02	1.95E+02	0.424	0.600	1.658E+01	6.909E-01
59729.28	2.26E+01	1.94E+02	1.95E+02	0.424	0.600	1.659E+01	6.913E-01
59767.66	2.26E+01	1.94E+02	1.95E+02	0.424	0.600	1.660E+01	6.918E-01
59805.41	2.26E+01	1.94E+02	1.95E+02	0.424	0.599	1.661E+01	6.922E-01
59843.03	2.26E+01	1.94E+02	1.95E+02	0.424	0.599	1.662E+01	6.926E-01
59880.66	2.26E+01	1.94E+02	1.95E+02	0.424	0.599	1.663E+01	6.931E-01
59918.41	2.26E+01	1.94E+02	1.95E+02	0.424	0.599	1.664E+01	6.935E-01
59957.28	2.26E+01	1.94E+02	1.95E+02	0.423	0.599	1.665E+01	6.940E-01
59995.66	2.26E+01	1.94E+02	1.95E+02	0.423	0.599	1.667E+01	6.944E-01
60033.53	2.26E+01	1.94E+02	1.95E+02	0.423	0.598	1.668E+01	6.948E-01
60070.97	2.26E+01	1.94E+02	1.95E+02	0.423	0.599	1.669E+01	6.953E-01
60108.59	2.26E+01	1.94E+02	1.95E+02	0.423	0.599	1.670E+01	6.957E-01
60146.09	2.26E+01	1.94E+02	1.95E+02	0.423	0.599	1.671E+01	6.961E-01
60184.09	2.26E+01	1.94E+02	1.95E+02	0.423	0.599	1.672E+01	6.966E-01
60221.97	2.26E+01	1.94E+02	1.95E+02	0.423	0.598	1.673E+01	6.970E-01
60259.59	2.26E+01	1.94E+02	1.95E+02	0.423	0.598	1.674E+01	6.974E-01
60297.34	2.26E+01	1.94E+02	1.95E+02	0.423	0.598	1.675E+01	6.979E-01
60336.72	2.26E+01	1.94E+02	1.95E+02	0.423	0.598	1.676E+01	6.983E-01
60374.22	2.26E+01	1.94E+02	1.95E+02	0.423	0.598	1.677E+01	6.988E-01
60413.47	2.26E+01	1.94E+02	1.95E+02	0.423	0.598	1.678E+01	6.992E-01
60452.22	2.26E+01	1.94E+02	1.95E+02	0.423	0.598	1.679E+01	6.997E-01
60489.72	2.26E+01	1.94E+02	1.95E+02	0.423	0.598	1.680E+01	7.001E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
60527.91	2.26E+01	1.94E+02	1.95E+02	0.423	0.598	1.681E+01	7.006E-01
60567.28	2.26E+01	1.94E+02	1.95E+02	0.423	0.598	1.682E+01	7.010E-01
60605.03	2.26E+01	1.94E+02	1.94E+02	0.423	0.598	1.683E+01	7.014E-01
60642.78	2.26E+01	1.94E+02	1.94E+02	0.423	0.598	1.685E+01	7.019E-01
60680.41	2.26E+01	1.94E+02	1.94E+02	0.423	0.598	1.686E+01	7.023E-01
60718.16	2.26E+01	1.94E+02	1.94E+02	0.423	0.598	1.687E+01	7.028E-01
60755.91	2.26E+01	1.94E+02	1.94E+02	0.422	0.597	1.688E+01	7.032E-01
60793.91	2.26E+01	1.94E+02	1.94E+02	0.422	0.597	1.689E+01	7.036E-01
60831.53	2.26E+01	1.94E+02	1.94E+02	0.422	0.597	1.690E+01	7.041E-01
60869.53	2.26E+01	1.94E+02	1.94E+02	0.422	0.597	1.691E+01	7.045E-01
60907.66	2.25E+01	1.94E+02	1.94E+02	0.422	0.597	1.692E+01	7.049E-01
60945.28	2.25E+01	1.94E+02	1.94E+02	0.422	0.597	1.693E+01	7.054E-01
60983.03	2.25E+01	1.94E+02	1.94E+02	0.422	0.597	1.694E+01	7.058E-01
61020.97	2.25E+01	1.94E+02	1.94E+02	0.422	0.597	1.695E+01	7.063E-01
61058.97	2.25E+01	1.94E+02	1.94E+02	0.422	0.597	1.696E+01	7.067E-01
61096.59	2.25E+01	1.94E+02	1.94E+02	0.422	0.597	1.697E+01	7.071E-01
61134.34	2.25E+01	1.94E+02	1.94E+02	0.422	0.597	1.698E+01	7.076E-01
61172.09	2.25E+01	1.94E+02	1.94E+02	0.422	0.597	1.699E+01	7.080E-01
61209.97	2.25E+01	1.94E+02	1.94E+02	0.422	0.597	1.700E+01	7.084E-01
61248.34	2.25E+01	1.94E+02	1.94E+02	0.422	0.597	1.701E+01	7.089E-01
61286.84	2.25E+01	1.94E+02	1.94E+02	0.422	0.597	1.702E+01	7.093E-01
61324.59	2.25E+01	1.94E+02	1.94E+02	0.422	0.596	1.703E+01	7.098E-01
61362.97	2.25E+01	1.94E+02	1.94E+02	0.422	0.596	1.705E+01	7.102E-01
61400.47	2.25E+01	1.94E+02	1.94E+02	0.422	0.596	1.706E+01	7.107E-01
61438.47	2.25E+01	1.94E+02	1.94E+02	0.422	0.596	1.707E+01	7.111E-01
61477.03	2.25E+01	1.94E+02	1.94E+02	0.422	0.596	1.708E+01	7.115E-01
61515.66	2.25E+01	1.94E+02	1.94E+02	0.422	0.596	1.709E+01	7.120E-01
61553.41	2.25E+01	1.94E+02	1.94E+02	0.421	0.596	1.710E+01	7.124E-01
61591.53	2.25E+01	1.94E+02	1.94E+02	0.421	0.596	1.711E+01	7.129E-01
61629.03	2.25E+01	1.94E+02	1.94E+02	0.421	0.596	1.712E+01	7.133E-01
61666.78	2.25E+01	1.94E+02	1.94E+02	0.421	0.596	1.713E+01	7.137E-01
61704.41	2.25E+01	1.94E+02	1.94E+02	0.421	0.596	1.714E+01	7.142E-01
61743.41	2.25E+01	1.94E+02	1.94E+02	0.421	0.595	1.715E+01	7.146E-01
61781.03	2.25E+01	1.94E+02	1.94E+02	0.421	0.595	1.716E+01	7.151E-01
61818.78	2.25E+01	1.93E+02	1.94E+02	0.421	0.595	1.717E+01	7.155E-01
61856.53	2.25E+01	1.93E+02	1.94E+02	0.421	0.595	1.718E+01	7.159E-01
61894.16	2.25E+01	1.93E+02	1.94E+02	0.421	0.595	1.719E+01	7.164E-01
61932.09	2.25E+01	1.93E+02	1.94E+02	0.421	0.595	1.720E+01	7.168E-01
61969.59	2.25E+01	1.93E+02	1.94E+02	0.421	0.595	1.721E+01	7.172E-01
62007.34	2.25E+01	1.93E+02	1.94E+02	0.421	0.595	1.722E+01	7.177E-01
62045.34	2.25E+01	1.93E+02	1.94E+02	0.421	0.595	1.723E+01	7.181E-01
62083.47	2.25E+01	1.93E+02	1.94E+02	0.421	0.595	1.725E+01	7.186E-01
62121.09	2.25E+01	1.93E+02	1.94E+02	0.421	0.595	1.726E+01	7.190E-01
62159.47	2.25E+01	1.93E+02	1.94E+02	0.420	0.595	1.727E+01	7.194E-01
62197.22	2.25E+01	1.93E+02	1.94E+02	0.420	0.595	1.728E+01	7.199E-01
62234.97	2.25E+01	1.93E+02	1.94E+02	0.420	0.595	1.729E+01	7.203E-01
62272.47	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.730E+01	7.207E-01
62310.34	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.731E+01	7.212E-01
62347.97	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.732E+01	7.216E-01
62385.41	2.25E+01	1.93E+02	1.94E+02	0.420	0.595	1.733E+01	7.221E-01
62423.16	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.734E+01	7.225E-01
62460.66	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.735E+01	7.229E-01

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
62498.28	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.736E+01	7.234E-01
62536.03	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.737E+01	7.238E-01
62573.53	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.738E+01	7.242E-01
62611.53	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.739E+01	7.247E-01
62650.28	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.740E+01	7.251E-01
62688.53	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.741E+01	7.256E-01
62726.03	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.742E+01	7.260E-01
62764.78	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.743E+01	7.264E-01
62802.41	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.745E+01	7.269E-01
62840.03	2.24E+01	1.93E+02	1.94E+02	0.419	0.593	1.746E+01	7.273E-01
62877.47	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.747E+01	7.277E-01
62915.34	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.748E+01	7.282E-01
62953.34	2.25E+01	1.93E+02	1.94E+02	0.420	0.594	1.749E+01	7.286E-01
62991.47	2.24E+01	1.93E+02	1.94E+02	0.419	0.593	1.750E+01	7.291E-01
63028.97	2.24E+01	1.93E+02	1.94E+02	0.419	0.593	1.751E+01	7.295E-01
63066.97	2.24E+01	1.93E+02	1.94E+02	0.419	0.593	1.752E+01	7.299E-01
63106.09	2.24E+01	1.93E+02	1.94E+02	0.419	0.593	1.753E+01	7.304E-01
63143.59	2.24E+01	1.93E+02	1.94E+02	0.419	0.593	1.754E+01	7.308E-01
63181.09	2.24E+01	1.93E+02	1.94E+02	0.419	0.593	1.755E+01	7.313E-01
63218.72	2.24E+01	1.93E+02	1.94E+02	0.419	0.593	1.756E+01	7.317E-01
63256.97	2.24E+01	1.93E+02	1.94E+02	0.419	0.592	1.757E+01	7.321E-01
63295.09	2.24E+01	1.93E+02	1.94E+02	0.419	0.592	1.758E+01	7.326E-01
63332.41	2.24E+01	1.93E+02	1.94E+02	0.419	0.593	1.759E+01	7.330E-01
63370.66	2.24E+01	1.93E+02	1.94E+02	0.419	0.593	1.760E+01	7.335E-01
63408.53	2.24E+01	1.93E+02	1.94E+02	0.419	0.592	1.761E+01	7.339E-01
63447.16	2.24E+01	1.93E+02	1.94E+02	0.419	0.592	1.762E+01	7.343E-01
63487.16	2.24E+01	1.93E+02	1.94E+02	0.419	0.593	1.764E+01	7.348E-01
63525.66	2.24E+01	1.93E+02	1.94E+02	0.419	0.592	1.765E+01	7.353E-01
63563.53	2.24E+01	1.93E+02	1.94E+02	0.419	0.592	1.766E+01	7.357E-01
63601.16	2.24E+01	1.93E+02	1.94E+02	0.419	0.592	1.767E+01	7.361E-01
63639.66	2.24E+01	1.93E+02	1.94E+02	0.419	0.592	1.768E+01	7.366E-01
63677.66	2.24E+01	1.93E+02	1.94E+02	0.419	0.592	1.769E+01	7.370E-01
63715.16	2.24E+01	1.93E+02	1.94E+02	0.418	0.592	1.770E+01	7.374E-01
63753.03	2.24E+01	1.93E+02	1.94E+02	0.418	0.592	1.771E+01	7.379E-01
63790.59	2.24E+01	1.93E+02	1.93E+02	0.419	0.592	1.772E+01	7.383E-01
63828.34	2.24E+01	1.93E+02	1.93E+02	0.418	0.592	1.773E+01	7.388E-01
63866.34	2.24E+01	1.93E+02	1.93E+02	0.418	0.592	1.774E+01	7.392E-01
63903.84	2.24E+01	1.93E+02	1.93E+02	0.418	0.592	1.775E+01	7.396E-01
63941.84	2.24E+01	1.93E+02	1.93E+02	0.418	0.592	1.776E+01	7.401E-01
63979.72	2.24E+01	1.93E+02	1.93E+02	0.418	0.591	1.777E+01	7.405E-01
64017.59	2.24E+01	1.93E+02	1.93E+02	0.418	0.591	1.778E+01	7.409E-01
64055.47	2.24E+01	1.93E+02	1.93E+02	0.418	0.591	1.779E+01	7.414E-01
64093.09	2.24E+01	1.93E+02	1.93E+02	0.418	0.591	1.780E+01	7.418E-01
64131.34	2.24E+01	1.93E+02	1.93E+02	0.418	0.591	1.781E+01	7.423E-01
64169.72	2.24E+01	1.93E+02	1.93E+02	0.418	0.591	1.782E+01	7.427E-01
64207.47	2.24E+01	1.93E+02	1.93E+02	0.418	0.591	1.784E+01	7.431E-01
64245.78	2.24E+01	1.93E+02	1.93E+02	0.418	0.591	1.785E+01	7.436E-01
64283.66	2.24E+01	1.93E+02	1.93E+02	0.418	0.591	1.786E+01	7.440E-01
64321.91	2.24E+01	1.93E+02	1.93E+02	0.418	0.591	1.787E+01	7.445E-01
64359.53	2.24E+01	1.93E+02	1.93E+02	0.418	0.591	1.788E+01	7.449E-01
64397.41	2.24E+01	1.93E+02	1.93E+02	0.418	0.590	1.789E+01	7.453E-01
64435.16	2.24E+01	1.93E+02	1.93E+02	0.418	0.590	1.790E+01	7.458E-01

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
64472.91	2.24E+01	1.93E+02	1.93E+02	0.418	0.590	1.791E+01	7.462E-01
64510.53	2.24E+01	1.93E+02	1.93E+02	0.418	0.590	1.792E+01	7.466E-01
64548.66	2.24E+01	1.93E+02	1.93E+02	0.417	0.590	1.793E+01	7.471E-01
64586.53	2.24E+01	1.93E+02	1.93E+02	0.417	0.590	1.794E+01	7.475E-01
64624.03	2.24E+01	1.93E+02	1.93E+02	0.417	0.590	1.795E+01	7.480E-01
64662.53	2.24E+01	1.93E+02	1.93E+02	0.417	0.590	1.796E+01	7.484E-01
64700.16	2.24E+01	1.93E+02	1.93E+02	0.417	0.590	1.797E+01	7.488E-01
64737.59	2.24E+01	1.93E+02	1.93E+02	0.417	0.590	1.798E+01	7.493E-01
64775.84	2.24E+01	1.93E+02	1.93E+02	0.417	0.590	1.799E+01	7.497E-01
64814.47	2.24E+01	1.93E+02	1.93E+02	0.417	0.590	1.800E+01	7.502E-01
64853.22	2.24E+01	1.93E+02	1.93E+02	0.417	0.590	1.801E+01	7.506E-01
64890.97	2.24E+01	1.93E+02	1.93E+02	0.417	0.590	1.803E+01	7.511E-01
64929.84	2.24E+01	1.93E+02	1.93E+02	0.417	0.590	1.804E+01	7.515E-01
64967.84	2.23E+01	1.93E+02	1.93E+02	0.417	0.589	1.805E+01	7.519E-01
65005.47	2.23E+01	1.92E+02	1.93E+02	0.417	0.589	1.806E+01	7.524E-01
65043.34	2.23E+01	1.92E+02	1.93E+02	0.417	0.589	1.807E+01	7.528E-01
65080.97	2.23E+01	1.92E+02	1.93E+02	0.417	0.589	1.808E+01	7.533E-01
65118.84	2.23E+01	1.92E+02	1.93E+02	0.416	0.589	1.809E+01	7.537E-01
65156.72	2.23E+01	1.92E+02	1.93E+02	0.416	0.589	1.810E+01	7.541E-01
65194.03	2.23E+01	1.92E+02	1.93E+02	0.417	0.589	1.811E+01	7.546E-01
65231.53	2.23E+01	1.92E+02	1.93E+02	0.417	0.589	1.812E+01	7.550E-01
65269.78	2.23E+01	1.92E+02	1.93E+02	0.416	0.589	1.813E+01	7.554E-01
65307.28	2.23E+01	1.92E+02	1.93E+02	0.416	0.589	1.814E+01	7.559E-01
65345.16	2.23E+01	1.92E+02	1.93E+02	0.416	0.589	1.815E+01	7.563E-01
65383.03	2.23E+01	1.92E+02	1.93E+02	0.416	0.589	1.816E+01	7.567E-01
65421.16	2.23E+01	1.92E+02	1.93E+02	0.416	0.589	1.817E+01	7.572E-01
65459.78	2.23E+01	1.92E+02	1.93E+02	0.416	0.589	1.818E+01	7.576E-01
65497.66	2.23E+01	1.92E+02	1.93E+02	0.416	0.589	1.819E+01	7.581E-01
65535.28	2.23E+01	1.92E+02	1.93E+02	0.416	0.589	1.820E+01	7.585E-01
65572.78	2.23E+01	1.92E+02	1.93E+02	0.416	0.588	1.821E+01	7.589E-01
65610.91	2.23E+01	1.92E+02	1.93E+02	0.416	0.588	1.823E+01	7.594E-01
65648.66	2.23E+01	1.92E+02	1.93E+02	0.416	0.588	1.824E+01	7.598E-01
65686.97	2.23E+01	1.92E+02	1.93E+02	0.416	0.588	1.825E+01	7.603E-01
65724.47	2.23E+01	1.92E+02	1.93E+02	0.416	0.588	1.826E+01	7.607E-01
65763.09	2.23E+01	1.92E+02	1.93E+02	0.416	0.588	1.827E+01	7.611E-01
65801.09	2.23E+01	1.92E+02	1.93E+02	0.416	0.588	1.828E+01	7.616E-01
65838.97	2.23E+01	1.92E+02	1.93E+02	0.416	0.588	1.829E+01	7.620E-01
65876.47	2.23E+01	1.92E+02	1.93E+02	0.416	0.588	1.830E+01	7.625E-01
65914.22	2.23E+01	1.92E+02	1.93E+02	0.416	0.588	1.831E+01	7.629E-01
65952.09	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.832E+01	7.633E-01
65990.34	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.833E+01	7.638E-01
66028.59	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.834E+01	7.642E-01
66066.59	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.835E+01	7.647E-01
66104.59	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.836E+01	7.651E-01
66142.66	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.837E+01	7.655E-01
66180.28	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.838E+01	7.660E-01
66218.16	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.839E+01	7.664E-01
66255.78	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.840E+01	7.668E-01
66294.53	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.842E+01	7.673E-01
66332.91	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.843E+01	7.677E-01
66370.78	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.844E+01	7.682E-01
66408.91	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.845E+01	7.686E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
66447.16	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.846E+01	7.691E-01
66485.03	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.847E+01	7.695E-01
66523.41	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.848E+01	7.699E-01
66561.53	2.23E+01	1.92E+02	1.93E+02	0.415	0.586	1.849E+01	7.704E-01
66599.03	2.23E+01	1.92E+02	1.93E+02	0.415	0.586	1.850E+01	7.708E-01
66636.84	2.23E+01	1.92E+02	1.93E+02	0.415	0.587	1.851E+01	7.713E-01
66674.84	2.23E+01	1.92E+02	1.93E+02	0.415	0.586	1.852E+01	7.717E-01
66712.47	2.23E+01	1.92E+02	1.93E+02	0.415	0.586	1.853E+01	7.721E-01
66750.09	2.23E+01	1.92E+02	1.93E+02	0.415	0.586	1.854E+01	7.726E-01
66787.97	2.23E+01	1.92E+02	1.93E+02	0.415	0.586	1.855E+01	7.730E-01
66825.97	2.23E+01	1.92E+02	1.93E+02	0.415	0.586	1.856E+01	7.734E-01
66863.84	2.23E+01	1.92E+02	1.93E+02	0.414	0.586	1.857E+01	7.739E-01
66901.47	2.23E+01	1.92E+02	1.93E+02	0.414	0.586	1.858E+01	7.743E-01
66938.97	2.23E+01	1.92E+02	1.93E+02	0.414	0.586	1.859E+01	7.748E-01
66976.72	2.23E+01	1.92E+02	1.93E+02	0.414	0.586	1.860E+01	7.752E-01
67014.22	2.22E+01	1.92E+02	1.92E+02	0.414	0.585	1.862E+01	7.756E-01
67052.59	2.22E+01	1.92E+02	1.92E+02	0.414	0.585	1.863E+01	7.761E-01
67090.47	2.22E+01	1.92E+02	1.92E+02	0.414	0.585	1.864E+01	7.765E-01
67127.91	2.22E+01	1.92E+02	1.92E+02	0.414	0.585	1.865E+01	7.769E-01
67166.03	2.22E+01	1.92E+02	1.92E+02	0.414	0.585	1.866E+01	7.774E-01
67205.16	2.22E+01	1.92E+02	1.92E+02	0.414	0.585	1.867E+01	7.778E-01
67242.78	2.22E+01	1.92E+02	1.92E+02	0.414	0.585	1.868E+01	7.783E-01
67280.53	2.22E+01	1.92E+02	1.92E+02	0.414	0.585	1.869E+01	7.787E-01
67319.03	2.22E+01	1.92E+02	1.92E+02	0.414	0.585	1.870E+01	7.792E-01
67357.66	2.22E+01	1.92E+02	1.92E+02	0.414	0.585	1.871E+01	7.796E-01
67395.28	2.22E+01	1.92E+02	1.92E+02	0.414	0.585	1.872E+01	7.800E-01
67433.41	2.22E+01	1.92E+02	1.92E+02	0.413	0.585	1.873E+01	7.805E-01
67471.16	2.22E+01	1.92E+02	1.92E+02	0.413	0.585	1.874E+01	7.809E-01
67509.41	2.22E+01	1.92E+02	1.92E+02	0.413	0.585	1.875E+01	7.814E-01
67547.03	2.22E+01	1.92E+02	1.92E+02	0.413	0.585	1.876E+01	7.818E-01
67584.34	2.22E+01	1.92E+02	1.92E+02	0.413	0.585	1.877E+01	7.822E-01
67622.22	2.22E+01	1.92E+02	1.92E+02	0.413	0.585	1.878E+01	7.827E-01
67660.72	2.22E+01	1.92E+02	1.92E+02	0.413	0.585	1.879E+01	7.831E-01
67698.59	2.22E+01	1.92E+02	1.92E+02	0.413	0.585	1.881E+01	7.835E-01
67736.34	2.22E+01	1.92E+02	1.92E+02	0.413	0.584	1.882E+01	7.840E-01
67774.72	2.22E+01	1.92E+02	1.92E+02	0.413	0.584	1.883E+01	7.844E-01
67812.22	2.22E+01	1.92E+02	1.92E+02	0.413	0.584	1.884E+01	7.849E-01
67849.97	2.22E+01	1.92E+02	1.92E+02	0.413	0.584	1.885E+01	7.853E-01
67888.34	2.22E+01	1.92E+02	1.92E+02	0.413	0.584	1.886E+01	7.857E-01
67925.97	2.22E+01	1.92E+02	1.92E+02	0.413	0.584	1.887E+01	7.862E-01
67963.72	2.22E+01	1.92E+02	1.92E+02	0.413	0.584	1.888E+01	7.866E-01
68002.97	2.22E+01	1.92E+02	1.92E+02	0.413	0.583	1.889E+01	7.871E-01
68041.47	2.22E+01	1.92E+02	1.92E+02	0.413	0.583	1.890E+01	7.875E-01
68079.03	2.22E+01	1.92E+02	1.92E+02	0.413	0.584	1.891E+01	7.880E-01
68116.66	2.22E+01	1.92E+02	1.92E+02	0.413	0.584	1.892E+01	7.884E-01
68155.41	2.22E+01	1.92E+02	1.92E+02	0.413	0.583	1.893E+01	7.888E-01
68193.78	2.22E+01	1.92E+02	1.92E+02	0.413	0.583	1.894E+01	7.893E-01
68231.66	2.22E+01	1.91E+02	1.92E+02	0.413	0.583	1.895E+01	7.897E-01
68269.78	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.896E+01	7.902E-01
68307.78	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.897E+01	7.906E-01
68345.53	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.898E+01	7.910E-01
68383.16	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.900E+01	7.915E-01

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
68422.03	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.901E+01	7.919E-01
68459.66	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.902E+01	7.924E-01
68497.16	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.903E+01	7.928E-01
68535.03	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.904E+01	7.932E-01
68573.34	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.905E+01	7.937E-01
68611.34	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.906E+01	7.941E-01
68649.34	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.907E+01	7.946E-01
68687.59	2.22E+01	1.91E+02	1.92E+02	0.412	0.583	1.908E+01	7.950E-01
68725.34	2.22E+01	1.91E+02	1.92E+02	0.412	0.582	1.909E+01	7.954E-01
68763.59	2.22E+01	1.91E+02	1.92E+02	0.412	0.582	1.910E+01	7.959E-01
68801.34	2.22E+01	1.91E+02	1.92E+02	0.412	0.582	1.911E+01	7.963E-01
68839.47	2.22E+01	1.91E+02	1.92E+02	0.412	0.582	1.912E+01	7.968E-01
68877.34	2.22E+01	1.91E+02	1.92E+02	0.412	0.582	1.913E+01	7.972E-01
68914.84	2.22E+01	1.91E+02	1.92E+02	0.411	0.582	1.914E+01	7.976E-01
68952.84	2.22E+01	1.91E+02	1.92E+02	0.411	0.582	1.915E+01	7.981E-01
68991.22	2.22E+01	1.91E+02	1.92E+02	0.411	0.582	1.916E+01	7.985E-01
69029.59	2.21E+01	1.91E+02	1.92E+02	0.411	0.582	1.917E+01	7.990E-01
69067.66	2.22E+01	1.91E+02	1.92E+02	0.411	0.582	1.919E+01	7.994E-01
69105.53	2.22E+01	1.91E+02	1.92E+02	0.411	0.582	1.920E+01	7.998E-01
69143.41	2.22E+01	1.91E+02	1.92E+02	0.411	0.582	1.921E+01	8.003E-01
69181.16	2.21E+01	1.91E+02	1.92E+02	0.411	0.582	1.922E+01	8.007E-01
69219.03	2.21E+01	1.91E+02	1.92E+02	0.411	0.582	1.923E+01	8.011E-01
69257.16	2.21E+01	1.91E+02	1.92E+02	0.411	0.582	1.924E+01	8.016E-01
69295.03	2.21E+01	1.91E+02	1.92E+02	0.411	0.582	1.925E+01	8.020E-01
69332.66	2.21E+01	1.91E+02	1.92E+02	0.411	0.582	1.926E+01	8.025E-01
69370.28	2.21E+01	1.91E+02	1.92E+02	0.411	0.581	1.927E+01	8.029E-01
69408.41	2.21E+01	1.91E+02	1.92E+02	0.411	0.581	1.928E+01	8.033E-01
69446.28	2.21E+01	1.91E+02	1.92E+02	0.411	0.581	1.929E+01	8.038E-01
69483.78	2.21E+01	1.91E+02	1.92E+02	0.411	0.581	1.930E+01	8.042E-01
69521.28	2.21E+01	1.91E+02	1.92E+02	0.411	0.581	1.931E+01	8.046E-01
69559.22	2.21E+01	1.91E+02	1.92E+02	0.411	0.581	1.932E+01	8.051E-01
69597.47	2.21E+01	1.91E+02	1.92E+02	0.411	0.581	1.933E+01	8.055E-01
69635.97	2.21E+01	1.91E+02	1.92E+02	0.411	0.581	1.934E+01	8.060E-01
69673.47	2.21E+01	1.91E+02	1.92E+02	0.411	0.581	1.935E+01	8.064E-01
69710.97	2.21E+01	1.91E+02	1.92E+02	0.411	0.581	1.936E+01	8.068E-01
69749.59	2.21E+01	1.91E+02	1.92E+02	0.411	0.581	1.937E+01	8.073E-01
69787.47	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.939E+01	8.077E-01
69826.22	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.940E+01	8.082E-01
69864.09	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.941E+01	8.086E-01
69902.22	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.942E+01	8.091E-01
69939.84	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.943E+01	8.095E-01
69977.72	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.944E+01	8.099E-01
70015.47	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.945E+01	8.104E-01
70053.41	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.946E+01	8.108E-01
70091.41	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.947E+01	8.112E-01
70129.66	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.948E+01	8.117E-01
70168.03	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.949E+01	8.121E-01
70206.03	2.21E+01	1.91E+02	1.92E+02	0.410	0.580	1.950E+01	8.126E-01
70244.28	2.21E+01	1.91E+02	1.91E+02	0.410	0.580	1.951E+01	8.130E-01
70282.41	2.21E+01	1.91E+02	1.91E+02	0.410	0.580	1.952E+01	8.135E-01
70320.16	2.21E+01	1.91E+02	1.91E+02	0.410	0.580	1.953E+01	8.139E-01
70357.78	2.21E+01	1.91E+02	1.91E+02	0.410	0.580	1.954E+01	8.143E-01

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
70395.28	2.21E+01	1.91E+02	1.91E+02	0.410	0.579	1.955E+01	8.148E-01
70432.91	2.21E+01	1.91E+02	1.91E+02	0.410	0.579	1.956E+01	8.152E-01
70470.91	2.21E+01	1.91E+02	1.91E+02	0.410	0.579	1.958E+01	8.156E-01
70508.41	2.21E+01	1.91E+02	1.91E+02	0.409	0.579	1.959E+01	8.161E-01
70545.97	2.21E+01	1.91E+02	1.91E+02	0.410	0.579	1.960E+01	8.165E-01
70583.72	2.21E+01	1.91E+02	1.91E+02	0.410	0.579	1.961E+01	8.169E-01
70621.59	2.21E+01	1.91E+02	1.91E+02	0.410	0.579	1.962E+01	8.174E-01
70659.09	2.21E+01	1.91E+02	1.91E+02	0.410	0.579	1.963E+01	8.178E-01
70696.59	2.21E+01	1.91E+02	1.91E+02	0.409	0.579	1.964E+01	8.182E-01
70734.72	2.21E+01	1.91E+02	1.91E+02	0.409	0.579	1.965E+01	8.187E-01
70772.34	2.21E+01	1.91E+02	1.91E+02	0.409	0.579	1.966E+01	8.191E-01
70811.09	2.21E+01	1.91E+02	1.91E+02	0.409	0.579	1.967E+01	8.196E-01
70848.59	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.968E+01	8.200E-01
70886.47	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.969E+01	8.204E-01
70925.22	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.970E+01	8.209E-01
70962.84	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.971E+01	8.213E-01
71000.97	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.972E+01	8.218E-01
71038.47	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.973E+01	8.222E-01
71075.78	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.974E+01	8.226E-01
71113.41	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.975E+01	8.231E-01
71150.91	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.976E+01	8.235E-01
71188.53	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.977E+01	8.239E-01
71226.66	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.979E+01	8.244E-01
71264.78	2.21E+01	1.91E+02	1.91E+02	0.409	0.578	1.980E+01	8.248E-01
71302.41	2.20E+01	1.91E+02	1.91E+02	0.408	0.578	1.981E+01	8.253E-01
71340.91	2.20E+01	1.91E+02	1.91E+02	0.408	0.578	1.982E+01	8.257E-01
71379.16	2.20E+01	1.91E+02	1.91E+02	0.408	0.578	1.983E+01	8.261E-01
71416.78	2.20E+01	1.91E+02	1.91E+02	0.408	0.577	1.984E+01	8.266E-01
71454.28	2.20E+01	1.91E+02	1.91E+02	0.408	0.577	1.985E+01	8.270E-01
71492.03	2.20E+01	1.91E+02	1.91E+02	0.408	0.577	1.986E+01	8.275E-01
71529.66	2.20E+01	1.90E+02	1.91E+02	0.408	0.577	1.987E+01	8.279E-01
71566.97	2.20E+01	1.90E+02	1.91E+02	0.408	0.577	1.988E+01	8.283E-01
71605.09	2.20E+01	1.90E+02	1.91E+02	0.408	0.577	1.989E+01	8.288E-01
71642.84	2.20E+01	1.90E+02	1.91E+02	0.408	0.577	1.990E+01	8.292E-01
71680.72	2.20E+01	1.90E+02	1.91E+02	0.408	0.577	1.991E+01	8.296E-01
71718.84	2.20E+01	1.90E+02	1.91E+02	0.408	0.577	1.992E+01	8.301E-01
71756.34	2.20E+01	1.90E+02	1.91E+02	0.408	0.577	1.993E+01	8.305E-01
71793.97	2.20E+01	1.90E+02	1.91E+02	0.408	0.577	1.994E+01	8.309E-01
71831.47	2.20E+01	1.90E+02	1.91E+02	0.408	0.577	1.995E+01	8.314E-01
71869.34	2.20E+01	1.90E+02	1.91E+02	0.408	0.577	1.996E+01	8.318E-01
71907.09	2.20E+01	1.90E+02	1.91E+02	0.408	0.576	1.997E+01	8.323E-01
71944.72	2.20E+01	1.90E+02	1.91E+02	0.408	0.576	1.998E+01	8.327E-01
71982.34	2.20E+01	1.90E+02	1.91E+02	0.408	0.576	2.000E+01	8.331E-01
72020.59	2.20E+01	1.90E+02	1.91E+02	0.407	0.576	2.001E+01	8.336E-01
72058.09	2.20E+01	1.90E+02	1.91E+02	0.407	0.576	2.002E+01	8.340E-01
72095.66	2.20E+01	1.90E+02	1.91E+02	0.408	0.576	2.003E+01	8.344E-01
72133.53	2.20E+01	1.90E+02	1.91E+02	0.408	0.576	2.004E+01	8.349E-01
72172.41	2.20E+01	1.90E+02	1.91E+02	0.407	0.576	2.005E+01	8.353E-01
72209.91	2.20E+01	1.90E+02	1.91E+02	0.407	0.576	2.006E+01	8.358E-01
72247.53	2.20E+01	1.90E+02	1.91E+02	0.407	0.576	2.007E+01	8.362E-01
72285.66	2.20E+01	1.90E+02	1.91E+02	0.407	0.576	2.008E+01	8.366E-01
72323.66	2.20E+01	1.90E+02	1.91E+02	0.407	0.576	2.009E+01	8.371E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
72361.41	2.20E+01	1.90E+02	1.91E+02	0.407	0.576	2.010E+01	8.375E-01
72399.03	2.20E+01	1.90E+02	1.91E+02	0.407	0.576	2.011E+01	8.380E-01
72437.03	2.20E+01	1.90E+02	1.91E+02	0.407	0.576	2.012E+01	8.384E-01
72474.91	2.20E+01	1.90E+02	1.91E+02	0.407	0.575	2.013E+01	8.388E-01
72513.53	2.20E+01	1.90E+02	1.91E+02	0.407	0.575	2.014E+01	8.393E-01
72551.66	2.20E+01	1.90E+02	1.91E+02	0.407	0.575	2.015E+01	8.397E-01
72589.84	2.20E+01	1.90E+02	1.91E+02	0.407	0.576	2.016E+01	8.402E-01
72627.34	2.20E+01	1.90E+02	1.91E+02	0.407	0.575	2.017E+01	8.406E-01
72664.97	2.20E+01	1.90E+02	1.91E+02	0.407	0.575	2.018E+01	8.410E-01
72703.22	2.20E+01	1.90E+02	1.91E+02	0.407	0.575	2.020E+01	8.415E-01
72740.97	2.20E+01	1.90E+02	1.91E+02	0.407	0.575	2.021E+01	8.419E-01
72779.59	2.20E+01	1.90E+02	1.91E+02	0.406	0.575	2.022E+01	8.424E-01
72817.97	2.20E+01	1.90E+02	1.91E+02	0.406	0.575	2.023E+01	8.428E-01
72855.72	2.20E+01	1.90E+02	1.91E+02	0.406	0.575	2.024E+01	8.432E-01
72893.22	2.20E+01	1.90E+02	1.91E+02	0.406	0.575	2.025E+01	8.437E-01
72931.84	2.20E+01	1.90E+02	1.91E+02	0.406	0.574	2.026E+01	8.441E-01
72970.22	2.20E+01	1.90E+02	1.91E+02	0.406	0.574	2.027E+01	8.446E-01
73007.97	2.20E+01	1.90E+02	1.91E+02	0.406	0.574	2.028E+01	8.450E-01
73045.59	2.20E+01	1.90E+02	1.91E+02	0.406	0.574	2.029E+01	8.454E-01
73083.09	2.20E+01	1.90E+02	1.91E+02	0.406	0.574	2.030E+01	8.459E-01
73120.53	2.20E+01	1.90E+02	1.91E+02	0.406	0.574	2.031E+01	8.463E-01
73159.03	2.20E+01	1.90E+02	1.91E+02	0.406	0.574	2.032E+01	8.467E-01
73196.53	2.20E+01	1.90E+02	1.91E+02	0.406	0.574	2.033E+01	8.472E-01
73234.16	2.20E+01	1.90E+02	1.91E+02	0.406	0.574	2.034E+01	8.476E-01
73271.66	2.20E+01	1.90E+02	1.91E+02	0.406	0.574	2.035E+01	8.481E-01
73309.41	2.20E+01	1.90E+02	1.91E+02	0.406	0.574	2.036E+01	8.485E-01
73346.91	2.19E+01	1.90E+02	1.91E+02	0.406	0.574	2.037E+01	8.489E-01
73385.91	2.19E+01	1.90E+02	1.91E+02	0.406	0.574	2.038E+01	8.494E-01
73423.66	2.19E+01	1.90E+02	1.91E+02	0.406	0.574	2.040E+01	8.498E-01
73461.78	2.19E+01	1.90E+02	1.91E+02	0.406	0.574	2.041E+01	8.503E-01
73499.41	2.19E+01	1.90E+02	1.91E+02	0.406	0.574	2.042E+01	8.507E-01
73537.16	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.043E+01	8.511E-01
73574.66	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.044E+01	8.516E-01
73612.16	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.045E+01	8.520E-01
73650.59	2.19E+01	1.90E+02	1.90E+02	0.406	0.574	2.046E+01	8.524E-01
73688.72	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.047E+01	8.529E-01
73726.34	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.048E+01	8.533E-01
73764.47	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.049E+01	8.538E-01
73801.97	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.050E+01	8.542E-01
73840.34	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.051E+01	8.546E-01
73878.09	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.052E+01	8.551E-01
73915.72	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.053E+01	8.555E-01
73953.59	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.054E+01	8.559E-01
73991.22	2.19E+01	1.90E+02	1.90E+02	0.405	0.572	2.055E+01	8.564E-01
74028.84	2.19E+01	1.90E+02	1.90E+02	0.405	0.572	2.056E+01	8.568E-01
74067.09	2.19E+01	1.90E+02	1.90E+02	0.405	0.572	2.057E+01	8.573E-01
74104.91	2.19E+01	1.90E+02	1.90E+02	0.405	0.573	2.058E+01	8.577E-01
74142.41	2.19E+01	1.90E+02	1.90E+02	0.405	0.572	2.060E+01	8.581E-01
74180.16	2.19E+01	1.90E+02	1.90E+02	0.405	0.572	2.061E+01	8.586E-01
74217.91	2.19E+01	1.90E+02	1.90E+02	0.405	0.572	2.062E+01	8.590E-01
74256.03	2.19E+01	1.90E+02	1.90E+02	0.405	0.572	2.063E+01	8.594E-01
74294.41	2.19E+01	1.90E+02	1.90E+02	0.405	0.572	2.064E+01	8.599E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
74333.41	2.19E+01	1.90E+02	1.90E+02	0.405	0.572	2.065E+01	8.603E-01
74372.53	2.19E+01	1.90E+02	1.90E+02	0.405	0.572	2.066E+01	8.608E-01
74410.03	2.19E+01	1.90E+02	1.90E+02	0.405	0.572	2.067E+01	8.612E-01
74447.53	2.19E+01	1.90E+02	1.90E+02	0.404	0.572	2.068E+01	8.617E-01
74485.53	2.19E+01	1.90E+02	1.90E+02	0.404	0.572	2.069E+01	8.621E-01
74523.53	2.19E+01	1.90E+02	1.90E+02	0.404	0.572	2.070E+01	8.625E-01
74561.78	2.19E+01	1.90E+02	1.90E+02	0.404	0.572	2.071E+01	8.630E-01
74599.66	2.19E+01	1.90E+02	1.90E+02	0.404	0.572	2.072E+01	8.634E-01
74637.59	2.19E+01	1.90E+02	1.90E+02	0.404	0.572	2.073E+01	8.639E-01
74675.22	2.19E+01	1.90E+02	1.90E+02	0.404	0.572	2.074E+01	8.643E-01
74713.22	2.19E+01	1.90E+02	1.90E+02	0.404	0.572	2.075E+01	8.647E-01
74751.84	2.19E+01	1.90E+02	1.90E+02	0.404	0.572	2.076E+01	8.652E-01
74789.84	2.19E+01	1.90E+02	1.90E+02	0.404	0.571	2.077E+01	8.656E-01
74827.72	2.19E+01	1.89E+02	1.90E+02	0.404	0.571	2.079E+01	8.661E-01
74865.84	2.19E+01	1.89E+02	1.90E+02	0.404	0.571	2.080E+01	8.665E-01
74903.34	2.19E+01	1.89E+02	1.90E+02	0.404	0.571	2.081E+01	8.669E-01
74940.97	2.19E+01	1.89E+02	1.90E+02	0.404	0.571	2.082E+01	8.674E-01
74978.84	2.19E+01	1.89E+02	1.90E+02	0.404	0.571	2.083E+01	8.678E-01
75017.59	2.19E+01	1.89E+02	1.90E+02	0.404	0.571	2.084E+01	8.683E-01
75055.47	2.19E+01	1.89E+02	1.90E+02	0.404	0.571	2.085E+01	8.687E-01
75093.09	2.19E+01	1.89E+02	1.90E+02	0.403	0.570	2.086E+01	8.691E-01
75131.16	2.19E+01	1.89E+02	1.90E+02	0.404	0.571	2.087E+01	8.696E-01
75169.28	2.19E+01	1.89E+02	1.90E+02	0.404	0.571	2.088E+01	8.700E-01
75207.78	2.19E+01	1.89E+02	1.90E+02	0.403	0.570	2.089E+01	8.705E-01
75245.28	2.19E+01	1.89E+02	1.90E+02	0.403	0.570	2.090E+01	8.709E-01
75283.28	2.19E+01	1.89E+02	1.90E+02	0.403	0.570	2.091E+01	8.713E-01
75321.16	2.19E+01	1.89E+02	1.90E+02	0.403	0.570	2.092E+01	8.718E-01
75359.53	2.19E+01	1.89E+02	1.90E+02	0.403	0.570	2.093E+01	8.722E-01
75397.03	2.19E+01	1.89E+02	1.90E+02	0.403	0.570	2.094E+01	8.727E-01
75435.66	2.19E+01	1.89E+02	1.90E+02	0.403	0.570	2.095E+01	8.731E-01
75473.53	2.19E+01	1.89E+02	1.90E+02	0.403	0.570	2.096E+01	8.735E-01
75511.16	2.18E+01	1.89E+02	1.90E+02	0.403	0.570	2.098E+01	8.740E-01
75548.66	2.18E+01	1.89E+02	1.90E+02	0.403	0.570	2.099E+01	8.744E-01
75586.78	2.18E+01	1.89E+02	1.90E+02	0.403	0.570	2.100E+01	8.748E-01
75624.91	2.18E+01	1.89E+02	1.90E+02	0.403	0.570	2.101E+01	8.753E-01
75662.34	2.18E+01	1.89E+02	1.90E+02	0.403	0.570	2.102E+01	8.757E-01
75700.34	2.18E+01	1.89E+02	1.90E+02	0.403	0.570	2.103E+01	8.762E-01
75738.22	2.18E+01	1.89E+02	1.90E+02	0.403	0.570	2.104E+01	8.766E-01
75775.97	2.18E+01	1.89E+02	1.90E+02	0.403	0.570	2.105E+01	8.770E-01
75813.47	2.18E+01	1.89E+02	1.90E+02	0.403	0.570	2.106E+01	8.775E-01
75851.59	2.18E+01	1.89E+02	1.90E+02	0.403	0.569	2.107E+01	8.779E-01
75890.09	2.18E+01	1.89E+02	1.90E+02	0.403	0.569	2.108E+01	8.784E-01
75928.72	2.18E+01	1.89E+02	1.90E+02	0.403	0.569	2.109E+01	8.788E-01
75966.47	2.18E+01	1.89E+02	1.90E+02	0.403	0.569	2.110E+01	8.792E-01
76004.72	2.18E+01	1.89E+02	1.90E+02	0.402	0.569	2.111E+01	8.797E-01
76042.84	2.18E+01	1.89E+02	1.90E+02	0.402	0.569	2.112E+01	8.801E-01
76080.47	2.18E+01	1.89E+02	1.90E+02	0.402	0.569	2.113E+01	8.806E-01
76118.09	2.18E+01	1.89E+02	1.90E+02	0.402	0.568	2.114E+01	8.810E-01
76156.41	2.18E+01	1.89E+02	1.90E+02	0.402	0.569	2.115E+01	8.814E-01
76193.91	2.18E+01	1.89E+02	1.90E+02	0.402	0.569	2.116E+01	8.819E-01
76232.16	2.18E+01	1.89E+02	1.90E+02	0.402	0.569	2.118E+01	8.823E-01
76270.28	2.18E+01	1.89E+02	1.90E+02	0.402	0.569	2.119E+01	8.828E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
76309.03	2.18E+01	1.89E+02	1.90E+02	0.402	0.568	2.120E+01	8.832E-01
76347.53	2.18E+01	1.89E+02	1.90E+02	0.402	0.568	2.121E+01	8.837E-01
76385.41	2.18E+01	1.89E+02	1.90E+02	0.402	0.568	2.122E+01	8.841E-01
76423.53	2.18E+01	1.89E+02	1.90E+02	0.402	0.568	2.123E+01	8.845E-01
76461.16	2.18E+01	1.89E+02	1.90E+02	0.402	0.568	2.124E+01	8.850E-01
76499.16	2.18E+01	1.89E+02	1.90E+02	0.402	0.568	2.125E+01	8.854E-01
76536.66	2.18E+01	1.89E+02	1.90E+02	0.402	0.568	2.126E+01	8.858E-01
76574.41	2.18E+01	1.89E+02	1.90E+02	0.402	0.568	2.127E+01	8.863E-01
76612.28	2.18E+01	1.89E+02	1.90E+02	0.401	0.568	2.128E+01	8.867E-01
76650.03	2.18E+01	1.89E+02	1.90E+02	0.401	0.568	2.129E+01	8.872E-01
76687.47	2.18E+01	1.89E+02	1.90E+02	0.402	0.568	2.130E+01	8.876E-01
76725.09	2.18E+01	1.89E+02	1.90E+02	0.401	0.568	2.131E+01	8.880E-01
76762.72	2.18E+01	1.89E+02	1.90E+02	0.401	0.568	2.132E+01	8.885E-01
76800.47	2.18E+01	1.89E+02	1.90E+02	0.401	0.568	2.133E+01	8.889E-01
76838.09	2.18E+01	1.89E+02	1.89E+02	0.401	0.568	2.134E+01	8.893E-01
76875.59	2.18E+01	1.89E+02	1.89E+02	0.401	0.568	2.135E+01	8.898E-01
76913.59	2.18E+01	1.89E+02	1.89E+02	0.401	0.568	2.136E+01	8.902E-01
76952.22	2.18E+01	1.89E+02	1.89E+02	0.401	0.567	2.138E+01	8.907E-01
76990.22	2.18E+01	1.89E+02	1.89E+02	0.401	0.567	2.139E+01	8.911E-01
77027.97	2.18E+01	1.89E+02	1.89E+02	0.401	0.567	2.140E+01	8.915E-01
77066.34	2.18E+01	1.89E+02	1.89E+02	0.401	0.567	2.141E+01	8.920E-01
77104.72	2.18E+01	1.89E+02	1.89E+02	0.401	0.567	2.142E+01	8.924E-01
77142.22	2.18E+01	1.89E+02	1.89E+02	0.401	0.567	2.143E+01	8.928E-01
77179.66	2.18E+01	1.89E+02	1.89E+02	0.401	0.567	2.144E+01	8.933E-01
77217.28	2.18E+01	1.89E+02	1.89E+02	0.401	0.567	2.145E+01	8.937E-01
77255.66	2.18E+01	1.89E+02	1.89E+02	0.401	0.567	2.146E+01	8.942E-01
77293.41	2.18E+01	1.89E+02	1.89E+02	0.401	0.567	2.147E+01	8.946E-01
77331.03	2.18E+01	1.89E+02	1.89E+02	0.401	0.567	2.148E+01	8.950E-01
77369.03	2.18E+01	1.89E+02	1.89E+02	0.401	0.566	2.149E+01	8.955E-01
77407.28	2.18E+01	1.89E+02	1.89E+02	0.401	0.566	2.150E+01	8.959E-01
77445.16	2.18E+01	1.89E+02	1.89E+02	0.401	0.566	2.151E+01	8.964E-01
77483.28	2.18E+01	1.89E+02	1.89E+02	0.401	0.566	2.152E+01	8.968E-01
77521.03	2.18E+01	1.89E+02	1.89E+02	0.401	0.566	2.153E+01	8.972E-01
77558.78	2.18E+01	1.89E+02	1.89E+02	0.400	0.566	2.154E+01	8.977E-01
77596.41	2.18E+01	1.89E+02	1.89E+02	0.400	0.566	2.155E+01	8.981E-01
77634.28	2.18E+01	1.89E+02	1.89E+02	0.400	0.566	2.157E+01	8.985E-01
77671.78	2.18E+01	1.89E+02	1.89E+02	0.400	0.566	2.158E+01	8.990E-01
77709.97	2.18E+01	1.89E+02	1.89E+02	0.400	0.566	2.159E+01	8.994E-01
77747.59	2.18E+01	1.89E+02	1.89E+02	0.400	0.566	2.160E+01	8.999E-01
77785.47	2.18E+01	1.89E+02	1.89E+02	0.400	0.566	2.161E+01	9.003E-01
77823.47	2.18E+01	1.89E+02	1.89E+02	0.400	0.566	2.162E+01	9.007E-01
77861.84	2.17E+01	1.89E+02	1.89E+02	0.400	0.566	2.163E+01	9.012E-01
77899.47	2.17E+01	1.89E+02	1.89E+02	0.400	0.566	2.164E+01	9.016E-01
77937.59	2.17E+01	1.89E+02	1.89E+02	0.400	0.566	2.165E+01	9.021E-01
77975.72	2.17E+01	1.89E+02	1.89E+02	0.400	0.566	2.166E+01	9.025E-01
78013.72	2.17E+01	1.89E+02	1.89E+02	0.400	0.565	2.167E+01	9.029E-01
78051.22	2.17E+01	1.89E+02	1.89E+02	0.400	0.565	2.168E+01	9.034E-01
78089.47	2.17E+01	1.89E+02	1.89E+02	0.400	0.565	2.169E+01	9.038E-01
78127.09	2.17E+01	1.89E+02	1.89E+02	0.400	0.565	2.170E+01	9.042E-01
78165.22	2.17E+01	1.88E+02	1.89E+02	0.399	0.565	2.171E+01	9.047E-01
78203.16	2.17E+01	1.88E+02	1.89E+02	0.400	0.565	2.172E+01	9.051E-01
78241.03	2.17E+01	1.88E+02	1.89E+02	0.400	0.565	2.173E+01	9.056E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
78278.78	2.17E+01	1.88E+02	1.89E+02	0.399	0.565	2.174E+01	9.060E-01
78316.53	2.17E+01	1.88E+02	1.89E+02	0.399	0.565	2.175E+01	9.064E-01
78354.66	2.17E+01	1.88E+02	1.89E+02	0.399	0.565	2.177E+01	9.069E-01
78392.66	2.17E+01	1.88E+02	1.89E+02	0.399	0.565	2.178E+01	9.073E-01
78430.53	2.17E+01	1.88E+02	1.89E+02	0.399	0.565	2.179E+01	9.078E-01
78468.53	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.180E+01	9.082E-01
78506.16	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.181E+01	9.086E-01
78543.78	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.182E+01	9.091E-01
78581.66	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.183E+01	9.095E-01
78619.53	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.184E+01	9.099E-01
78657.16	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.185E+01	9.104E-01
78694.66	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.186E+01	9.108E-01
78731.97	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.187E+01	9.112E-01
78769.84	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.188E+01	9.117E-01
78807.84	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.189E+01	9.121E-01
78845.47	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.190E+01	9.126E-01
78883.09	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.191E+01	9.130E-01
78920.84	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.192E+01	9.134E-01
78958.72	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.193E+01	9.139E-01
78997.84	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.194E+01	9.143E-01
79036.84	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.195E+01	9.148E-01
79074.34	2.17E+01	1.88E+02	1.89E+02	0.399	0.564	2.197E+01	9.152E-01
79111.84	2.17E+01	1.88E+02	1.89E+02	0.398	0.563	2.198E+01	9.156E-01
79149.84	2.17E+01	1.88E+02	1.89E+02	0.398	0.563	2.199E+01	9.161E-01
79187.72	2.17E+01	1.88E+02	1.89E+02	0.398	0.563	2.200E+01	9.165E-01
79225.72	2.17E+01	1.88E+02	1.89E+02	0.398	0.563	2.201E+01	9.170E-01
79263.91	2.17E+01	1.88E+02	1.89E+02	0.398	0.563	2.202E+01	9.174E-01
79302.78	2.17E+01	1.88E+02	1.89E+02	0.398	0.563	2.203E+01	9.179E-01
79341.91	2.17E+01	1.88E+02	1.89E+02	0.398	0.563	2.204E+01	9.183E-01
79379.78	2.17E+01	1.88E+02	1.89E+02	0.398	0.563	2.205E+01	9.187E-01
79417.91	2.17E+01	1.88E+02	1.89E+02	0.398	0.563	2.206E+01	9.192E-01
79455.91	2.17E+01	1.88E+02	1.89E+02	0.398	0.563	2.207E+01	9.196E-01
79494.53	2.17E+01	1.88E+02	1.89E+02	0.398	0.563	2.208E+01	9.201E-01
79532.03	2.17E+01	1.88E+02	1.89E+02	0.398	0.562	2.209E+01	9.205E-01
79569.53	2.17E+01	1.88E+02	1.89E+02	0.398	0.562	2.210E+01	9.209E-01
79607.03	2.17E+01	1.88E+02	1.89E+02	0.398	0.562	2.211E+01	9.214E-01
79644.53	2.17E+01	1.88E+02	1.89E+02	0.398	0.562	2.212E+01	9.218E-01
79682.91	2.17E+01	1.88E+02	1.89E+02	0.398	0.562	2.213E+01	9.223E-01
79721.53	2.17E+01	1.88E+02	1.89E+02	0.397	0.562	2.214E+01	9.227E-01
79759.28	2.17E+01	1.88E+02	1.89E+02	0.397	0.562	2.216E+01	9.231E-01
79796.84	2.17E+01	1.88E+02	1.89E+02	0.398	0.562	2.217E+01	9.236E-01
79835.22	2.17E+01	1.88E+02	1.89E+02	0.398	0.562	2.218E+01	9.240E-01
79873.34	2.17E+01	1.88E+02	1.89E+02	0.397	0.562	2.219E+01	9.245E-01
79911.84	2.17E+01	1.88E+02	1.89E+02	0.397	0.562	2.220E+01	9.249E-01
79949.59	2.17E+01	1.88E+02	1.89E+02	0.397	0.562	2.221E+01	9.253E-01
79987.22	2.17E+01	1.88E+02	1.89E+02	0.397	0.562	2.222E+01	9.258E-01
80025.72	2.16E+01	1.88E+02	1.89E+02	0.397	0.562	2.223E+01	9.262E-01
80063.47	2.16E+01	1.88E+02	1.89E+02	0.397	0.562	2.224E+01	9.267E-01
80102.47	2.16E+01	1.88E+02	1.89E+02	0.397	0.562	2.225E+01	9.271E-01
80140.47	2.16E+01	1.88E+02	1.88E+02	0.397	0.562	2.226E+01	9.276E-01
80178.34	2.16E+01	1.88E+02	1.88E+02	0.397	0.562	2.227E+01	9.280E-01
80216.59	2.16E+01	1.88E+02	1.88E+02	0.397	0.561	2.228E+01	9.284E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
80254.97	2.16E+01	1.88E+02	1.88E+02	0.397	0.561	2.229E+01	9.289E-01
80293.41	2.16E+01	1.88E+02	1.88E+02	0.397	0.562	2.230E+01	9.293E-01
80331.16	2.16E+01	1.88E+02	1.88E+02	0.397	0.561	2.231E+01	9.298E-01
80369.53	2.16E+01	1.88E+02	1.88E+02	0.397	0.561	2.232E+01	9.302E-01
80407.41	2.16E+01	1.88E+02	1.88E+02	0.397	0.561	2.234E+01	9.306E-01
80445.78	2.16E+01	1.88E+02	1.88E+02	0.397	0.561	2.235E+01	9.311E-01
80484.28	2.16E+01	1.88E+02	1.88E+02	0.397	0.561	2.236E+01	9.315E-01
80522.28	2.16E+01	1.88E+02	1.88E+02	0.397	0.561	2.237E+01	9.320E-01
80560.03	2.16E+01	1.88E+02	1.88E+02	0.397	0.561	2.238E+01	9.324E-01
80598.16	2.16E+01	1.88E+02	1.88E+02	0.397	0.561	2.239E+01	9.328E-01
80635.91	2.16E+01	1.88E+02	1.88E+02	0.397	0.561	2.240E+01	9.333E-01
80673.66	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.241E+01	9.337E-01
80711.91	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.242E+01	9.342E-01
80749.41	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.243E+01	9.346E-01
80786.91	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.244E+01	9.350E-01
80824.59	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.245E+01	9.355E-01
80862.34	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.246E+01	9.359E-01
80899.84	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.247E+01	9.363E-01
80937.34	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.248E+01	9.368E-01
80974.84	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.249E+01	9.372E-01
81012.47	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.250E+01	9.376E-01
81050.47	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.251E+01	9.381E-01
81088.22	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.252E+01	9.385E-01
81126.47	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.254E+01	9.390E-01
81165.09	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.255E+01	9.394E-01
81203.22	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.256E+01	9.399E-01
81241.09	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.257E+01	9.403E-01
81278.72	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.258E+01	9.407E-01
81316.22	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.259E+01	9.412E-01
81353.53	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.260E+01	9.416E-01
81391.66	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.261E+01	9.420E-01
81429.66	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.262E+01	9.425E-01
81467.16	2.16E+01	1.88E+02	1.88E+02	0.396	0.560	2.263E+01	9.429E-01
81505.16	2.16E+01	1.87E+02	1.88E+02	0.395	0.559	2.264E+01	9.433E-01
81543.78	2.16E+01	1.87E+02	1.88E+02	0.395	0.559	2.265E+01	9.438E-01
81582.41	2.16E+01	1.87E+02	1.88E+02	0.395	0.559	2.266E+01	9.442E-01
81619.91	2.16E+01	1.87E+02	1.88E+02	0.395	0.559	2.267E+01	9.447E-01
81658.28	2.16E+01	1.87E+02	1.88E+02	0.395	0.559	2.268E+01	9.451E-01
81696.78	2.16E+01	1.87E+02	1.88E+02	0.395	0.559	2.269E+01	9.456E-01
81734.78	2.16E+01	1.87E+02	1.88E+02	0.395	0.559	2.270E+01	9.460E-01
81772.66	2.16E+01	1.87E+02	1.88E+02	0.395	0.559	2.271E+01	9.464E-01
81810.16	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.273E+01	9.469E-01
81848.53	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.274E+01	9.473E-01
81886.41	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.275E+01	9.478E-01
81924.22	2.16E+01	1.87E+02	1.88E+02	0.395	0.559	2.276E+01	9.482E-01
81961.84	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.277E+01	9.486E-01
82000.34	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.278E+01	9.491E-01
82038.59	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.279E+01	9.495E-01
82076.22	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.280E+01	9.500E-01
82114.09	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.281E+01	9.504E-01
82151.97	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.282E+01	9.508E-01
82190.22	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.283E+01	9.513E-01

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
82229.09	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.284E+01	9.517E-01
82266.72	2.15E+01	1.87E+02	1.88E+02	0.394	0.558	2.285E+01	9.522E-01
82304.22	2.15E+01	1.87E+02	1.88E+02	0.394	0.558	2.286E+01	9.526E-01
82341.72	2.15E+01	1.87E+02	1.88E+02	0.394	0.558	2.287E+01	9.530E-01
82379.97	2.15E+01	1.87E+02	1.88E+02	0.394	0.558	2.288E+01	9.535E-01
82417.72	2.15E+01	1.87E+02	1.88E+02	0.394	0.558	2.289E+01	9.539E-01
82455.91	2.16E+01	1.87E+02	1.88E+02	0.395	0.558	2.290E+01	9.544E-01
82494.28	2.15E+01	1.87E+02	1.88E+02	0.394	0.558	2.292E+01	9.548E-01
82532.03	2.15E+01	1.87E+02	1.88E+02	0.394	0.558	2.293E+01	9.552E-01
82570.28	2.15E+01	1.87E+02	1.88E+02	0.394	0.558	2.294E+01	9.557E-01
82608.66	2.15E+01	1.87E+02	1.88E+02	0.394	0.558	2.295E+01	9.561E-01
82646.53	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.296E+01	9.566E-01
82685.03	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.297E+01	9.570E-01
82722.78	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.298E+01	9.574E-01
82760.53	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.299E+01	9.579E-01
82799.03	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.300E+01	9.583E-01
82837.03	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.301E+01	9.588E-01
82875.28	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.302E+01	9.592E-01
82913.03	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.303E+01	9.596E-01
82950.72	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.304E+01	9.601E-01
82988.59	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.305E+01	9.605E-01
83026.09	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.306E+01	9.610E-01
83063.84	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.307E+01	9.614E-01
83101.47	2.15E+01	1.87E+02	1.88E+02	0.394	0.557	2.308E+01	9.618E-01
83139.47	2.15E+01	1.87E+02	1.88E+02	0.393	0.556	2.309E+01	9.623E-01
83177.22	2.15E+01	1.87E+02	1.88E+02	0.393	0.556	2.310E+01	9.627E-01
83214.72	2.15E+01	1.87E+02	1.88E+02	0.393	0.556	2.312E+01	9.631E-01
83253.09	2.15E+01	1.87E+02	1.88E+02	0.393	0.556	2.313E+01	9.636E-01
83291.09	2.15E+01	1.87E+02	1.88E+02	0.393	0.556	2.314E+01	9.640E-01
83329.59	2.15E+01	1.87E+02	1.88E+02	0.393	0.556	2.315E+01	9.645E-01
83367.09	2.15E+01	1.87E+02	1.88E+02	0.393	0.556	2.316E+01	9.649E-01
83405.59	2.15E+01	1.87E+02	1.88E+02	0.393	0.556	2.317E+01	9.653E-01
83443.97	2.15E+01	1.87E+02	1.88E+02	0.393	0.556	2.318E+01	9.658E-01
83481.47	2.15E+01	1.87E+02	1.87E+02	0.393	0.556	2.319E+01	9.662E-01
83518.91	2.15E+01	1.87E+02	1.87E+02	0.393	0.556	2.320E+01	9.667E-01
83557.16	2.15E+01	1.87E+02	1.87E+02	0.393	0.556	2.321E+01	9.671E-01
83595.16	2.15E+01	1.87E+02	1.87E+02	0.393	0.556	2.322E+01	9.675E-01
83633.41	2.15E+01	1.87E+02	1.87E+02	0.393	0.556	2.323E+01	9.680E-01
83671.41	2.15E+01	1.87E+02	1.87E+02	0.393	0.556	2.324E+01	9.684E-01
83709.03	2.15E+01	1.87E+02	1.87E+02	0.393	0.556	2.325E+01	9.689E-01
83747.41	2.15E+01	1.87E+02	1.87E+02	0.393	0.556	2.326E+01	9.693E-01
83784.91	2.15E+01	1.87E+02	1.87E+02	0.393	0.555	2.327E+01	9.697E-01
83823.91	2.15E+01	1.87E+02	1.87E+02	0.393	0.555	2.328E+01	9.702E-01
83861.91	2.15E+01	1.87E+02	1.87E+02	0.393	0.555	2.329E+01	9.706E-01
83899.78	2.15E+01	1.87E+02	1.87E+02	0.393	0.555	2.331E+01	9.711E-01
83937.41	2.15E+01	1.87E+02	1.87E+02	0.393	0.555	2.332E+01	9.715E-01
83975.03	2.15E+01	1.87E+02	1.87E+02	0.392	0.555	2.333E+01	9.719E-01
84012.66	2.15E+01	1.87E+02	1.87E+02	0.392	0.555	2.334E+01	9.724E-01
84050.47	2.15E+01	1.87E+02	1.87E+02	0.393	0.555	2.335E+01	9.728E-01
84088.22	2.15E+01	1.87E+02	1.87E+02	0.393	0.555	2.336E+01	9.732E-01
84126.34	2.15E+01	1.87E+02	1.87E+02	0.392	0.555	2.337E+01	9.737E-01
84163.84	2.15E+01	1.87E+02	1.87E+02	0.392	0.555	2.338E+01	9.741E-01

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
84201.47	2.15E+01	1.87E+02	1.87E+02	0.392	0.555	2.339E+01	9.746E-01
84239.22	2.15E+01	1.87E+02	1.87E+02	0.392	0.555	2.340E+01	9.750E-01
84276.72	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.341E+01	9.754E-01
84315.72	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.342E+01	9.759E-01
84353.59	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.343E+01	9.763E-01
84391.47	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.344E+01	9.768E-01
84429.34	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.345E+01	9.772E-01
84467.22	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.346E+01	9.776E-01
84504.72	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.347E+01	9.781E-01
84542.34	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.348E+01	9.785E-01
84580.09	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.349E+01	9.789E-01
84617.53	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.350E+01	9.794E-01
84656.03	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.352E+01	9.798E-01
84693.91	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.353E+01	9.803E-01
84732.91	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.354E+01	9.807E-01
84770.53	2.15E+01	1.87E+02	1.87E+02	0.392	0.554	2.355E+01	9.811E-01
84808.03	2.14E+01	1.87E+02	1.87E+02	0.391	0.554	2.356E+01	9.816E-01
84845.53	2.14E+01	1.87E+02	1.87E+02	0.391	0.554	2.357E+01	9.820E-01
84883.66	2.14E+01	1.87E+02	1.87E+02	0.391	0.554	2.358E+01	9.824E-01
84921.78	2.14E+01	1.87E+02	1.87E+02	0.391	0.554	2.359E+01	9.829E-01
84959.66	2.14E+01	1.86E+02	1.87E+02	0.391	0.554	2.360E+01	9.833E-01
84998.16	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.361E+01	9.838E-01
85036.28	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.362E+01	9.842E-01
85073.91	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.363E+01	9.847E-01
85111.53	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.364E+01	9.851E-01
85149.78	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.365E+01	9.855E-01
85187.59	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.366E+01	9.860E-01
85226.47	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.367E+01	9.864E-01
85265.34	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.368E+01	9.869E-01
85302.84	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.370E+01	9.873E-01
85341.97	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.371E+01	9.878E-01
85379.97	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.372E+01	9.882E-01
85417.72	2.14E+01	1.86E+02	1.87E+02	0.391	0.553	2.373E+01	9.886E-01
85455.47	2.14E+01	1.86E+02	1.87E+02	0.391	0.552	2.374E+01	9.891E-01
85492.97	2.14E+01	1.86E+02	1.87E+02	0.391	0.552	2.375E+01	9.895E-01
85531.09	2.14E+01	1.86E+02	1.87E+02	0.391	0.552	2.376E+01	9.899E-01
85568.84	2.14E+01	1.86E+02	1.87E+02	0.391	0.552	2.377E+01	9.904E-01
85606.97	2.14E+01	1.86E+02	1.87E+02	0.390	0.552	2.378E+01	9.908E-01
85644.59	2.14E+01	1.86E+02	1.87E+02	0.390	0.552	2.379E+01	9.913E-01
85682.09	2.14E+01	1.86E+02	1.87E+02	0.390	0.552	2.380E+01	9.917E-01
85719.66	2.14E+01	1.86E+02	1.87E+02	0.391	0.552	2.381E+01	9.921E-01
85758.03	2.14E+01	1.86E+02	1.87E+02	0.391	0.552	2.382E+01	9.926E-01
85795.78	2.14E+01	1.86E+02	1.87E+02	0.391	0.552	2.383E+01	9.930E-01
85833.41	2.14E+01	1.86E+02	1.87E+02	0.390	0.552	2.384E+01	9.934E-01
85871.41	2.14E+01	1.86E+02	1.87E+02	0.390	0.552	2.385E+01	9.939E-01
85908.91	2.14E+01	1.86E+02	1.87E+02	0.390	0.552	2.386E+01	9.943E-01
85947.03	2.14E+01	1.86E+02	1.87E+02	0.390	0.552	2.387E+01	9.948E-01
85985.66	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.388E+01	9.952E-01
86023.78	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.390E+01	9.956E-01
86061.28	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.391E+01	9.961E-01
86099.28	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.392E+01	9.965E-01
86137.53	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.393E+01	9.970E-01

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44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
86175.03	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.394E+01	9.974E-01
86212.53	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.395E+01	9.978E-01
86250.78	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.396E+01	9.983E-01
86288.09	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.397E+01	9.987E-01
86326.47	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.398E+01	9.991E-01
86363.97	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.399E+01	9.996E-01
86403.59	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.400E+01	1.000E+00
86441.97	2.14E+01	1.86E+02	1.87E+02	0.390	0.551	2.401E+01	1.000E+00
86479.72	2.14E+01	1.86E+02	1.87E+02	0.389	0.551	2.402E+01	1.001E+00
86517.59	2.14E+01	1.86E+02	1.87E+02	0.389	0.551	2.403E+01	1.001E+00
86556.34	2.14E+01	1.86E+02	1.87E+02	0.389	0.551	2.404E+01	1.002E+00
86594.84	2.14E+01	1.86E+02	1.87E+02	0.389	0.551	2.405E+01	1.002E+00
86632.97	2.14E+01	1.86E+02	1.87E+02	0.389	0.551	2.406E+01	1.003E+00
86670.59	2.14E+01	1.86E+02	1.87E+02	0.389	0.550	2.408E+01	1.003E+00
86708.09	2.14E+01	1.86E+02	1.87E+02	0.389	0.550	2.409E+01	1.004E+00
86745.72	2.14E+01	1.86E+02	1.87E+02	0.389	0.550	2.410E+01	1.004E+00
86783.47	2.14E+01	1.86E+02	1.87E+02	0.389	0.550	2.411E+01	1.004E+00
86821.16	2.14E+01	1.86E+02	1.87E+02	0.389	0.550	2.412E+01	1.005E+00
86858.66	2.14E+01	1.86E+02	1.87E+02	0.389	0.550	2.413E+01	1.005E+00
86897.03	2.14E+01	1.86E+02	1.87E+02	0.389	0.550	2.414E+01	1.006E+00
86934.91	2.14E+01	1.86E+02	1.86E+02	0.389	0.550	2.415E+01	1.006E+00
86972.91	2.14E+01	1.86E+02	1.86E+02	0.389	0.550	2.416E+01	1.007E+00
87010.66	2.14E+01	1.86E+02	1.86E+02	0.389	0.550	2.417E+01	1.007E+00
87048.41	2.14E+01	1.86E+02	1.86E+02	0.389	0.550	2.418E+01	1.008E+00
87086.41	2.14E+01	1.86E+02	1.86E+02	0.389	0.550	2.419E+01	1.008E+00
87124.28	2.14E+01	1.86E+02	1.86E+02	0.389	0.550	2.420E+01	1.008E+00
87161.91	2.14E+01	1.86E+02	1.86E+02	0.389	0.550	2.421E+01	1.009E+00
87199.91	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.422E+01	1.009E+00
87238.91	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.423E+01	1.010E+00
87276.53	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.424E+01	1.010E+00
87314.16	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.425E+01	1.011E+00
87352.03	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.426E+01	1.011E+00
87389.78	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.427E+01	1.011E+00
87427.72	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.429E+01	1.012E+00
87465.84	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.430E+01	1.012E+00
87503.47	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.431E+01	1.013E+00
87541.72	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.432E+01	1.013E+00
87579.34	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.433E+01	1.014E+00
87616.84	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.434E+01	1.014E+00
87654.97	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.435E+01	1.015E+00
87692.47	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.436E+01	1.015E+00
87731.09	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.437E+01	1.015E+00
87768.84	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.438E+01	1.016E+00
87806.59	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.439E+01	1.016E+00
87844.97	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.440E+01	1.017E+00
87882.72	2.13E+01	1.86E+02	1.86E+02	0.388	0.548	2.441E+01	1.017E+00
87920.59	2.13E+01	1.86E+02	1.86E+02	0.388	0.548	2.442E+01	1.018E+00
87958.34	2.13E+01	1.86E+02	1.86E+02	0.388	0.548	2.443E+01	1.018E+00
87996.91	2.13E+01	1.86E+02	1.86E+02	0.388	0.549	2.444E+01	1.018E+00
88034.91	2.13E+01	1.86E+02	1.86E+02	0.388	0.548	2.445E+01	1.019E+00
88072.66	2.13E+01	1.86E+02	1.86E+02	0.388	0.548	2.446E+01	1.019E+00
88110.53	2.13E+01	1.86E+02	1.86E+02	0.388	0.548	2.448E+01	1.020E+00

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
88148.16	2.13E+01	1.86E+02	1.86E+02	0.388	0.548	2.449E+01	1.020E+00
88187.16	2.13E+01	1.86E+02	1.86E+02	0.388	0.548	2.450E+01	1.021E+00
88225.16	2.13E+01	1.86E+02	1.86E+02	0.387	0.548	2.451E+01	1.021E+00
88262.66	2.13E+01	1.86E+02	1.86E+02	0.387	0.548	2.452E+01	1.022E+00
88300.28	2.13E+01	1.86E+02	1.86E+02	0.387	0.548	2.453E+01	1.022E+00
88338.16	2.13E+01	1.86E+02	1.86E+02	0.387	0.548	2.454E+01	1.022E+00
88377.16	2.13E+01	1.86E+02	1.86E+02	0.387	0.548	2.455E+01	1.023E+00
88415.16	2.13E+01	1.86E+02	1.86E+02	0.387	0.547	2.456E+01	1.023E+00
88453.03	2.13E+01	1.86E+02	1.86E+02	0.387	0.547	2.457E+01	1.024E+00
88490.78	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.458E+01	1.024E+00
88528.41	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.459E+01	1.025E+00
88565.97	2.13E+01	1.85E+02	1.86E+02	0.387	0.548	2.460E+01	1.025E+00
88603.72	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.461E+01	1.026E+00
88641.47	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.462E+01	1.026E+00
88679.59	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.463E+01	1.026E+00
88717.34	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.464E+01	1.027E+00
88755.09	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.465E+01	1.027E+00
88793.09	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.466E+01	1.028E+00
88830.59	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.468E+01	1.028E+00
88868.09	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.469E+01	1.029E+00
88906.34	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.470E+01	1.029E+00
88945.59	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.471E+01	1.029E+00
88984.34	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.472E+01	1.030E+00
89021.84	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.473E+01	1.030E+00
89059.34	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.474E+01	1.031E+00
89096.97	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.475E+01	1.031E+00
89135.28	2.13E+01	1.85E+02	1.86E+02	0.387	0.547	2.476E+01	1.032E+00
89173.03	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.477E+01	1.032E+00
89211.03	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.478E+01	1.033E+00
89249.28	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.479E+01	1.033E+00
89286.78	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.480E+01	1.033E+00
89324.41	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.481E+01	1.034E+00
89361.91	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.482E+01	1.034E+00
89399.91	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.483E+01	1.035E+00
89438.16	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.484E+01	1.035E+00
89476.03	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.485E+01	1.036E+00
89513.53	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.486E+01	1.036E+00
89551.28	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.488E+01	1.036E+00
89589.28	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.489E+01	1.037E+00
89627.28	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.490E+01	1.037E+00
89665.16	2.12E+01	1.85E+02	1.86E+02	0.386	0.545	2.491E+01	1.038E+00
89702.91	2.12E+01	1.85E+02	1.86E+02	0.386	0.545	2.492E+01	1.038E+00
89740.22	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.493E+01	1.039E+00
89778.34	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.494E+01	1.039E+00
89816.34	2.13E+01	1.85E+02	1.86E+02	0.386	0.546	2.495E+01	1.040E+00
89853.84	2.12E+01	1.85E+02	1.86E+02	0.386	0.545	2.496E+01	1.040E+00
89892.34	2.12E+01	1.85E+02	1.86E+02	0.386	0.545	2.497E+01	1.040E+00
89930.47	2.12E+01	1.85E+02	1.86E+02	0.386	0.545	2.498E+01	1.041E+00
89968.34	2.12E+01	1.85E+02	1.86E+02	0.386	0.545	2.499E+01	1.041E+00
90006.47	2.12E+01	1.85E+02	1.86E+02	0.386	0.545	2.500E+01	1.042E+00
90043.97	2.12E+01	1.85E+02	1.86E+02	0.385	0.545	2.501E+01	1.042E+00
90082.09	2.12E+01	1.85E+02	1.86E+02	0.385	0.545	2.502E+01	1.043E+00

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
90119.72	2.12E+01	1.85E+02	1.86E+02	0.385	0.545	2.503E+01	1.043E+00
90157.34	2.12E+01	1.85E+02	1.86E+02	0.385	0.545	2.504E+01	1.043E+00
90195.09	2.12E+01	1.85E+02	1.86E+02	0.385	0.544	2.505E+01	1.044E+00
90232.97	2.12E+01	1.85E+02	1.86E+02	0.385	0.544	2.506E+01	1.044E+00
90271.22	2.12E+01	1.85E+02	1.86E+02	0.385	0.544	2.508E+01	1.045E+00
90308.78	2.12E+01	1.85E+02	1.86E+02	0.385	0.545	2.509E+01	1.045E+00
90346.28	2.12E+01	1.85E+02	1.86E+02	0.385	0.545	2.510E+01	1.046E+00
90383.78	2.12E+01	1.85E+02	1.86E+02	0.385	0.544	2.511E+01	1.046E+00
90421.53	2.12E+01	1.85E+02	1.86E+02	0.385	0.544	2.512E+01	1.047E+00
90460.53	2.12E+01	1.85E+02	1.86E+02	0.385	0.544	2.513E+01	1.047E+00
90498.16	2.12E+01	1.85E+02	1.85E+02	0.385	0.544	2.514E+01	1.047E+00
90536.16	2.12E+01	1.85E+02	1.85E+02	0.385	0.544	2.515E+01	1.048E+00
90574.16	2.12E+01	1.85E+02	1.85E+02	0.385	0.544	2.516E+01	1.048E+00
90612.28	2.12E+01	1.85E+02	1.85E+02	0.385	0.544	2.517E+01	1.049E+00
90650.41	2.12E+01	1.85E+02	1.85E+02	0.385	0.544	2.518E+01	1.049E+00
90689.03	2.12E+01	1.85E+02	1.85E+02	0.385	0.544	2.519E+01	1.050E+00
90726.78	2.12E+01	1.85E+02	1.85E+02	0.384	0.544	2.520E+01	1.050E+00
90764.91	2.12E+01	1.85E+02	1.85E+02	0.384	0.544	2.521E+01	1.051E+00
90802.41	2.12E+01	1.85E+02	1.85E+02	0.384	0.544	2.522E+01	1.051E+00
90840.66	2.12E+01	1.85E+02	1.85E+02	0.384	0.544	2.523E+01	1.051E+00
90878.66	2.12E+01	1.85E+02	1.85E+02	0.384	0.544	2.524E+01	1.052E+00
90916.47	2.12E+01	1.85E+02	1.85E+02	0.385	0.544	2.525E+01	1.052E+00
90954.09	2.12E+01	1.85E+02	1.85E+02	0.384	0.544	2.527E+01	1.053E+00
90991.59	2.12E+01	1.85E+02	1.85E+02	0.384	0.544	2.528E+01	1.053E+00
91029.47	2.12E+01	1.85E+02	1.85E+02	0.384	0.544	2.529E+01	1.054E+00
91066.97	2.12E+01	1.85E+02	1.85E+02	0.384	0.544	2.530E+01	1.054E+00
91105.47	2.12E+01	1.85E+02	1.85E+02	0.384	0.544	2.531E+01	1.054E+00
91143.09	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.532E+01	1.055E+00
91181.22	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.533E+01	1.055E+00
91219.22	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.534E+01	1.056E+00
91257.59	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.535E+01	1.056E+00
91295.34	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.536E+01	1.057E+00
91332.84	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.537E+01	1.057E+00
91370.47	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.538E+01	1.058E+00
91407.97	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.539E+01	1.058E+00
91445.47	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.540E+01	1.058E+00
91484.47	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.541E+01	1.059E+00
91523.03	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.542E+01	1.059E+00
91560.78	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.543E+01	1.060E+00
91598.91	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.544E+01	1.060E+00
91636.53	2.12E+01	1.85E+02	1.85E+02	0.384	0.543	2.545E+01	1.061E+00
91674.78	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.547E+01	1.061E+00
91713.28	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.548E+01	1.061E+00
91752.03	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.549E+01	1.062E+00
91789.78	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.550E+01	1.062E+00
91827.41	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.551E+01	1.063E+00
91865.41	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.552E+01	1.063E+00
91903.78	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.553E+01	1.064E+00
91941.66	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.554E+01	1.064E+00
91979.28	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.555E+01	1.065E+00
92016.78	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.556E+01	1.065E+00
92054.78	2.12E+01	1.85E+02	1.85E+02	0.383	0.541	2.557E+01	1.065E+00

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
92093.03	2.12E+01	1.85E+02	1.85E+02	0.383	0.541	2.558E+01	1.066E+00
92131.09	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.559E+01	1.066E+00
92168.97	2.12E+01	1.85E+02	1.85E+02	0.383	0.542	2.560E+01	1.067E+00
92207.34	2.12E+01	1.84E+02	1.85E+02	0.383	0.542	2.561E+01	1.067E+00
92244.97	2.12E+01	1.84E+02	1.85E+02	0.383	0.541	2.562E+01	1.068E+00
92283.22	2.12E+01	1.84E+02	1.85E+02	0.383	0.541	2.563E+01	1.068E+00
92321.47	2.12E+01	1.84E+02	1.85E+02	0.383	0.541	2.564E+01	1.069E+00
92359.47	2.12E+01	1.84E+02	1.85E+02	0.383	0.541	2.566E+01	1.069E+00
92396.97	2.12E+01	1.84E+02	1.85E+02	0.383	0.541	2.567E+01	1.069E+00
92434.97	2.11E+01	1.84E+02	1.85E+02	0.383	0.541	2.568E+01	1.070E+00
92472.84	2.11E+01	1.84E+02	1.85E+02	0.383	0.541	2.569E+01	1.070E+00
92510.97	2.11E+01	1.84E+02	1.85E+02	0.383	0.541	2.570E+01	1.071E+00
92549.34	2.11E+01	1.84E+02	1.85E+02	0.383	0.541	2.571E+01	1.071E+00
92587.22	2.11E+01	1.84E+02	1.85E+02	0.383	0.541	2.572E+01	1.072E+00
92625.47	2.11E+01	1.84E+02	1.85E+02	0.382	0.541	2.573E+01	1.072E+00
92663.47	2.11E+01	1.84E+02	1.85E+02	0.382	0.541	2.574E+01	1.072E+00
92701.72	2.11E+01	1.84E+02	1.85E+02	0.382	0.541	2.575E+01	1.073E+00
92739.41	2.11E+01	1.84E+02	1.85E+02	0.383	0.541	2.576E+01	1.073E+00
92777.16	2.11E+01	1.84E+02	1.85E+02	0.383	0.541	2.577E+01	1.074E+00
92814.66	2.11E+01	1.84E+02	1.85E+02	0.382	0.541	2.578E+01	1.074E+00
92853.41	2.11E+01	1.84E+02	1.85E+02	0.382	0.541	2.579E+01	1.075E+00
92891.03	2.11E+01	1.84E+02	1.85E+02	0.382	0.541	2.580E+01	1.075E+00
92928.53	2.11E+01	1.84E+02	1.85E+02	0.382	0.541	2.581E+01	1.076E+00
92966.78	2.11E+01	1.84E+02	1.85E+02	0.382	0.541	2.582E+01	1.076E+00
93004.53	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.583E+01	1.076E+00
93042.03	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.585E+01	1.077E+00
93079.66	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.586E+01	1.077E+00
93118.03	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.587E+01	1.078E+00
93156.53	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.588E+01	1.078E+00
93194.03	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.589E+01	1.079E+00
93231.66	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.590E+01	1.079E+00
93269.28	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.591E+01	1.080E+00
93307.03	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.592E+01	1.080E+00
93345.09	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.593E+01	1.080E+00
93382.72	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.594E+01	1.081E+00
93421.97	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.595E+01	1.081E+00
93459.97	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.596E+01	1.082E+00
93498.09	2.11E+01	1.84E+02	1.85E+02	0.382	0.540	2.597E+01	1.082E+00
93535.72	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.598E+01	1.083E+00
93573.59	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.599E+01	1.083E+00
93611.72	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.600E+01	1.083E+00
93649.34	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.601E+01	1.084E+00
93687.47	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.602E+01	1.084E+00
93725.59	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.603E+01	1.085E+00
93763.22	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.605E+01	1.085E+00
93801.22	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.606E+01	1.086E+00
93839.72	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.607E+01	1.086E+00
93879.09	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.608E+01	1.087E+00
93916.72	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.609E+01	1.087E+00
93954.22	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.610E+01	1.087E+00
93992.28	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.611E+01	1.088E+00
94030.66	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.612E+01	1.088E+00

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
94068.53	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.613E+01	1.089E+00
94106.03	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.614E+01	1.089E+00
94144.28	2.11E+01	1.84E+02	1.85E+02	0.381	0.539	2.615E+01	1.090E+00
94181.91	2.11E+01	1.84E+02	1.84E+02	0.381	0.539	2.616E+01	1.090E+00
94220.16	2.11E+01	1.84E+02	1.84E+02	0.381	0.539	2.617E+01	1.091E+00
94258.41	2.11E+01	1.84E+02	1.84E+02	0.381	0.539	2.618E+01	1.091E+00
94297.41	2.11E+01	1.84E+02	1.84E+02	0.381	0.539	2.619E+01	1.091E+00
94334.91	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.620E+01	1.092E+00
94372.66	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.621E+01	1.092E+00
94410.66	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.623E+01	1.093E+00
94448.28	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.624E+01	1.093E+00
94485.91	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.625E+01	1.094E+00
94523.78	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.626E+01	1.094E+00
94562.03	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.627E+01	1.094E+00
94599.66	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.628E+01	1.095E+00
94637.59	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.629E+01	1.095E+00
94675.34	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.630E+01	1.096E+00
94713.09	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.631E+01	1.096E+00
94750.97	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.632E+01	1.097E+00
94788.47	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.633E+01	1.097E+00
94826.47	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.634E+01	1.098E+00
94864.09	2.11E+01	1.84E+02	1.84E+02	0.380	0.538	2.635E+01	1.098E+00
94902.59	2.11E+01	1.84E+02	1.84E+02	0.380	0.537	2.636E+01	1.098E+00
94940.47	2.11E+01	1.84E+02	1.84E+02	0.380	0.537	2.637E+01	1.099E+00
94978.22	2.11E+01	1.84E+02	1.84E+02	0.380	0.537	2.638E+01	1.099E+00
95016.47	2.11E+01	1.84E+02	1.84E+02	0.380	0.537	2.639E+01	1.100E+00
95054.09	2.11E+01	1.84E+02	1.84E+02	0.380	0.537	2.640E+01	1.100E+00
95092.09	2.10E+01	1.84E+02	1.84E+02	0.380	0.537	2.641E+01	1.101E+00
95129.72	2.10E+01	1.84E+02	1.84E+02	0.380	0.537	2.642E+01	1.101E+00
95167.34	2.10E+01	1.84E+02	1.84E+02	0.380	0.537	2.644E+01	1.101E+00
95204.97	2.10E+01	1.84E+02	1.84E+02	0.380	0.537	2.645E+01	1.102E+00
95242.97	2.10E+01	1.84E+02	1.84E+02	0.380	0.537	2.646E+01	1.102E+00
95280.78	2.10E+01	1.84E+02	1.84E+02	0.380	0.537	2.647E+01	1.103E+00
95318.28	2.10E+01	1.84E+02	1.84E+02	0.380	0.537	2.648E+01	1.103E+00
95355.78	2.10E+01	1.84E+02	1.84E+02	0.380	0.537	2.649E+01	1.104E+00
95393.66	2.10E+01	1.84E+02	1.84E+02	0.380	0.537	2.650E+01	1.104E+00
95432.16	2.10E+01	1.84E+02	1.84E+02	0.380	0.537	2.651E+01	1.105E+00
95470.53	2.10E+01	1.84E+02	1.84E+02	0.380	0.537	2.652E+01	1.105E+00
95508.41	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.653E+01	1.105E+00
95546.03	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.654E+01	1.106E+00
95584.28	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.655E+01	1.106E+00
95622.53	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.656E+01	1.107E+00
95660.53	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.657E+01	1.107E+00
95698.16	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.658E+01	1.108E+00
95735.66	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.659E+01	1.108E+00
95773.66	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.660E+01	1.108E+00
95811.53	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.661E+01	1.109E+00
95849.28	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.662E+01	1.109E+00
95886.72	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.664E+01	1.110E+00
95924.22	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.665E+01	1.110E+00
95962.22	2.10E+01	1.84E+02	1.84E+02	0.379	0.536	2.666E+01	1.111E+00
96000.22	2.10E+01	1.83E+02	1.84E+02	0.379	0.536	2.667E+01	1.111E+00

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
96038.47	2.10E+01	1.83E+02	1.84E+02	0.379	0.536	2.668E+01	1.112E+00
96076.72	2.10E+01	1.83E+02	1.84E+02	0.379	0.536	2.669E+01	1.112E+00
96114.59	2.10E+01	1.83E+02	1.84E+02	0.379	0.536	2.670E+01	1.112E+00
96152.34	2.10E+01	1.83E+02	1.84E+02	0.379	0.536	2.671E+01	1.113E+00
96190.09	2.10E+01	1.83E+02	1.84E+02	0.379	0.536	2.672E+01	1.113E+00
96227.59	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.673E+01	1.114E+00
96265.59	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.674E+01	1.114E+00
96303.09	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.675E+01	1.115E+00
96340.59	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.676E+01	1.115E+00
96379.72	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.677E+01	1.116E+00
96417.34	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.678E+01	1.116E+00
96455.34	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.679E+01	1.116E+00
96492.97	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.680E+01	1.117E+00
96530.66	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.681E+01	1.117E+00
96569.03	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.682E+01	1.118E+00
96606.91	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.684E+01	1.118E+00
96644.41	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.685E+01	1.119E+00
96682.03	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.686E+01	1.119E+00
96719.53	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.687E+01	1.119E+00
96757.16	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.688E+01	1.120E+00
96795.28	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.689E+01	1.120E+00
96832.91	2.10E+01	1.83E+02	1.84E+02	0.378	0.535	2.690E+01	1.121E+00
96870.66	2.10E+01	1.83E+02	1.84E+02	0.378	0.534	2.691E+01	1.121E+00
96908.16	2.10E+01	1.83E+02	1.84E+02	0.378	0.534	2.692E+01	1.122E+00
96946.28	2.10E+01	1.83E+02	1.84E+02	0.378	0.534	2.693E+01	1.122E+00
96984.78	2.10E+01	1.83E+02	1.84E+02	0.378	0.534	2.694E+01	1.123E+00
97023.78	2.10E+01	1.83E+02	1.84E+02	0.377	0.534	2.695E+01	1.123E+00
97061.91	2.10E+01	1.83E+02	1.84E+02	0.377	0.534	2.696E+01	1.123E+00
97099.78	2.10E+01	1.83E+02	1.84E+02	0.377	0.534	2.697E+01	1.124E+00
97138.03	2.10E+01	1.83E+02	1.84E+02	0.377	0.534	2.698E+01	1.124E+00
97175.34	2.10E+01	1.83E+02	1.84E+02	0.378	0.534	2.699E+01	1.125E+00
97212.84	2.10E+01	1.83E+02	1.84E+02	0.377	0.534	2.700E+01	1.125E+00
97250.34	2.10E+01	1.83E+02	1.84E+02	0.377	0.534	2.701E+01	1.126E+00
97288.47	2.10E+01	1.83E+02	1.84E+02	0.377	0.534	2.702E+01	1.126E+00
97325.97	2.10E+01	1.83E+02	1.84E+02	0.377	0.534	2.703E+01	1.126E+00
97363.72	2.10E+01	1.83E+02	1.84E+02	0.377	0.534	2.705E+01	1.127E+00
97402.84	2.10E+01	1.83E+02	1.84E+02	0.377	0.534	2.706E+01	1.127E+00
97440.72	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.707E+01	1.128E+00
97478.47	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.708E+01	1.128E+00
97516.34	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.709E+01	1.129E+00
97554.72	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.710E+01	1.129E+00
97593.72	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.711E+01	1.130E+00
97631.72	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.712E+01	1.130E+00
97669.47	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.713E+01	1.130E+00
97706.97	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.714E+01	1.131E+00
97744.59	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.715E+01	1.131E+00
97782.66	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.716E+01	1.132E+00
97820.16	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.717E+01	1.132E+00
97858.53	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.718E+01	1.133E+00
97896.03	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.719E+01	1.133E+00
97935.03	2.10E+01	1.83E+02	1.84E+02	0.377	0.533	2.720E+01	1.134E+00
97972.53	2.10E+01	1.83E+02	1.83E+02	0.377	0.533	2.721E+01	1.134E+00

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
98010.28	2.09E+01	1.83E+02	1.83E+02	0.377	0.533	2.723E+01	1.134E+00
98048.28	2.09E+01	1.83E+02	1.83E+02	0.377	0.533	2.724E+01	1.135E+00
98087.41	2.09E+01	1.83E+02	1.83E+02	0.377	0.533	2.725E+01	1.135E+00
98125.53	2.09E+01	1.83E+02	1.83E+02	0.377	0.533	2.726E+01	1.136E+00
98163.28	2.09E+01	1.83E+02	1.83E+02	0.377	0.533	2.727E+01	1.136E+00
98201.16	2.09E+01	1.83E+02	1.83E+02	0.377	0.533	2.728E+01	1.137E+00
98238.78	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.729E+01	1.137E+00
98278.66	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.730E+01	1.137E+00
98316.41	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.731E+01	1.138E+00
98354.03	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.732E+01	1.138E+00
98392.03	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.733E+01	1.139E+00
98429.72	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.734E+01	1.139E+00
98467.22	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.735E+01	1.140E+00
98505.22	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.736E+01	1.140E+00
98544.09	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.737E+01	1.141E+00
98582.09	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.738E+01	1.141E+00
98620.34	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.739E+01	1.141E+00
98658.34	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.741E+01	1.142E+00
98696.47	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.742E+01	1.142E+00
98734.22	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.743E+01	1.143E+00
98772.47	2.09E+01	1.83E+02	1.83E+02	0.376	0.532	2.744E+01	1.143E+00
98810.47	2.09E+01	1.83E+02	1.83E+02	0.376	0.531	2.745E+01	1.144E+00
98848.47	2.09E+01	1.83E+02	1.83E+02	0.376	0.531	2.746E+01	1.144E+00
98886.16	2.09E+01	1.83E+02	1.83E+02	0.376	0.531	2.747E+01	1.145E+00
98924.34	2.09E+01	1.83E+02	1.83E+02	0.376	0.531	2.748E+01	1.145E+00
98961.97	2.09E+01	1.83E+02	1.83E+02	0.376	0.531	2.749E+01	1.145E+00
98999.97	2.09E+01	1.83E+02	1.83E+02	0.376	0.531	2.750E+01	1.146E+00
99037.72	2.09E+01	1.83E+02	1.83E+02	0.375	0.531	2.751E+01	1.146E+00
99075.28	2.09E+01	1.83E+02	1.83E+02	0.376	0.531	2.752E+01	1.147E+00
99113.66	2.09E+01	1.83E+02	1.83E+02	0.376	0.531	2.753E+01	1.147E+00
99151.66	2.09E+01	1.83E+02	1.83E+02	0.376	0.531	2.754E+01	1.148E+00
99189.16	2.09E+01	1.83E+02	1.83E+02	0.376	0.531	2.755E+01	1.148E+00
99227.41	2.09E+01	1.83E+02	1.83E+02	0.375	0.531	2.756E+01	1.148E+00
99265.78	2.09E+01	1.83E+02	1.83E+02	0.375	0.531	2.757E+01	1.149E+00
99304.16	2.09E+01	1.83E+02	1.83E+02	0.375	0.531	2.758E+01	1.149E+00
99341.78	2.09E+01	1.83E+02	1.83E+02	0.375	0.531	2.759E+01	1.150E+00
99379.91	2.09E+01	1.83E+02	1.83E+02	0.375	0.531	2.761E+01	1.150E+00
99417.53	2.09E+01	1.83E+02	1.83E+02	0.375	0.531	2.762E+01	1.151E+00
99455.16	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.763E+01	1.151E+00
99493.53	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.764E+01	1.152E+00
99531.16	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.765E+01	1.152E+00
99569.41	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.766E+01	1.152E+00
99607.16	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.767E+01	1.153E+00
99645.53	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.768E+01	1.153E+00
99683.28	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.769E+01	1.154E+00
99720.84	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.770E+01	1.154E+00
99759.22	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.771E+01	1.155E+00
99796.84	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.772E+01	1.155E+00
99834.72	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.773E+01	1.155E+00
99872.47	2.09E+01	1.83E+02	1.83E+02	0.375	0.530	2.774E+01	1.156E+00
99910.09	2.09E+01	1.82E+02	1.83E+02	0.375	0.530	2.775E+01	1.156E+00
99948.34	2.09E+01	1.82E+02	1.83E+02	0.375	0.530	2.776E+01	1.157E+00

SHEX-05A LGS SIL-636 CONT DBA-LOCA ANAL K=305

44 PC Leak Test Pressure (psig)
22 MSIV Leak Test Pressure (psig)

TIME	DW PRESS (PSIA)	DW TEMP (F)	SP TEMP (F)	PC Leak Fraction of Design Basis	MSIV Leak Fraction of Design Basis	Time (hours)	Time (days)
99986.59	2.09E+01	1.82E+02	1.83E+02	0.375	0.530	2.777E+01	1.157E+00
100000.1	2.09E+01	1.82E+02	1.83E+02	0.375	0.530	2.778E+01	1.157E+00

Results:

1. Based on Containment Pressure, PC leakage is reduced by at least 50% by 24 hours.
2. Based on Containment Pressure, MSIVs will see pressure exceeding test pressures for only 6.5 minutes at the start of the design basis LOCA, with the peak leak rate estimated at 1.2 time the measured value.
3. Informal test runs suggest that leakage during this period results in negligible dose contributions even if an adjustment were made to extrapolate leakage to what might be expected if MSIVs were tested at the PGS Pa of 44 psig.
4. However, to provide design margin, the MSIV leakages is assumed to be 25% higher that the test acceptance criteria. This margin also allows MSIV Leakage to be stepped down by 50% at 24 hours, rather than the somewhat higher values shown above.

Assessment of Steam Line Temperatures for Piping Deposition Credit Analysis

Main steam line wall temperatures following a LOCA have not been calculated specifically for LGS. A generic cooldown analysis developed by GE and reported in August 1990 Cline Report (Reference 32) is used. Cooling is considered independent of leakage flow. Only conduction is considered. The function to the right is from Reference 32 and fits the figure below (from Reference 33) and is used for Limerick:

$$T(^{\circ}K) = 299.7 + 265.6 * e^{04.428*10^{-6}t}$$

where

t *time*, sec.

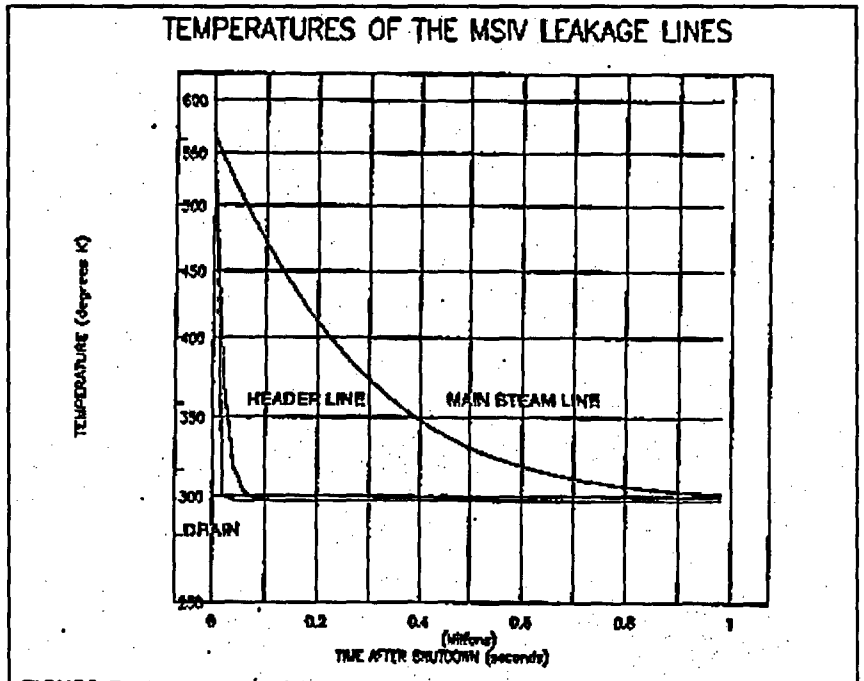

FIGURE 7. Temperature of the MSIV Leakage Pathway Piping as a Function of Time after Shutdown. The Rate of Cooling is Nearly Independent of the Flow Rate at the Low Rates Considered in the Present Analysis.

Time (hrs)	Temperature °K	Temperature °F	Value Used °F
0	565.3	557.9	
1	561.1	550.3	550
2	557.0	542.9	|
3	552.9	535.5	|
4	548.9	528.3	|
5	545.0	521.2	|
6	541.1	514.3	|
7	537.3	507.4	|
8	533.5	500.6	|
9	529.8	494.0	|
10	526.2	487.4	|
11	522.6	481.0	|
12	519.1	474.6	|
13	515.6	468.4	|
14	512.2	462.2	|
15	508.8	456.2	|
16	505.5	450.2	|
17	502.3	444.4	|
18	499.0	438.6	|
19	495.9	432.9	|
20	492.8	427.4	|
21	489.7	421.9	|
22	486.7	416.5	|
23	483.8	411.1	\\/
24	480.9	405.9	410
48	423.3	302.2	|
72	384.0	231.5	\\/
96	357.2	183.3	200

Calculation No. LM-0646, Rev. 2
"Re-analysis of Loss of Coolant Accident (LOCA) Using Alternative Source Term Methodology "
Attachment G
Evaluation of post-LOCA Doses to LGS Vital Areas

Purpose

The purpose of this attachment is to examine dose consequences to areas vital to the post-LOCA operational support of Limerick Generating Station. Two of these Vital Areas, requiring continuous occupancy, have been identified for evaluation; they are the Technical Support Center (TSC) and the Security Center. This evaluation determines the impact of an AST treatment of the accident, and shows that the TID-14844 analysis bounds for airborne releases.

Approach

Of the two Vital Areas identified, it was determined that, due to less favorable dispersion coefficients and the lack of intake filtration, the Security Center dose analysis bounds that of the TSC. Therefore, only the Security Center dose was evaluated. The parameters that characterize the two facilities are shown in Table 1 below.

The three post-LOCA release pathways, Primary Containment leakage, MSIV leakage, and ECCS fluid leakage, were modeled the same way as was done for the Control Room dose analysis, using the RADTRAD code. However, for the Security Center analysis, historical dispersion factors, or $^{\chi}/_{Q}$'s, from LGS Calc. 1042, Rev. 3 are used to characterize the release point to intake relationship of this vital area. To achieve rapid equilibrium and conservatively model infiltration and exfiltration of the Security Center, one unfiltered air-change per minute was used to model the flow. For added conservatism, the geometry factor associated with the building volume was not credited for an "External" analysis, then compared to an "Internal" analysis crediting the geometry factor. The External analysis was modeled by calculating the dose external to the Security Center and applying the dispersion factors to a dose location within the Environment compartment.

Table 1: Vital Area Parameters

Parameter	Technical Support Center	Security Center
Volume (ft^3)	294,000*	74,880*
Intake Flow (cfm)	1,000*	74,880 (modeled for 1 air-change per minute)
Recirculation Flow (cfm)	2,000*	0
Inleakage Flow (cfm)	500 (vs. 10*)	0
Exfiltration/Exhaust (cfm)	1,500	74,880
Filter Efficiency	95%*	0%
Dispersion Factors (sec/m^3)		
0-8 hrs	1.04E-05*	3.41E-05*
8-24 hrs	6.15E-06*	2.01E-05*
24-96 hrs	3.91E-06*	1.28E-05*
96-720 hrs	1.72E-06*	5.62E-06*
Calculated Geometry Factor	0.060118	0.037865

*from LGS Calc. 1042, Rev. 3

The dose acceptance criterion used for the evaluation of Vital Areas is the same 10CFR 50.67 30-day limit of 5 rem TEDE, as is used for the Control Room.

Table 2 below compares the doses to the Security Center as evaluated using a TID-14844 methodology to the AST-based doses calculated using the RADTRAD code. Because the historically evaluated doses from airborne releases are only given in whole body and thyroid rem units, they must be converted to a Total Effective Dose Equivalent (TEDE) rem units for comparison. For purposes of simplification, the TEDE dose is considered equal to the Whole Body dose, plus 0.03 times the Thyroid dose, per Federal Guidance Report 11. The total AST-based dose to the Security Center results from the sum of airborne releases from the three contributing pathways detailed in the LOCA analysis. As discussed in the body of this analysis, the shine dose from ECCS piping and a Reactor Enclosure cloud is clearly bounded by the historical analysis. Therefore, in comparing total doses, this source is added to both the historical TID-14844 and the AST dose, for conservatism.

Table 2: Comparison of Security Center Doses (UFSAR TID-14844 Based vs. AST-Based)

Dose Contributor	TID-14844 Based Analysis	AST Based Analysis (External)	AST Based Analysis (Internal)
PC Leakage Dose (rem TEDE)	———	5.704E-01	2.630E-02
MSIV Leakage Dose (rem TEDE)	———	6.050E-02	2.355E-02
ECCS Fluid Leakage Dose (rem TEDE)	———	1.276E-03	1.227E-03
Airborne Whole Body Dose (rem Whole Body)	1.300E+00	———	———
Airborne Thyroid Dose (rem Thyroid)	3.500E+01	———	———
Total Shine Dose (rem)	7.300E-01	7.300E-01	7.300E-01
MSIV Resuspension Allowance (10%), conservative estimate based on CR results in Attachment A		6.050E-03	2.355E-03
Total Dose (rem TEDE)	**3.08**	**1.37**	**0.78**

Conclusion

Based on this evaluation, the existing TID-14844 based analyses included in Section 1.13 of the UFSAR are shown to be conservative and bounding. Given compliance with GDC-19 limit of 5 rem when dose is based on TID-14844 source terms, compliance with 10CFR 50.67 control room dose limits is provided with the AST-based analysis. Therefore, the historically analyzed cases are sufficient, and no additional analysis of Vital Areas at LGS is necessary.

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 12:47:42
#######################################################################

#######################################################################
                      File information
#######################################################################

 Plant file           = C:\Documents and Settings\Aleem Boatright\My Documents\My
Work\Exelon\AST\Limerick\LGS LOCA\RADTRAD\LGS LOCA PC Leak - Vital Area - Security
Center.psf
 Inventory file       = c:\program files\radtrad3-03\defaults\limerick ast source
terms.nif
 Release file         = c:\program files\radtrad3-03\defaults\bwr_dba.rft
 Dose Conversion file = c:\program files\radtrad3-03\defaults\fgrl1&12.inp
```

```
    #####    ####   #####    #  #     #  #####   #    #  #####
    #    #  #       #        #  ##    #  #    #  #    #    #
    #    #  #       #        #  # #   #  #    #  #    #    #
    #####    ####   ####     #  #  #  #  #####   #    #    #
    #            #  #        #  #   # #  #       #    #    #
    #            #  #        #  #    ##  #       #    #    #
    #        ####   #        #  #     #  #        ####     #
```

```
Radtrad 3.03 4/15/2001
LGS PC Leak - Vital Area - Security Center
Nuclide Inventory File:
c:\program files\radtrad3-03\defaults\limerick ast source terms.nif
Plant Power Level:
 3.5270E+03
Compartments:
  5
Compartment 1:
Primary Containment
  3
 3.7907E+05
  0
  0
  0
  1
  0
Compartment 2:
Reactor Enclosure
  3
 1.8000E+06
  0
  0
  1
  0
  0
Compartment 3:
Environment
  2
 0.0000E+00
```

```
  0
  0
  0
  0
  0
Compartment 4:
Security Center
  1
 7.4880E+04
  0
  0
  0
  0
  0
Compartment 5:
SGTS Node
  3
 1.0000E+00
  0
  0
  0
  0
  0
Pathways:
  6
Pathway 1:
Primary Containment to Reactor Enclosure
  1
  2
  4
Pathway 2:
Reactor Enclosure to SGTS Node
  2
  5
  2
Pathway 3:
Environment to Security Center - Unfiltered Inleakage
  3
  4
  2
Pathway 4:
Environment to Security Center - Filtered Intake
  3
  4
  2
Pathway 5:
Security Center to Environment
  4
  3
  2
Pathway 6:
SGTS Node to  Environment
  5
  3
  2
End of Plant Model File
Scenario Description Name:

Plant Model Filename:
```

```
Source Term:
  1
  1   1.0000E+00
c:\program files\radtrad3-03\defaults\fgr11&12.inp
c:\program files\radtrad3-03\defaults\bwr_dba.rft
  0.0000E+00
  1
  9.5000E-01   4.8500E-02   1.5000E-03   1.0000E+00
Overlying Pool:
  0
  0.0000E+00
  0
  0
  0
  0
Compartments:
  5
Compartment 1:
  0
  1
  0
  0
  0
  0
  0
  3
  3
  1.0000E+01
  1
  1
  0.0000E+00   0.0000E+00
Compartment 2:
  0
  1
  0
  0
  0
  0
  1
  5.1000E+04
  4
  0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   0.0000E+00   0.0000E+00   0.0000E+00
  2.5830E-01   9.9000E+01   9.5000E+01   9.5000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
Compartment 3:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 4:
  0
  1
```

```
  0
  0
  0
  0
  0
  0
  0
Compartment 5:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Pathways:
  6
Pathway 1:
  0
  0
  0
  0
  0
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   5.0000E-01
  2.4000E+01   2.5000E-01
  7.2000E+02   0.0000E+00
  0
Pathway 2:
  0
  0
  0
  0
  0
  1
 10
  0.0000E+00   9.0000E+07   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   9.0000E+07   0.0000E+00   0.0000E+00   0.0000E+00
  5.8300E-02   4.0930E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.0000E-01   2.1230E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.4170E-01   1.4690E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.8330E-01   1.1430E+04   0.0000E+00   0.0000E+00   0.0000E+00
  2.2500E-01   9.4760E+03   0.0000E+00   0.0000E+00   0.0000E+00
  2.5830E-01   7.8960E+03   9.9000E+01   9.5000E+01   9.5000E+01
  2.6670E-01   6.8170E+03   9.9000E+01   9.5000E+01   9.5000E+01
  3.9580E-01   5.0000E+03   9.9000E+01   9.5000E+01   9.5000E+01
  0
  0
  0
  0
  0
  0
```

```
Pathway 3:
  0
  0
  0
  0
  0
  1
  2
  0.0000E+00   7.4880E+04   0.0000E+00   0.0000E+00   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 4:
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   0.0000E+00   9.9000E+01   9.5000E+01   9.5000E+01
  5.0000E-01   0.0000E+00   9.9000E+01   9.5000E+01   9.5000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 5:
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   7.4880E+04   1.0000E+02   1.0000E+02   1.0000E+02
  5.0000E-01   7.4880E+04   1.0000E+02   1.0000E+02   1.0000E+02
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 6:
  0
  0
  0
  0
  0
  1
 10
  0.0000E+00   9.0000E+07   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   9.0000E+07   0.0000E+00   0.0000E+00   0.0000E+00
```

```
  5.8300E-02   4.0930E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.0000E-01   2.1230E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.4170E-01   1.4690E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.8330E-01   1.1430E+04   0.0000E+00   0.0000E+00   0.0000E+00
  2.2500E-01   9.4760E+03   0.0000E+00   0.0000E+00   0.0000E+00
  2.5830E-01   7.8960E+03   9.9000E+01   9.9000E+01   9.9000E+01
  2.6670E-01   6.8170E+03   9.9000E+01   9.9000E+01   9.9000E+01
  3.9583E-01   5.0000E+03   9.9000E+01   9.9000E+01   9.9000E+01
  0
  0
  0
  0
  0
  0
Dose Locations:
  4
Location 1:
Security Center (Internal)
  4
  0
  1
  2
  0.0000E+00   3.5000E-04
  7.2000E+02   0.0000E+00
  1
  4
  0.0000E+00   1.0000E+00
  2.4000E+01   6.0000E-01
  9.6000E+01   4.0000E-01
  7.2000E+02   0.0000E+00
Location 2:
EAB
  3
  1
  2
  0.0000E+00   3.1800E-04
  8.0000E+00   0.0000E+00
  1
  2
  0.0000E+00   3.5000E-04
  8.0000E+00   0.0000E+00
  0
Location 3:
LPZ
  3
  1
  5
  0.0000E+00   5.7900E-05
  8.0000E+00   4.1000E-05
  2.4000E+01   1.9500E-05
  9.6000E+01   6.6800E-06
  7.2000E+02   0.0000E+00
  1
  4
  0.0000E+00   3.5000E-04
  8.0000E+00   1.8000E-04
  2.4000E+01   2.3000E-04
  7.2000E+02   0.0000E+00
  0
Location 4:
```

```
Security Center (External)
  3
  1
  5
  0.0000E+00   3.4100E-05
  8.0000E+00   2.0100E-05
  2.4000E+01   7.6800E-06
  9.6000E+01   2.2500E-06
  7.2000E+02   0.0000E+00
  1
  2
  0.0000E+00   3.5000E-04
  7.2000E+02   0.0000E+00
  0
Effective Volume Location:
  1
  6
  0.0000E+00   3.4100E-05
  2.0000E+00   3.4100E-05
  8.0000E+00   2.0100E-05
  2.4000E+01   1.2800E-05
  9.6000E+01   5.6200E-06
  7.2000E+02   0.0000E+00
Simulation Parameters:
  3
  0.0000E+00   1.6670E-03
  1.6700E-02   2.5000E-02
  2.5830E-01   0.0000E+00
Output Filename:
C:\Documents and Settings\Aleem Boatright\My Documents\My Work\Exelon\AST\Limerick\LGS
LOCA\RADTRAD\LGS LOCA PC Leak - Vital Area - Security Center.o0
  1
  1
  1
  0
  1
End of Scenario File
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 12:47:42
#######################################################################

#######################################################################
                    Plant Description
#######################################################################

Number of Nuclides =  60

Inventory Power =   1.0000E+00 MWth
Plant Power Level =   3.5270E+03 MWth

Number of compartments    =   5

Compartment information

Compartment number  1  (Source term fraction =   1.0000E+00
)
Name: Primary Containment
Compartment volume =   3.7907E+05 (Cubic feet)
Compartment type is Normal
Removal devices within compartment:
     Deposition
Pathways into and out of compartment  1
   Exit Pathway Number    1: Primary Containment to Reactor Enclosure

Compartment number  2
Name: Reactor Enclosure
Compartment volume =   1.8000E+06 (Cubic feet)
Compartment type is Normal
Removal devices within compartment:
     Filter(s)
Pathways into and out of compartment  2
   Inlet Pathway Number   1: Primary Containment to Reactor Enclosure
   Exit Pathway Number    2: Reactor Enclosure to SGTS Node

Compartment number  3
Name: Environment
Compartment type is Environment
Pathways into and out of compartment  3
   Inlet Pathway Number   5: Security Center to Environment
   Inlet Pathway Number   6: SGTS Node to  Environment
   Exit Pathway Number    3: Environment to Security Center - Unfiltered Inleak
   Exit Pathway Number    4: Environment to Security Center - Filtered Intake

Compartment number  4
Name: Security Center
Compartment volume =   7.4880E+04 (Cubic feet)
Compartment type is Control Room
Pathways into and out of compartment  4
   Inlet Pathway Number   3: Environment to Security Center - Unfiltered Inleak
   Inlet Pathway Number   4: Environment to Security Center - Filtered Intake
   Exit Pathway Number    5: Security Center to Environment

Compartment number  5
Name: SGTS Node
Compartment volume =   1.0000E+00 (Cubic feet)
Compartment type is Normal
```

```
Pathways into and out of compartment  5
   Inlet Pathway Number   2: Reactor Enclosure to SGTS Node
   Exit Pathway Number    6: SGTS Node to  Environment

Total number of pathways =   6
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 12:47:42
#######################################################################

#######################################################################
                    Scenario Description
#######################################################################
```

Radioactive Decay is enabled
Calculation of Daughters is enabled

Release Fractions and Timings

	GAP	EARLY IN-VESSEL	LATE RELEASE	RELEASE MASS
	0.500000 hr	1.5000 hrs	0.0000 hrs	(gm)
NOBLES	5.0000E-02	9.5000E-01	0.0000E+00	4.625E+03
IODINE	5.0000E-02	2.5000E-01	0.0000E+00	3.033E+02
CESIUM	5.0000E-02	2.0000E-01	0.0000E+00	5.099E+04
TELLURIUM	0.0000E+00	5.0000E-02	0.0000E+00	4.012E+01
STRONTIUM	0.0000E+00	2.0000E-02	0.0000E+00	1.712E+03
BARIUM	0.0000E+00	2.0000E-02	0.0000E+00	4.739E+01
RUTHENIUM	0.0000E+00	2.5000E-03	0.0000E+00	5.988E+01
CERIUM	0.0000E+00	5.0000E-04	0.0000E+00	5.914E+02
LANTHANUM	0.0000E+00	2.0000E-04	0.0000E+00	8.731E+00

Inventory Power = 3527. MWt

Nuclide Name	Group	Specific Inventory (Ci/MWt)	half life (s)	Whole Body DCF (Sv-m3/Bq-s)	Inhaled Thyroid (Sv/Bq)	Inhaled Effective (Sv/Bq)
Co-58	7	1.529E+02	6.117E+06	4.760E-14	8.720E-10	2.940E-09
Co-60	7	1.830E+02	1.663E+08	1.260E-13	1.620E-08	5.910E-08
Kr-85	1	3.946E+02	3.383E+08	1.190E-16	0.000E+00	0.000E+00
Kr-85m	1	8.313E+03	1.613E+04	7.480E-15	0.000E+00	0.000E+00
Kr-87	1	1.633E+04	4.578E+03	4.120E-14	0.000E+00	0.000E+00
Kr-88	1	2.303E+04	1.022E+04	1.020E-13	0.000E+00	0.000E+00
Rb-86	3	6.518E+01	1.612E+06	4.810E-15	1.330E-09	1.790E-09
Sr-89	5	2.798E+04	4.363E+06	7.730E-17	7.960E-12	1.120E-08
Sr-90	5	3.178E+03	9.190E+08	7.530E-18	2.690E-10	3.510E-07
Sr-91	5	3.801E+04	3.420E+04	4.924E-14	9.930E-12	4.547E-10
Sr-92	5	4.017E+04	9.756E+03	6.790E-14	3.920E-12	2.180E-10
Y-90	9	3.272E+03	2.304E+05	1.900E-16	5.170E-13	2.280E-09
Y-91	9	3.448E+04	5.055E+06	2.600E-16	8.500E-12	1.320E-08
Y-92	9	4.029E+04	1.274E+04	1.300E-14	1.050E-12	2.110E-10
Y-93	9	4.526E+04	3.636E+04	4.800E-15	9.260E-13	5.820E-10
Zr-95	9	4.489E+04	5.528E+06	3.600E-14	1.440E-09	6.390E-09
Zr-97	9	4.657E+04	6.084E+04	4.432E-14	2.315E-11	1.171E-09
Nb-95	9	4.512E+04	3.037E+06	3.740E-14	3.580E-10	1.570E-09
Mo-99	7	5.078E+04	2.376E+05	7.280E-15	1.520E-11	1.070E-09
Tc-99m	7	4.447E+04	2.167E+04	5.890E-15	5.010E-11	8.800E-12
Ru-103	7	4.202E+04	3.394E+06	2.251E-14	2.570E-10	2.421E-09
Ru-105	7	2.908E+04	1.598E+04	3.810E-14	4.150E-12	1.230E-10
Ru-106	7	1.730E+04	3.181E+07	1.040E-14	1.720E-09	1.290E-07
Rh-105	7	2.752E+04	1.273E+05	3.720E-15	2.880E-12	2.580E-10
Sb-127	4	2.896E+03	3.326E+05	3.330E-14	6.150E-11	1.630E-09
Sb-129	4	8.638E+03	1.555E+04	7.140E-14	9.720E-12	1.740E-10
Te-127	4	2.873E+03	3.366E+04	2.420E-16	1.840E-12	8.600E-11
Te-127m	4	3.855E+02	9.418E+06	1.470E-16	9.660E-11	5.810E-09
Te-129	4	8.501E+03	4.176E+03	2.750E-15	5.090E-13	2.090E-11
Te-129m	4	1.267E+03	2.903E+06	3.337E-15	1.563E-10	6.484E-09

Te-131m	4	3.869E+03	1.080E+05	7.463E-14	3.669E-08	1.758E-09
Te-132	4	3.821E+04	2.815E+05	1.030E-14	6.280E-08	2.550E-09
I-131	2	2.687E+04	6.947E+05	1.820E-14	2.920E-07	8.890E-09
I-132	2	3.881E+04	8.280E+03	1.120E-13	1.740E-09	1.030E-10
I-133	2	5.556E+04	7.488E+04	2.940E-14	4.860E-08	1.580E-09
I-134	2	6.165E+04	3.156E+03	1.300E-13	2.880E-10	3.550E-11
I-135	2	5.192E+04	2.380E+04	8.294E-14	8.460E-09	3.320E-10
Xe-133	1	5.491E+04	4.532E+05	1.560E-15	0.000E+00	0.000E+00
Xe-135	1	2.228E+04	3.272E+04	1.190E-14	0.000E+00	0.000E+00
Cs-134	3	7.280E+03	6.507E+07	7.570E-14	1.110E-08	1.250E-08
Cs-136	3	2.027E+03	1.132E+06	1.060E-13	1.730E-09	1.980E-09
Cs-137	3	4.538E+03	9.467E+08	2.725E-14	7.930E-09	8.630E-09
Ba-139	6	5.084E+04	4.962E+03	2.170E-15	2.400E-12	4.640E-11
Ba-140	6	4.896E+04	1.101E+06	8.580E-15	2.560E-10	1.010E-09
La-140	9	5.019E+04	1.450E+05	1.170E-13	6.870E-11	1.310E-09
La-141	9	4.640E+04	1.415E+04	2.390E-15	9.400E-12	1.570E-10
La-142	9	4.532E+04	5.550E+03	1.440E-13	8.740E-12	6.840E-11
Ce-141	8	4.492E+04	2.808E+06	3.430E-15	2.550E-11	2.420E-09
Ce-143	8	4.427E+04	1.188E+05	1.290E-14	6.230E-12	9.160E-10
Ce-144	8	3.596E+04	2.456E+07	2.773E-15	2.920E-10	1.010E-07
Pr-143	9	4.293E+04	1.172E+06	2.100E-17	1.680E-18	2.190E-09
Nd-147	9	1.838E+04	9.487E+05	6.190E-15	1.820E-11	1.850E-09
Np-239	8	5.397E+05	2.035E+05	7.690E-15	7.620E-12	6.780E-10
Pu-238	8	1.796E+02	2.769E+09	4.880E-18	3.860E-10	7.790E-05
Pu-239	8	1.200E+01	7.594E+11	4.240E-18	3.750E-10	8.330E-05
Pu-240	8	1.288E+01	2.063E+11	4.750E-18	3.760E-10	8.330E-05
Pu-241	8	6.182E+03	4.544E+08	7.250E-20	9.150E-12	1.340E-06
Am-241	9	9.528E+00	1.364E+10	8.180E-16	1.600E-09	1.200E-04
Cm-242	9	2.388E+03	1.407E+07	5.690E-18	9.410E-10	4.670E-06
Cm-244	9	2.602E+02	5.715E+08	4.910E-18	1.010E-09	6.700E-05

Nuclide	Daughter	Fraction	Daughter	Fraction	Daughter	Fraction
Kr-85m	Kr-85	0.21	none	0.00	none	0.00
Kr-87	Rb-87	1.00	none	0.00	none	0.00
Kr-88	Rb-88	1.00	none	0.00	none	0.00
Sr-90	Y-90	1.00	none	0.00	none	0.00
Sr-91	Y-91m	0.58	Y-91	0.42	none	0.00
Sr-92	Y-92	1.00	none	0.00	none	0.00
Y-93	Zr-93	1.00	none	0.00	none	0.00
Zr-95	Nb-95m	0.01	Nb-95	0.99	none	0.00
Zr-97	Nb-97m	0.95	Nb-97	0.05	none	0.00
Mo-99	Tc-99m	0.88	Tc-99	0.12	none	0.00
Tc-99m	Tc-99	1.00	none	0.00	none	0.00
Ru-103	Rh-103m	1.00	none	0.00	none	0.00
Ru-105	Rh-105	1.00	none	0.00	none	0.00
Ru-106	Rh-106	1.00	none	0.00	none	0.00
Sb-127	Te-127m	0.18	Te-127	0.82	none	0.00
Sb-129	Te-129m	0.22	Te-129	0.77	none	0.00
Te-127m	Te-127	0.98	none	0.00	none	0.00
Te-129	I-129	1.00	none	0.00	none	0.00
Te-129m	Te-129	0.65	I-129	0.35	none	0.00
Te-131m	Te-131	0.22	I-131	0.78	none	0.00
Te-132	I-132	1.00	none	0.00	none	0.00
I-131	Xe-131m	0.01	none	0.00	none	0.00
I-133	Xe-133m	0.03	Xe-133	0.97	none	0.00
I-135	Xe-135m	0.15	Xe-135	0.85	none	0.00
Xe-135	Cs-135	1.00	none	0.00	none	0.00
Cs-137	Ba-137m	0.95	none	0.00	none	0.00
Ba-140	La-140	1.00	none	0.00	none	0.00
La-141	Ce-141	1.00	none	0.00	none	0.00

Ce-143	Pr-143	1.00	none	0.00	none	0.00
Ce-144	Pr-144m	0.02	Pr-144	0.98	none	0.00
Nd-147	Pm-147	1.00	none	0.00	none	0.00
Np-239	Pu-239	1.00	none	0.00	none	0.00
Pu-238	U-234	1.00	none	0.00	none	0.00
Pu-239	U-235	1.00	none	0.00	none	0.00
Pu-240	U-236	1.00	none	0.00	none	0.00
Pu-241	U-237	0.00	Am-241	1.00	none	0.00
Am-241	Np-237	1.00	none	0.00	none	0.00
Cm-242	Pu-238	1.00	none	0.00	none	0.00
Cm-244	Pu-240	1.00	none	0.00	none	0.00

Iodine fractions
Aerosol = 9.5000E-01
Elemental = 4.8500E-02
Organic = 1.5000E-03

COMPARTMENT DATA

Compartment number 1: Primary Containment
Natural Deposition (Powers' model): Aerosol data
Reactor type: 3
Percentile = 10 (%)

Natural Deposition: Elemental Removal Data

Time (hr)	Removal Coef. (hr^-1)
0.0000E+00	0.0000E+00

Compartment number 2: Reactor Enclosure

Compartment Filter Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	5.1000E+04	0.0000E+00	0.0000E+00	0.0000E+00
1.6700E-02	5.1000E+04	0.0000E+00	0.0000E+00	0.0000E+00
2.5830E-01	5.1000E+04	9.9000E+01	9.5000E+01	9.5000E+01
7.2000E+02	5.1000E+04	0.0000E+00	0.0000E+00	0.0000E+00

Compartment number 3: Environment

Compartment number 4: Security Center

Compartment number 5: SGTS Node

PATHWAY DATA

Pathway number 1: Primary Containment to Reactor Enclosure

Convection Data

Time (hr)	Flow Rate (% / day)
0.0000E+00	5.0000E-01
2.4000E+01	2.5000E-01
7.2000E+02	0.0000E+00

Pathway number 2: Reactor Enclosure to SGTS Node

Pathway Filter: Removal Data

Time (hr) Flow Rate Filter Efficiencies (%)

	(cfm)	Aerosol	Elemental	Organic
0.0000E+00	9.0000E+07	0.0000E+00	0.0000E+00	0.0000E+00
1.6700E-02	9.0000E+07	0.0000E+00	0.0000E+00	0.0000E+00
5.8300E-02	4.0930E+04	0.0000E+00	0.0000E+00	0.0000E+00
1.0000E-01	2.1230E+04	0.0000E+00	0.0000E+00	0.0000E+00
1.4170E-01	1.4690E+04	0.0000E+00	0.0000E+00	0.0000E+00
1.8330E-01	1.1430E+04	0.0000E+00	0.0000E+00	0.0000E+00
2.2500E-01	9.4760E+03	0.0000E+00	0.0000E+00	0.0000E+00
2.5830E-01	7.8960E+03	9.9000E+01	9.5000E+01	9.5000E+01
2.6670E-01	6.8170E+03	9.9000E+01	9.5000E+01	9.5000E+01
3.9580E-01	5.0000E+03	9.9000E+01	9.5000E+01	9.5000E+01

Pathway number 3: Environment to Security Center - Unfiltered Inleak

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	7.4880E+04	0.0000E+00	0.0000E+00	0.0000E+00
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 4: Environment to Security Center - Filtered Intake

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	0.0000E+00	9.9000E+01	9.5000E+01	9.5000E+01
5.0000E-01	0.0000E+00	9.9000E+01	9.5000E+01	9.5000E+01
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 5: Security Center to Environment

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	7.4880E+04	1.0000E+02	1.0000E+02	1.0000E+02
5.0000E-01	7.4880E+04	1.0000E+02	1.0000E+02	1.0000E+02
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 6: SGTS Node to Environment

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	9.0000E+07	0.0000E+00	0.0000E+00	0.0000E+00
1.6700E-02	9.0000E+07	0.0000E+00	0.0000E+00	0.0000E+00
5.8300E-02	4.0930E+04	0.0000E+00	0.0000E+00	0.0000E+00
1.0000E-01	2.1230E+04	0.0000E+00	0.0000E+00	0.0000E+00
1.4170E-01	1.4690E+04	0.0000E+00	0.0000E+00	0.0000E+00
1.8330E-01	1.1430E+04	0.0000E+00	0.0000E+00	0.0000E+00
2.2500E-01	9.4760E+03	0.0000E+00	0.0000E+00	0.0000E+00
2.5830E-01	7.8960E+03	9.9000E+01	9.9000E+01	9.9000E+01
2.6670E-01	6.8170E+03	9.9000E+01	9.9000E+01	9.9000E+01
3.9583E-01	5.0000E+03	9.9000E+01	9.9000E+01	9.9000E+01

LOCATION DATA

Location Security Center (Internal) is in compartment 4

```
Location X/Q Data
 Time (hr)          X/Q (s * m^-3)
  0.0000E+00           3.4100E-05
  2.0000E+00           3.4100E-05
  8.0000E+00           2.0100E-05
  2.4000E+01           1.2800E-05
  9.6000E+01           5.6200E-06
  7.2000E+02           0.0000E+00

Location Breathing Rate Data
 Time (hr)          Breathing Rate (m^3 * sec^-1)
  0.0000E+00                  3.5000E-04
  7.2000E+02                  0.0000E+00

Location Occupancy Factor Data
 Time (hr)          Occupancy Factor
  0.0000E+00             1.0000E+00
  2.4000E+01             6.0000E-01
  9.6000E+01             4.0000E-01
  7.2000E+02             0.0000E+00
Location EAB     is in compartment   3

Location X/Q Data
 Time (hr)          X/Q (s * m^-3)
  0.0000E+00           3.1800E-04
  8.0000E+00           0.0000E+00

Location Breathing Rate Data
 Time (hr)          Breathing Rate (m^3 * sec^-1)
  0.0000E+00                  3.5000E-04
  8.0000E+00                  0.0000E+00
Location LPZ     is in compartment   3

Location X/Q Data
 Time (hr)          X/Q (s * m^-3)
  0.0000E+00           5.7900E-05
  8.0000E+00           4.1000E-05
  2.4000E+01           1.9500E-05
  9.6000E+01           6.6800E-06
  7.2000E+02           0.0000E+00

Location Breathing Rate Data
 Time (hr)          Breathing Rate (m^3 * sec^-1)
  0.0000E+00                  3.5000E-04
  8.0000E+00                  1.8000E-04
  2.4000E+01                  2.3000E-04
  7.2000E+02                  0.0000E+00
Location Security Center (External)     is in compartment   3

Location X/Q Data
 Time (hr)          X/Q (s * m^-3)
  0.0000E+00           3.4100E-05
  8.0000E+00           2.0100E-05
  2.4000E+01           7.6800E-06
  9.6000E+01           2.2500E-06
  7.2000E+02           0.0000E+00

Location Breathing Rate Data
 Time (hr)          Breathing Rate (m^3 * sec^-1)
```

```
      0.0000E+00                3.5000E-04
      7.2000E+02                0.0000E+00

USER SPECIFIED TIME STEP DATA - SUPPLEMENTAL TIME STEPS
     Time            Time step
      0.0000E+00       1.6670E-03
      1.6700E-02       2.5000E-02
      2.5830E-01       0.0000E+00
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 12:47:42
#######################################################################

     ####   #    #  #####  #####   #    #  #####
    #    #  #    #    #    #    #  #    #    #
    #    #  #    #    #    #    #  #    #    #
    #    #  #    #    #    #####   #    #    #
    #    #  #    #    #    #       #    #    #
    #    #  #    #    #    #       #    #    #
     ####    ####     #    #        ####     #

#######################################################################
                                Dose Output
#######################################################################

Detailed model information at time (H) =    0.0167

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble      Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 7.0466E-01
Deposition Net DF
     Noble      Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.0059E+00

Security Center (Internal) Doses:

Time (h) =   0.0167    Whole Body   Thyroid       TEDE
Delta dose (rem)        2.8249E-07  1.2690E-03  5.5203E-05
Accumulated dose (rem)  2.8249E-07  1.2690E-03  5.5203E-05

EAB Doses:

Time (h) =   0.0167    Whole Body   Thyroid       TEDE
Delta dose (rem)        2.6592E-04  4.5201E-02  2.2222E-03
Accumulated dose (rem)  2.6592E-04  4.5201E-02  2.2222E-03

LPZ Doses:

Time (h) =   0.0167    Whole Body   Thyroid       TEDE
Delta dose (rem)        4.8417E-05  8.2299E-03  4.0461E-04
Accumulated dose (rem)  4.8417E-05  8.2299E-03  4.0461E-04

Security Center (External) Doses:

Time (h) =   0.0167    Whole Body   Thyroid       TEDE
Delta dose (rem)        2.8515E-05  4.8470E-03  2.3829E-04
Accumulated dose (rem)  2.8515E-05  4.8470E-03  2.3829E-04

Detailed model information at time (H) =    0.0583

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
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     Noble       Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 7.0466E-01
Deposition Net DF
     Noble       Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.0207E+00

Security Center (Internal) Doses:

Time (h) =    0.0583    Whole Body   Thyroid       TEDE
Delta dose (rem)         7.6041E-06  3.4360E-02  1.4946E-03
Accumulated dose (rem)   7.8866E-06  3.5629E-02  1.5498E-03

EAB Doses:

Time (h) =    0.0583    Whole Body   Thyroid       TEDE
Delta dose (rem)         3.0196E-03  5.1619E-01  2.5357E-02
Accumulated dose (rem)   3.2855E-03  5.6139E-01  2.7579E-02

LPZ Doses:

Time (h) =    0.0583    Whole Body   Thyroid       TEDE
Delta dose (rem)         5.4979E-04  9.3985E-02  4.6169E-03
Accumulated dose (rem)   5.9820E-04  1.0221E-01  5.0215E-03

Security Center (External) Doses:

Time (h) =    0.0583    Whole Body   Thyroid       TEDE
Delta dose (rem)         3.2379E-04  5.5352E-02  2.7191E-03
Accumulated dose (rem)   3.5231E-04  6.0199E-02  2.9574E-03

Detailed model information at time (H) =    0.1000

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble       Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 7.0466E-01
Deposition Net DF
     Noble       Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.0356E+00

Security Center (Internal) Doses:

Time (h) =    0.1000    Whole Body   Thyroid       TEDE
Delta dose (rem)         5.9122E-06  2.7008E-02  1.1746E-03
Accumulated dose (rem)   1.3799E-05  6.2637E-02  2.7244E-03

EAB Doses:

Time (h) =    0.1000    Whole Body   Thyroid       TEDE
Delta dose (rem)         1.6236E-04  2.8116E-02  1.3789E-03
Accumulated dose (rem)   3.4478E-03  5.8950E-01  2.8958E-02

LPZ Doses:

Time (h) =    0.1000    Whole Body   Thyroid       TEDE
Delta dose (rem)         2.9562E-05  5.1192E-03  2.5106E-04
Accumulated dose (rem)   6.2777E-04  1.0733E-01  5.2726E-03

Security Center (External) Doses:
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Time (h) =    0.1000    Whole Body   Thyroid       TEDE
Delta dose (rem)         1.7411E-05  3.0149E-03  1.4786E-04
Accumulated dose (rem)  3.6972E-04  6.3214E-02  3.1053E-03

Detailed model information at time (H) =    0.1417

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble       Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 7.0466E-01
Deposition Net DF
     Noble       Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.0508E+00

Security Center (Internal) Doses:

Time (h) =    0.1417    Whole Body   Thyroid       TEDE
Delta dose (rem)         1.5220E-06  7.0534E-03  3.0671E-04
Accumulated dose (rem)  1.5321E-05  6.9691E-02  3.0311E-03

EAB Doses:

Time (h) =    0.1417    Whole Body   Thyroid       TEDE
Delta dose (rem)         3.0512E-04  5.3528E-02  2.6210E-03
Accumulated dose (rem)  3.7530E-03  6.4303E-01  3.1579E-02

LPZ Doses:

Time (h) =    0.1417    Whole Body   Thyroid       TEDE
Delta dose (rem)         5.5555E-05  9.7462E-03  4.7722E-04
Accumulated dose (rem)  6.8332E-04  1.1708E-01  5.7498E-03

Security Center (External) Doses:

Time (h) =    0.1417    Whole Body   Thyroid       TEDE
Delta dose (rem)         3.2719E-05  5.7400E-03  2.8106E-04
Accumulated dose (rem)  4.0244E-04  6.8954E-02  3.3863E-03

Detailed model information at time (H) =    0.1833

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble       Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 7.0466E-01
Deposition Net DF
     Noble       Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.0660E+00

Security Center (Internal) Doses:

Time (h) =    0.1833    Whole Body   Thyroid       TEDE
Delta dose (rem)         1.5669E-06  7.3613E-03  3.2003E-04
Accumulated dose (rem)  1.6888E-05  7.7052E-02  3.3511E-03

EAB Doses:

Time (h) =    0.1833    Whole Body   Thyroid       TEDE
Delta dose (rem)         4.1802E-04  7.4320E-02  3.6331E-03
Accumulated dose (rem)  4.1710E-03  7.1735E-01  3.5212E-02
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LPZ Doses:

Time (h) =    0.1833    Whole Body   Thyroid       TEDE
Delta dose (rem)         7.6111E-05  1.3532E-02  6.6150E-04
Accumulated dose (rem)   7.5943E-04  1.3061E-01  6.4113E-03

Security Center (External) Doses:

Time (h) =    0.1833    Whole Body   Thyroid       TEDE
Delta dose (rem)         4.4826E-05  7.9696E-03  3.8959E-04
Accumulated dose (rem)   4.4726E-04  7.6923E-02  3.7759E-03

Detailed model information at time (H) =    0.2250

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble      Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 7.0466E-01
Deposition Net DF
     Noble      Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.0814E+00

Security Center (Internal) Doses:

Time (h) =    0.2250    Whole Body   Thyroid       TEDE
Delta dose (rem)         1.9857E-06  9.4426E-03  4.1045E-04
Accumulated dose (rem)   1.8873E-05  8.6495E-02  3.7616E-03

EAB Doses:

Time (h) =    0.2250    Whole Body   Thyroid       TEDE
Delta dose (rem)         5.2850E-04  9.5099E-02  4.6421E-03
Accumulated dose (rem)   4.6995E-03  8.1245E-01  3.9854E-02

LPZ Doses:

Time (h) =    0.2250    Whole Body   Thyroid       TEDE
Delta dose (rem)         9.6227E-05  1.7315E-02  8.4521E-04
Accumulated dose (rem)   8.5566E-04  1.4793E-01  7.2565E-03

Security Center (External) Doses:

Time (h) =    0.2250    Whole Body   Thyroid       TEDE
Delta dose (rem)         5.6673E-05  1.0198E-02  4.9778E-04
Accumulated dose (rem)   5.0394E-04  8.7121E-02  4.2737E-03

Detailed model information at time (H) =    0.2583

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble      Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 7.0466E-01
Deposition Net DF
     Noble      Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.0938E+00

Security Center (Internal) Doses:

Time (h) =    0.2583    Whole Body   Thyroid       TEDE
Delta dose (rem)         1.8971E-06  9.1258E-03  3.9662E-04
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Accumulated dose (rem)  2.0770E-05  9.5621E-02  4.1582E-03

EAB Doses:

Time (h) =   0.2583    Whole Body   Thyroid       TEDE
Delta dose (rem)        4.9116E-04  8.9400E-02  4.3579E-03
Accumulated dose (rem)  5.1906E-03  9.0185E-01  4.4212E-02

LPZ Doses:

Time (h) =   0.2583    Whole Body   Thyroid       TEDE
Delta dose (rem)        8.9429E-05  1.6278E-02  7.9347E-04
Accumulated dose (rem)  9.4509E-04  1.6420E-01  8.0500E-03

Security Center (External) Doses:

Time (h) =   0.2583    Whole Body   Thyroid       TEDE
Delta dose (rem)        5.2669E-05  9.5867E-03  4.6731E-04
Accumulated dose (rem)  5.5661E-04  9.6708E-02  4.7410E-03

Detailed model information at time (H) =    0.2667

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble      Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 7.0466E-01
Deposition Net DF
     Noble      Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.0969E+00

Security Center (Internal) Doses:

Time (h) =   0.2667    Whole Body   Thyroid       TEDE
Delta dose (rem)        4.2539E-07  1.9881E-03  8.6414E-05
Accumulated dose (rem)  2.1196E-05  9.7609E-02  4.2446E-03

EAB Doses:

Time (h) =   0.2667    Whole Body   Thyroid       TEDE
Delta dose (rem)        1.9425E-05  2.7255E-06  1.9537E-05
Accumulated dose (rem)  5.2101E-03  9.0185E-01  4.4232E-02

LPZ Doses:

Time (h) =   0.2667    Whole Body   Thyroid       TEDE
Delta dose (rem)        3.5368E-06  4.9624E-07  3.5573E-06
Accumulated dose (rem)  9.4862E-04  1.6421E-01  8.0535E-03

Security Center (External) Doses:

Time (h) =   0.2667    Whole Body   Thyroid       TEDE
Delta dose (rem)        2.0830E-06  2.9226E-07  2.0951E-06
Accumulated dose (rem)  5.5869E-04  9.6708E-02  4.7431E-03

Detailed model information at time (H) =    0.3958

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble      Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 7.0466E-01
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Deposition Net DF
     Noble      Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.1459E+00

Security Center (Internal) Doses:

Time (h) =   0.3958    Whole Body   Thyroid       TEDE
Delta dose (rem)        3.2138E-06  8.9458E-03  3.9014E-04
Accumulated dose (rem)  2.4410E-05  1.0655E-01  4.6348E-03

EAB Doses:

Time (h) =   0.3958    Whole Body   Thyroid       TEDE
Delta dose (rem)        4.1944E-04  5.2388E-05  4.2160E-04
Accumulated dose (rem)  5.6295E-03  9.0191E-01  4.4653E-02

LPZ Doses:

Time (h) =   0.3958    Whole Body   Thyroid       TEDE
Delta dose (rem)        7.6371E-05  9.5386E-06  7.6763E-05
Accumulated dose (rem)  1.0250E-03  1.6421E-01  8.1303E-03

Security Center (External) Doses:

Time (h) =   0.3958    Whole Body   Thyroid       TEDE
Delta dose (rem)        4.4978E-05  5.6177E-06  4.5209E-05
Accumulated dose (rem)  6.0367E-04  9.6714E-02  4.7883E-03

Detailed model information at time (H) =    0.3958

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble      Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 7.0466E-01
Deposition Net DF
     Noble      Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.1459E+00

Security Center (Internal) Doses:

Time (h) =   0.3958    Whole Body   Thyroid       TEDE
Delta dose (rem)        5.0275E-10  3.9240E-09  6.6909E-10
Accumulated dose (rem)  2.4410E-05  1.0655E-01  4.6348E-03

EAB Doses:

Time (h) =   0.3958    Whole Body   Thyroid       TEDE
Delta dose (rem)        1.0184E-07  1.2227E-08  1.0234E-07
Accumulated dose (rem)  5.6296E-03  9.0191E-01  4.4653E-02

LPZ Doses:

Time (h) =   0.3958    Whole Body   Thyroid       TEDE
Delta dose (rem)        1.8542E-08  2.2263E-09  1.8634E-08
Accumulated dose (rem)  1.0250E-03  1.6421E-01  8.1303E-03

Security Center (External) Doses:

Time (h) =   0.3958    Whole Body   Thyroid       TEDE
Delta dose (rem)        1.0920E-08  1.3112E-09  1.0974E-08
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Accumulated dose (rem)  6.0368E-04  9.6714E-02  4.7883E-03

Detailed model information at time (H) =    0.5000

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble      Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 7.0466E-01
Deposition Net DF
     Noble      Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.1865E+00

Security Center (Internal) Doses:

Time (h) =   0.5000    Whole Body   Thyroid       TEDE
Delta dose (rem)        1.9082E-06  9.6999E-06  2.3153E-06
Accumulated dose (rem)  2.6318E-05  1.0656E-01  4.6371E-03

EAB Doses:

Time (h) =   0.5000    Whole Body   Thyroid       TEDE
Delta dose (rem)        4.4343E-04  5.0674E-05  4.4552E-04
Accumulated dose (rem)  6.0730E-03  9.0196E-01  4.5099E-02

LPZ Doses:

Time (h) =   0.5000    Whole Body   Thyroid       TEDE
Delta dose (rem)        8.0738E-05  9.2264E-06  8.1118E-05
Accumulated dose (rem)  1.1058E-03  1.6422E-01  8.2114E-03

Security Center (External) Doses:

Time (h) =   0.5000    Whole Body   Thyroid       TEDE
Delta dose (rem)        4.7551E-05  5.4339E-06  4.7774E-05
Accumulated dose (rem)  6.5123E-04  9.6719E-02  4.8361E-03

Detailed model information at time (H) =    2.0000

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble      Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 3.0681E-01
Deposition Net DF
     Noble      Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.3635E+00

Security Center (Internal) Doses:

Time (h) =   2.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        5.3099E-04  5.1190E-04  5.5684E-04
Accumulated dose (rem)  5.5731E-04  1.0708E-01  5.1939E-03

EAB Doses:

Time (h) =   2.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        1.3461E-01  4.8690E-03  1.3485E-01
Accumulated dose (rem)  1.4068E-01  9.0683E-01  1.7995E-01

LPZ Doses:
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Time (h) =    2.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         2.4509E-02  8.8652E-04  2.4554E-02
Accumulated dose (rem)   2.5614E-02  1.6511E-01  3.2765E-02

Security Center (External) Doses:

Time (h) =    2.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         1.4434E-02  5.2211E-04  1.4461E-02
Accumulated dose (rem)   1.5086E-02  9.7241E-02  1.9297E-02

Detailed model information at time (H) =    8.0000

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble      Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 6.2057E-01
Deposition Net DF
     Noble      Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 1.8279E+02

Security Center (Internal) Doses:

Time (h) =    8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         9.5625E-03  2.3309E-03  9.6639E-03
Accumulated dose (rem)   1.0120E-02  1.0941E-01  1.4858E-02

EAB Doses:

Time (h) =    8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         2.3657E+00  2.1676E-02  2.3666E+00
Accumulated dose (rem)   2.5064E+00  9.2850E-01  2.5466E+00

LPZ Doses:

Time (h) =    8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         4.3073E-01  3.9467E-03  4.3090E-01
Accumulated dose (rem)   4.5635E-01  1.6906E-01  4.6367E-01

Security Center (External) Doses:

Time (h) =    8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         2.5368E-01  2.3244E-03  2.5378E-01
Accumulated dose (rem)   2.6876E-01  9.9566E-02  2.7308E-01

Detailed model information at time (H) =   24.0000

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble      Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 4.8360E-01
Deposition Net DF
     Noble      Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 6.0637E+05

Security Center (Internal) Doses:

Time (h) =   24.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         7.9199E-03  1.9687E-03  7.9810E-03
Accumulated dose (rem)   1.8040E-02  1.1138E-01  2.2839E-02
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EAB Doses:

Time (h) =  24.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   2.5064E+00  9.2850E-01  2.5466E+00

LPZ Doses:

Time (h) =  24.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         4.2530E-01  2.0601E-03  4.2536E-01
Accumulated dose (rem)   8.8164E-01  1.7112E-01  8.8903E-01

Security Center (External) Doses:

Time (h) =  24.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         2.0850E-01  1.9638E-03  2.0856E-01
Accumulated dose (rem)   4.7726E-01  1.0153E-01  4.8164E-01

Detailed model information at time (H) =   96.0000

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble       Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 1.0000E-01
Deposition Net DF
     Noble       Elemental  Organic    Aerosol
     1.0000E+00 1.0000E+00 1.0000E+00 8.2005E+08

Security Center (Internal) Doses:

Time (h) =  96.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         2.3723E-03  1.2776E-03  2.4114E-03
Accumulated dose (rem)   2.0412E-02  1.1265E-01  2.5250E-02

EAB Doses:

Time (h) =  96.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   2.5064E+00  9.2850E-01  2.5466E+00

LPZ Doses:

Time (h) =  96.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         1.5697E-01  2.1059E-03  1.5704E-01
Accumulated dose (rem)   1.0386E+00  1.7322E-01  1.0461E+00

Security Center (External) Doses:

Time (h) =  96.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         6.1823E-02  1.2622E-03  6.1861E-02
Accumulated dose (rem)   5.3909E-01  1.0279E-01  5.4350E-01

Detailed model information at time (H) =  720.0000

     Natural deposition - Powers' Model, Compartment  1
Deposition Lambda (1 / Hours)
     Noble       Elemental  Organic    Aerosol
     0.0000E+00 0.0000E+00 0.0000E+00 1.0000E-01
Deposition Net DF
     Noble       Elemental  Organic    Aerosol
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1.0000E+00 1.0000E+00 1.0000E+00 1.1106E+36

Security Center (Internal) Doses:

Time (h) = 720.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.0193E-03	1.0108E-03	1.0501E-03
Accumulated dose (rem)	2.1431E-02	1.1366E-01	2.6300E-02

EAB Doses:

Time (h) = 720.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	2.5064E+00	9.2850E-01	2.5466E+00

LPZ Doses:

Time (h) = 720.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	7.9701E-02	1.9686E-03	7.9761E-02
Accumulated dose (rem)	1.1183E+00	1.7519E-01	1.1258E+00

Security Center (External) Doses:

Time (h) = 720.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.6845E-02	1.0090E-03	2.6876E-02
Accumulated dose (rem)	5.6593E-01	1.0380E-01	5.7037E-01

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##

I-131 Summary

##

Time (hr)	Primary Containment I-131 (Curies)	Reactor Enclosure I-131 (Curies)	Environment I-131 (Curies)
0.000	5.2640E+03	1.8766E-04	1.1699E-04
0.017	1.5738E+05	1.0712E-02	2.6357E-01
0.058	5.4176E+05	3.7412E-02	3.2742E+00
0.100	9.1639E+05	6.2144E+00	3.4383E+00
0.142	1.2806E+06	1.5451E+01	3.7508E+00
0.183	1.6340E+06	2.7651E+01	4.1850E+00
0.225	1.9783E+06	4.2787E+01	4.7409E+00
0.258	2.2465E+06	5.6917E+01	5.2637E+00
0.267	2.3132E+06	5.9952E+01	5.2637E+00
0.396	3.2927E+06	1.1431E+02	5.2641E+00
0.396	3.2929E+06	1.1432E+02	5.2641E+00
0.500	4.0239E+06	1.6682E+02	5.2644E+00
0.900	9.2485E+06	4.9174E+02	5.2669E+00
1.200	1.2852E+07	8.2149E+02	5.2710E+00
1.500	1.6204E+07	1.1771E+03	5.2772E+00
1.800	1.9322E+07	1.5359E+03	5.2857E+00
2.000	2.1277E+07	1.7706E+03	5.2926E+00
2.300	1.6059E+07	1.8947E+03	5.3045E+00
2.600	1.2210E+07	1.7534E+03	5.3165E+00
2.900	9.3722E+06	1.5157E+03	5.3278E+00
3.200	7.2788E+06	1.2637E+03	5.3378E+00
3.500	5.7347E+06	1.0340E+03	5.3468E+00
3.800	4.5957E+06	8.3928E+02	5.3547E+00
4.100	3.7554E+06	6.8121E+02	5.3617E+00
4.400	3.1353E+06	5.5630E+02	5.3680E+00
4.700	2.6777E+06	4.5939E+02	5.3738E+00

5.000	2.3398E+06	3.8515E+02	5.3792E+00
5.300	2.1770E+06	3.3123E+02	5.3842E+00
5.600	2.0416E+06	2.9325E+02	5.3890E+00
5.900	1.9292E+06	2.6558E+02	5.3937E+00
6.200	1.8356E+06	2.4483E+02	5.3982E+00
6.500	1.7578E+06	2.2887E+02	5.4026E+00
6.800	1.6930E+06	2.1633E+02	5.4070E+00
7.100	1.6390E+06	2.0632E+02	5.4113E+00
7.400	1.5939E+06	1.9822E+02	5.4155E+00
7.700	1.5563E+06	1.9162E+02	5.4197E+00
8.000	1.5249E+06	1.8619E+02	5.4239E+00
8.300	1.4985E+06	1.8171E+02	5.4280E+00
8.600	1.4789E+06	1.7805E+02	5.4322E+00
8.900	1.4620E+06	1.7508E+02	5.4363E+00
9.200	1.4474E+06	1.7263E+02	5.4403E+00
9.500	1.4348E+06	1.7058E+02	5.4444E+00
9.800	1.4238E+06	1.6883E+02	5.4485E+00
10.100	1.4143E+06	1.6734E+02	5.4525E+00
10.400	1.4059E+06	1.6606E+02	5.4565E+00
24.000	1.2984E+06	1.5185E+02	5.6331E+00
96.000	9.9499E+05	5.8177E+01	6.0358E+00
720.000	9.9109E+04	5.7948E+00	7.2146E+00

Time (hr)	Security Center I-131 (Curies)	SGTS Node I-131 (Curies)
0.000	1.3973E-07	1.0425E-10
0.017	2.3477E-04	5.9511E-09
0.058	1.6320E-03	2.0784E-08
0.100	2.3625E-04	3.4524E-06
0.142	1.8069E-04	8.5838E-06
0.183	2.2826E-04	1.5361E-05
0.225	2.8480E-04	2.3770E-05
0.258	3.2336E-04	3.1620E-05
0.267	1.9536E-04	4.0393E-07
0.396	1.4381E-07	7.7490E-07
0.396	1.4363E-07	5.6843E-07
0.500	6.5046E-08	1.1365E-06
0.900	1.9668E-07	3.3804E-06
1.200	3.3376E-07	5.6738E-06
1.500	4.8387E-07	8.1721E-06
1.800	6.3758E-07	1.0724E-05
2.000	7.3938E-07	1.2412E-05
2.300	8.1582E-07	1.3550E-05
2.600	7.8794E-07	1.3026E-05
2.900	7.1869E-07	1.1857E-05
3.200	6.3962E-07	1.0544E-05
3.500	5.6519E-07	9.3165E-06
3.800	5.0103E-07	8.2619E-06
4.100	4.4834E-07	7.3978E-06
4.400	4.0636E-07	6.7104E-06
4.700	3.7359E-07	6.1741E-06
5.000	3.4834E-07	5.7612E-06
5.300	3.2981E-07	5.4597E-06
5.600	3.1668E-07	5.2458E-06
5.900	3.0706E-07	5.0888E-06
6.200	2.9979E-07	4.9698E-06
6.500	2.9414E-07	4.8773E-06
6.800	2.8965E-07	4.8037E-06
7.100	2.8601E-07	4.7441E-06
7.400	2.8303E-07	4.6951E-06

7.700	2.8055E-07	4.6543E-06
8.000	2.7847E-07	4.6201E-06
8.300	1.6310E-07	4.5911E-06
8.600	1.6223E-07	4.5667E-06
8.900	1.6149E-07	4.5462E-06
9.200	1.6086E-07	4.5285E-06
9.500	1.6030E-07	4.5130E-06
9.800	1.5981E-07	4.4993E-06
10.100	1.5937E-07	4.4869E-06
10.400	1.5897E-07	4.4757E-06
24.000	1.4980E-07	4.2178E-06
96.000	3.6550E-08	1.6160E-06
720.000	1.5985E-09	1.6097E-07

##
Cumulative Dose Summary
##

	Security Center (Inte		EAB		LPZ	
Time (hr)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)
0.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.017	1.2690E-03	5.5203E-05	4.5201E-02	2.2222E-03	8.2299E-03	4.0461E-04
0.058	3.5629E-02	1.5498E-03	5.6139E-01	2.7579E-02	1.0221E-01	5.0215E-03
0.100	6.2637E-02	2.7244E-03	5.8950E-01	2.8958E-02	1.0733E-01	5.2726E-03
0.142	6.9691E-02	3.0311E-03	6.4303E-01	3.1579E-02	1.1708E-01	5.7498E-03
0.183	7.7052E-02	3.3511E-03	7.1735E-01	3.5212E-02	1.3061E-01	6.4113E-03
0.225	8.6495E-02	3.7616E-03	8.1245E-01	3.9854E-02	1.4793E-01	7.2565E-03
0.258	9.5621E-02	4.1582E-03	9.0185E-01	4.4212E-02	1.6420E-01	8.0500E-03
0.267	9.7609E-02	4.2446E-03	9.0185E-01	4.4232E-02	1.6421E-01	8.0535E-03
0.396	1.0655E-01	4.6348E-03	9.0191E-01	4.4653E-02	1.6421E-01	8.1303E-03
0.396	1.0655E-01	4.6348E-03	9.0191E-01	4.4653E-02	1.6421E-01	8.1303E-03
0.500	1.0656E-01	4.6371E-03	9.0196E-01	4.5099E-02	1.6422E-01	8.2114E-03
0.900	1.0661E-01	4.6629E-03	9.0240E-01	5.1348E-02	1.6430E-01	9.3493E-03
1.200	1.0668E-01	4.7248E-03	9.0309E-01	6.6413E-02	1.6443E-01	1.2092E-02
1.500	1.0679E-01	4.8428E-03	9.0417E-01	9.5004E-02	1.6463E-01	1.7298E-02
1.800	1.0695E-01	5.0285E-03	9.0563E-01	1.3995E-01	1.6489E-01	2.5481E-02
2.000	1.0708E-01	5.1939E-03	9.0683E-01	1.7995E-01	1.6511E-01	3.2765E-02
2.300	1.0729E-01	5.5050E-03	9.0886E-01	2.5512E-01	1.6548E-01	4.6452E-02
2.600	1.0751E-01	5.8787E-03	9.1092E-01	3.4557E-01	1.6586E-01	6.2920E-02
2.900	1.0772E-01	6.3008E-03	9.1283E-01	4.4804E-01	1.6620E-01	8.1578E-02
3.200	1.0790E-01	6.7599E-03	9.1453E-01	5.5983E-01	1.6651E-01	1.0193E-01
3.500	1.0807E-01	7.2467E-03	9.1603E-01	6.7865E-01	1.6679E-01	1.2357E-01
3.800	1.0821E-01	7.7535E-03	9.1735E-01	8.0263E-01	1.6703E-01	1.4614E-01
4.100	1.0833E-01	8.2743E-03	9.1852E-01	9.3019E-01	1.6724E-01	1.6936E-01
4.400	1.0845E-01	8.8038E-03	9.1956E-01	1.0600E+00	1.6743E-01	1.9301E-01
4.700	1.0855E-01	9.3379E-03	9.2051E-01	1.1911E+00	1.6760E-01	2.1686E-01
5.000	1.0864E-01	9.8729E-03	9.2138E-01	1.3224E+00	1.6776E-01	2.4078E-01
5.300	1.0873E-01	1.0406E-02	9.2220E-01	1.4534E+00	1.6791E-01	2.6462E-01
5.600	1.0881E-01	1.0935E-02	9.2297E-01	1.5833E+00	1.6805E-01	2.8828E-01
5.900	1.0889E-01	1.1458E-02	9.2372E-01	1.7118E+00	1.6819E-01	3.1167E-01
6.200	1.0897E-01	1.1974E-02	9.2444E-01	1.8384E+00	1.6832E-01	3.3473E-01
6.500	1.0905E-01	1.2480E-02	9.2515E-01	1.9629E+00	1.6845E-01	3.5739E-01
6.800	1.0912E-01	1.2977E-02	9.2584E-01	2.0849E+00	1.6857E-01	3.7961E-01
7.100	1.0919E-01	1.3464E-02	9.2652E-01	2.2044E+00	1.6870E-01	4.0137E-01
7.400	1.0927E-01	1.3940E-02	9.2719E-01	2.3213E+00	1.6882E-01	4.2265E-01
7.700	1.0934E-01	1.4405E-02	9.2785E-01	2.4353E+00	1.6894E-01	4.4341E-01
8.000	1.0941E-01	1.4858E-02	9.2850E-01	2.5466E+00	1.6906E-01	4.6367E-01
8.300	1.0945E-01	1.5149E-02	9.2850E-01	2.5466E+00	1.6910E-01	4.7764E-01
8.600	1.0949E-01	1.5402E-02	9.2850E-01	2.5466E+00	1.6914E-01	4.9125E-01

8.900	1.0953E-01	1.5649E-02	9.2850E-01	2.5466E+00	1.6918E-01	5.0450E-01
9.200	1.0957E-01	1.5889E-02	9.2850E-01	2.5466E+00	1.6923E-01	5.1738E-01
9.500	1.0961E-01	1.6123E-02	9.2850E-01	2.5466E+00	1.6927E-01	5.2991E-01
9.800	1.0965E-01	1.6350E-02	9.2850E-01	2.5466E+00	1.6931E-01	5.4210E-01
10.100	1.0969E-01	1.6571E-02	9.2850E-01	2.5466E+00	1.6935E-01	5.5394E-01
10.400	1.0973E-01	1.6786E-02	9.2850E-01	2.5466E+00	1.6939E-01	5.6546E-01
24.000	1.1138E-01	2.2839E-02	9.2850E-01	2.5466E+00	1.7112E-01	8.8903E-01
96.000	1.1265E-01	2.5250E-02	9.2850E-01	2.5466E+00	1.7322E-01	1.0461E+00
720.000	1.1366E-01	2.6300E-02	9.2850E-01	2.5466E+00	1.7519E-01	1.1258E+00

Security Center (Exte

Time (hr)	Thyroid (rem)	TEDE (rem)
0.000	0.0000E+00	0.0000E+00
0.017	4.8470E-03	2.3829E-04
0.058	6.0199E-02	2.9574E-03
0.100	6.3214E-02	3.1053E-03
0.142	6.8954E-02	3.3863E-03
0.183	7.6923E-02	3.7759E-03
0.225	8.7121E-02	4.2737E-03
0.258	9.6708E-02	4.7410E-03
0.267	9.6708E-02	4.7431E-03
0.396	9.6714E-02	4.7883E-03
0.396	9.6714E-02	4.7883E-03
0.500	9.6719E-02	4.8361E-03
0.900	9.6766E-02	5.5062E-03
1.200	9.6841E-02	7.1217E-03
1.500	9.6956E-02	1.0188E-02
1.800	9.7113E-02	1.5007E-02
2.000	9.7241E-02	1.9297E-02
2.300	9.7460E-02	2.7358E-02
2.600	9.7680E-02	3.7057E-02
2.900	9.7885E-02	4.8045E-02
3.200	9.8068E-02	6.0032E-02
3.500	9.8229E-02	7.2773E-02
3.800	9.8370E-02	8.6068E-02
4.100	9.8495E-02	9.9747E-02
4.400	9.8607E-02	1.1367E-01
4.700	9.8709E-02	1.2772E-01
5.000	9.8802E-02	1.4181E-01
5.300	9.8890E-02	1.5585E-01
5.600	9.8973E-02	1.6978E-01
5.900	9.9053E-02	1.8356E-01
6.200	9.9131E-02	1.9714E-01
6.500	9.9206E-02	2.1048E-01
6.800	9.9280E-02	2.2357E-01
7.100	9.9353E-02	2.3639E-01
7.400	9.9425E-02	2.4892E-01
7.700	9.9496E-02	2.6115E-01
8.000	9.9566E-02	2.7308E-01
8.300	9.9607E-02	2.7993E-01
8.600	9.9647E-02	2.8660E-01
8.900	9.9687E-02	2.9309E-01
9.200	9.9727E-02	2.9941E-01
9.500	9.9767E-02	3.0556E-01
9.800	9.9807E-02	3.1153E-01
10.100	9.9846E-02	3.1734E-01
10.400	9.9885E-02	3.2298E-01
24.000	1.0153E-01	4.8164E-01
96.000	1.0279E-01	5.4350E-01

```
 720.000 1.0380E-01 5.7037E-01

#####################################################################
                         Worst Two-Hour Doses
#####################################################################

Security Center (Internal)
   Time    Whole Body    Thyroid        TEDE
   (hr)      (rem)        (rem)         (rem)
    0.0   6.5372E-04   1.4079E-01   5.1027E-03
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/12/2006  at 11:37:45
#######################################################################

#######################################################################
                      File information
#######################################################################

 Plant file           = P:\Users\Nuc\Exelon EOC\Discipline
Files\Process\AST\Limerick AST\LGS LOCA\RADTRAD\Rev 2 Final DBA Runs\LGS LOCA MSIV
Leak (24-hr Settling Distribution) - Vital Area - Security Center.psf
 Inventory file       = c:\program files\radtrad3-03\defaults\limerick ast source
terms.nif
 Release file         = c:\program files\radtrad3-03\defaults\bwr_dba.rft
 Dose Conversion file = c:\program files\radtrad3-03\defaults\fgr11&12.inp
```

```
#####    ####   #####    #  #     #  #####   #    #  #####
#    #  #       #        #  ##    #  #    #  #    #    #
#    #  #       #        #  # #   #  #    #  #    #    #
#####    ####   ####     #  #  #  #  #####   #    #    #
#            #  #        #  #   # #  #       #    #    #
#            #  #        #  #    ##  #       #    #    #
#        ####   #        #  #     #  #        ####     #
```

```
Radtrad 3.03 4/15/2001
LGS LOCA 200scfh MSIV Leak - Vital Area - Security Center
Nuclide Inventory File:
c:\program files\radtrad3-03\defaults\limerick ast source terms.nif
Plant Power Level:
 3.5270E+03
Compartments:
  9
Compartment 1:
Containment
  3
 3.7907E+05
  0
  0
  0
  1
  0
Compartment 2:
(Node 1) Inboard MSL A Volume
  3
 2.5800E+02
  0
  0
  0
  0
  0
Compartment 3:
(Node 1) Inboard MSL B Volume
  3
 1.0000E-08
```

```
  0
  0
  0
  0
  0
Compartment 4:
(Node 2) Outboard MSL A Volume
  3
 1.1820E+03
  0
  0
  0
  0
  0
Compartment 5:
(Node 2) Outboard MSL B Volume
  3
 1.0510E+03
  0
  0
  0
  0
  0
Compartment 6:
Condenser
  3
 5.4750E+04
  0
  0
  0
  0
  0
Compartment 7:
Environment
  2
 0.0000E+00
  0
  0
  0
  0
  0
Compartment 8:
Security Center
  1
 7.4880E+04
  0
  0
  0
  0
  0
Compartment 9:
Hold
  3
 1.0000E+00
  0
  0
  0
  0
  0
Pathways:
```

```
 11
Pathway 1:
Containment to (Node 1) Inboard MSL A Volume
  1
  2
  2
Pathway 2:
Containment to (Node 1) Inboard MSL B Volume
  1
  3
  2
Pathway 3:
Containment to Hold (PC Leakage)
  1
  9
  4
Pathway 4:
(Node 1) Inboard MSL A Volume to (Node 2) Outboard MSL A Volume
  2
  4
  2
Pathway 5:
(Node 1) Inboard MSL B Volume to (Node 2) Outboard MSL B Volume
  3
  5
  2
Pathway 6:
(Node 2) Outboard MSL A Volume to Condenser
  4
  6
  2
Pathway 7:
(Node 2) Outboard MSL B Volume to Condenser
  5
  6
  2
Pathway 8:
Condenser Leak to Environment
  6
  7
  2
Pathway 9:
Filtered Intake to Security Center
  7
  8
  2
Pathway 10:
Unfiltered Inleakage to Security Center
  7
  8
  2
Pathway 11:
Security Center Exhaust
  8
  7
  2
End of Plant Model File
Scenario Description Name:

Plant Model Filename:
```

```
Source Term:
  1
  1   1.0000E+00
c:\program files\radtrad3-03\defaults\fgr11&12.inp
c:\program files\radtrad3-03\defaults\bwr_dba.rft
  0.0000E+00
  1
  9.5000E-01   4.8500E-02   1.5000E-03   1.0000E+00
Overlying Pool:
  0
  0.0000E+00
  0
  0
  0
  0
Compartments:
  9
Compartment 1:
  0
  1
  0
  0
  0
  0
  0
  3
  3
  1.0000E+01
  1
  1
  0.0000E+00   0.0000E+00
Compartment 2:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 3:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 4:
  0
  1
  0
  0
  0
  0
  0
```

```
  0
  0
Compartment 5:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 6:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 7:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 8:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 9:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Pathways:
 11
Pathway 1:
  0
  0
  0
  0
  0
```

```
  1
  5
  0.0000E+00   1.5240E+00   9.9980E+01   9.9690E+01   0.0000E+00
  2.0000E+00   9.3060E-01   9.9980E+01   9.9690E+01   0.0000E+00
  2.4000E+01   5.1270E-01   0.0000E+00   9.9970E+01   0.0000E+00
  9.6000E+01   5.1270E-01   0.0000E+00   9.9990E+01   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 2:
  0
  0
  0
  0
  0
  1
  5
  0.0000E+00   1.5240E+00   9.9910E+01   9.9480E+01   0.0000E+00
  2.0000E+00   9.3060E-01   9.9910E+01   9.9480E+01   0.0000E+00
  2.4000E+01   5.1270E-01   0.0000E+00   9.9890E+01   0.0000E+00
  9.6000E+01   5.1270E-01   0.0000E+00   9.9980E+01   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 3:
  0
  0
  0
  0
  0
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   5.0000E-01
  2.4000E+01   2.5000E-01
  7.2000E+02   0.0000E+00
  0
Pathway 4:
  0
  0
  0
  0
  0
  1
  4
  0.0000E+00   9.3060E-01   0.0000E+00   0.0000E+00   0.0000E+00
  2.4000E+01   5.1270E-01   0.0000E+00   0.0000E+00   0.0000E+00
  9.6000E+01   5.1270E-01   0.0000E+00   0.0000E+00   0.0000E+00
```

```
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 5:
  0
  0
  0
  0
  0
  1
  4
  0.0000E+00   9.3060E-01   0.0000E+00   0.0000E+00   0.0000E+00
  2.4000E+01   5.1270E-01   0.0000E+00   0.0000E+00   0.0000E+00
  9.6000E+01   5.1270E-01   0.0000E+00   0.0000E+00   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 6:
  0
  0
  0
  0
  0
  1
  4
  0.0000E+00   3.1880E+00   0.0000E+00   0.0000E+00   0.0000E+00
  2.4000E+01   1.5130E+00   0.0000E+00   0.0000E+00   0.0000E+00
  9.6000E+01   1.1480E+00   0.0000E+00   0.0000E+00   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 7:
  0
  0
  0
  0
  0
  1
  4
  0.0000E+00   3.1880E+00   0.0000E+00   0.0000E+00   0.0000E+00
  2.4000E+01   1.5130E+00   0.0000E+00   0.0000E+00   0.0000E+00
  9.6000E+01   1.1480E+00   0.0000E+00   0.0000E+00   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
```

```
  0
Pathway 8:
  0
  0
  0
  0
  0
  1
  4
  0.0000E+00   3.6620E+00   0.0000E+00   0.0000E+00   0.0000E+00
  2.4000E+01   2.0180E+00   0.0000E+00   0.0000E+00   0.0000E+00
  9.6000E+01   2.0180E+00   0.0000E+00   0.0000E+00   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 9:
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   0.0000E+00   9.9000E+01   9.5000E+01   9.5000E+01
  5.0000E-01   0.0000E+00   9.9000E+01   9.5000E+01   9.5000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 10:
  0
  0
  0
  0
  0
  1
  2
  0.0000E+00   7.4880E+04   0.0000E+00   0.0000E+00   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 11:
  0
  0
  0
  0
  0
  1
  3
```

```
  0.0000E+00   7.4880E+04   1.0000E+02   1.0000E+02   1.0000E+02
  5.0000E-01   7.4880E+04   1.0000E+02   1.0000E+02   1.0000E+02
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Dose Locations:
  4
Location 1:
Exclusion Area Boundary (EAB)
  7
  1
  2
  0.0000E+00   3.1800E-04
  2.4000E+01   0.0000E+00
  1
  4
  0.0000E+00   3.5000E-04
  8.0000E+00   1.8000E-04
  2.4000E+01   2.3000E-04
  7.2000E+02   0.0000E+00
  0
Location 2:
Low Population Zone (LPZ)
  7
  1
 10
  0.0000E+00   5.7900E-05
  8.0000E+00   4.1000E-05
  2.4000E+01   1.9500E-05
  4.8000E+01   1.9500E-05
  7.2000E+01   1.9500E-05
  9.6000E+01   6.6800E-06
  1.2000E+02   6.6800E-06
  1.6800E+02   6.6800E-06
  3.3600E+02   6.6800E-06
  7.2000E+02   0.0000E+00
  1
  4
  0.0000E+00   3.5000E-04
  8.0000E+00   1.8000E-04
  2.4000E+01   2.3000E-04
  7.2000E+02   0.0000E+00
  0
Location 3:
Security Center (Internal)
  8
  0
  1
  2
  0.0000E+00   3.5000E-04
  7.2000E+02   0.0000E+00
  1
  4
  0.0000E+00   1.0000E+00
  2.4000E+01   6.0000E-01
  9.6000E+01   4.0000E-01
```

```
  7.2000E+02   0.0000E+00
 Location 4:
 Security Center (External)
  7
  1
  5
  0.0000E+00   3.4100E-05
  8.0000E+00   2.0100E-05
  2.4000E+01   7.6800E-06
  9.6000E+01   2.2500E-06
  7.2000E+02   0.0000E+00
  1
  2
  0.0000E+00   3.5000E-04
  7.2000E+02   0.0000E+00
  0
 Effective Volume Location:
  1
  6
  0.0000E+00   3.4100E-05
  2.0000E+00   3.4100E-05
  8.0000E+00   2.0100E-05
  2.4000E+01   1.2800E-05
  9.6000E+01   5.6200E-06
  7.2000E+02   0.0000E+00
 Simulation Parameters:
  1
  0.0000E+00   0.0000E+00
 Output Filename:
 P:\Users\Nuc\Exelon EOC\Discipline Files\Process\AST\Limerick AST\LGS
LOCA\RADTRAD\Rev 2 Final DBA Runs\LGS LOCA MSIV Leak (24-hr Settling Distribution)
- Vital Area - Security Center.o0
  1
  1
  1
  0
  0
 End of Scenario File
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/12/2006  at 11:37:45
#######################################################################

#######################################################################
                      Plant Description
#######################################################################

Number of Nuclides =  60

Inventory Power =   1.0000E+00 MWth
Plant Power Level =   3.5270E+03 MWth

Number of compartments    =   9

Compartment information

Compartment number  1  (Source term fraction =   1.0000E+00
)
Name: Containment
Compartment volume =   3.7907E+05 (Cubic feet)
Compartment type is Normal
Removal devices within compartment:
     Deposition
Pathways into and out of compartment  1
   Exit Pathway Number    1: Containment to (Node 1) Inboard MSL A Volume
   Exit Pathway Number    2: Containment to (Node 1) Inboard MSL B Volume
   Exit Pathway Number    3: Containment to Hold (PC Leakage)

Compartment number  2
Name: (Node 1) Inboard MSL A Volume
Compartment volume =   2.5800E+02 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  2
   Inlet Pathway Number   1: Containment to (Node 1) Inboard MSL A Volume
   Exit Pathway Number    4: (Node 1) Inboard MSL A Volume to (Node 2) Outboard

Compartment number  3
Name: (Node 1) Inboard MSL B Volume
Compartment volume =   1.0000E-08 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  3
   Inlet Pathway Number   2: Containment to (Node 1) Inboard MSL B Volume
   Exit Pathway Number    5: (Node 1) Inboard MSL B Volume to (Node 2) Outboard

Compartment number  4
Name: (Node 2) Outboard MSL A Volume
Compartment volume =   1.1820E+03 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  4
   Inlet Pathway Number   4: (Node 1) Inboard MSL A Volume to (Node 2) Outboard
   Exit Pathway Number    6: (Node 2) Outboard MSL A Volume to Condenser

Compartment number  5
Name: (Node 2) Outboard MSL B Volume
Compartment volume =   1.0510E+03 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  5
   Inlet Pathway Number   5: (Node 1) Inboard MSL B Volume to (Node 2) Outboard
```

```
   Exit Pathway Number    7: (Node 2) Outboard MSL B Volume to Condenser

Compartment number  6
Name: Condenser
Compartment volume =   5.4750E+04 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  6
   Inlet Pathway Number   6: (Node 2) Outboard MSL A Volume to Condenser
   Inlet Pathway Number   7: (Node 2) Outboard MSL B Volume to Condenser
   Exit Pathway Number    8: Condenser Leak to Environment

Compartment number  7
Name: Environment
Compartment type is Environment
Pathways into and out of compartment  7
   Inlet Pathway Number   8: Condenser Leak to Environment
   Inlet Pathway Number  11: Security Center Exhaust
   Exit Pathway Number    9: Filtered Intake to Security Center
   Exit Pathway Number   10: Unfiltered Inleakage to Security Center

Compartment number  8
Name: Security Center
Compartment volume =   7.4880E+04 (Cubic feet)
Compartment type is Control Room
Pathways into and out of compartment  8
   Inlet Pathway Number   9: Filtered Intake to Security Center
   Inlet Pathway Number  10: Unfiltered Inleakage to Security Center
   Exit Pathway Number   11: Security Center Exhaust

Compartment number  9
Name: Hold
Compartment volume =   1.0000E+00 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  9
   Inlet Pathway Number   3: Containment to Hold (PC Leakage)

Total number of pathways =  11
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/12/2006  at 11:37:45
#######################################################################

#######################################################################
                    Scenario Description
#######################################################################
```

Radioactive Decay is enabled
Calculation of Daughters is enabled

Release Fractions and Timings

	GAP	EARLY IN-VESSEL	LATE RELEASE	RELEASE MASS
	0.500000 hr	1.5000 hrs	0.0000 hrs	(gm)
NOBLES	5.0000E-02	9.5000E-01	0.0000E+00	4.625E+03
IODINE	5.0000E-02	2.5000E-01	0.0000E+00	3.033E+02
CESIUM	5.0000E-02	2.0000E-01	0.0000E+00	5.099E+04
TELLURIUM	0.0000E+00	5.0000E-02	0.0000E+00	4.012E+01
STRONTIUM	0.0000E+00	2.0000E-02	0.0000E+00	1.712E+03
BARIUM	0.0000E+00	2.0000E-02	0.0000E+00	4.739E+01
RUTHENIUM	0.0000E+00	2.5000E-03	0.0000E+00	5.988E+01
CERIUM	0.0000E+00	5.0000E-04	0.0000E+00	5.914E+02
LANTHANUM	0.0000E+00	2.0000E-04	0.0000E+00	8.731E+00

Inventory Power = 3527. MWt

Nuclide Name	Group	Specific Inventory (Ci/MWt)	half life (s)	Whole Body DCF (Sv-m3/Bq-s)	Inhaled Thyroid (Sv/Bq)	Inhaled Effective (Sv/Bq)
Co-58	7	1.529E+02	6.117E+06	4.760E-14	8.720E-10	2.940E-09
Co-60	7	1.830E+02	1.663E+08	1.260E-13	1.620E-08	5.910E-08
Kr-85	1	3.946E+02	3.383E+08	1.190E-16	0.000E+00	0.000E+00
Kr-85m	1	8.313E+03	1.613E+04	7.480E-15	0.000E+00	0.000E+00
Kr-87	1	1.633E+04	4.578E+03	4.120E-14	0.000E+00	0.000E+00
Kr-88	1	2.303E+04	1.022E+04	1.020E-13	0.000E+00	0.000E+00
Rb-86	3	6.518E+01	1.612E+06	4.810E-15	1.330E-09	1.790E-09
Sr-89	5	2.798E+04	4.363E+06	7.730E-17	7.960E-12	1.120E-08
Sr-90	5	3.178E+03	9.190E+08	7.530E-18	2.690E-10	3.510E-07
Sr-91	5	3.801E+04	3.420E+04	4.924E-14	9.930E-12	4.547E-10
Sr-92	5	4.017E+04	9.756E+03	6.790E-14	3.920E-12	2.180E-10
Y-90	9	3.272E+03	2.304E+05	1.900E-16	5.170E-13	2.280E-09
Y-91	9	3.448E+04	5.055E+06	2.600E-16	8.500E-12	1.320E-08
Y-92	9	4.029E+04	1.274E+04	1.300E-14	1.050E-12	2.110E-10
Y-93	9	4.526E+04	3.636E+04	4.800E-15	9.260E-13	5.820E-10
Zr-95	9	4.489E+04	5.528E+06	3.600E-14	1.440E-09	6.390E-09
Zr-97	9	4.657E+04	6.084E+04	4.432E-14	2.315E-11	1.171E-09
Nb-95	9	4.512E+04	3.037E+06	3.740E-14	3.580E-10	1.570E-09
Mo-99	7	5.078E+04	2.376E+05	7.280E-15	1.520E-11	1.070E-09
Tc-99m	7	4.447E+04	2.167E+04	5.890E-15	5.010E-11	8.800E-12
Ru-103	7	4.202E+04	3.394E+06	2.251E-14	2.570E-10	2.421E-09
Ru-105	7	2.908E+04	1.598E+04	3.810E-14	4.150E-12	1.230E-10
Ru-106	7	1.730E+04	3.181E+07	1.040E-14	1.720E-09	1.290E-07
Rh-105	7	2.752E+04	1.273E+05	3.720E-15	2.880E-12	2.580E-10
Sb-127	4	2.896E+03	3.326E+05	3.330E-14	6.150E-11	1.630E-09
Sb-129	4	8.638E+03	1.555E+04	7.140E-14	9.720E-12	1.740E-10
Te-127	4	2.873E+03	3.366E+04	2.420E-16	1.840E-12	8.600E-11
Te-127m	4	3.855E+02	9.418E+06	1.470E-16	9.660E-11	5.810E-09
Te-129	4	8.501E+03	4.176E+03	2.750E-15	5.090E-13	2.090E-11
Te-129m	4	1.267E+03	2.903E+06	3.337E-15	1.563E-10	6.484E-09

Te-131m	4	3.869E+03	1.080E+05	7.463E-14	3.669E-08	1.758E-09
Te-132	4	3.821E+04	2.815E+05	1.030E-14	6.280E-08	2.550E-09
I-131	2	2.687E+04	6.947E+05	1.820E-14	2.920E-07	8.890E-09
I-132	2	3.881E+04	8.280E+03	1.120E-13	1.740E-09	1.030E-10
I-133	2	5.556E+04	7.488E+04	2.940E-14	4.860E-08	1.580E-09
I-134	2	6.165E+04	3.156E+03	1.300E-13	2.880E-10	3.550E-11
I-135	2	5.192E+04	2.380E+04	8.294E-14	8.460E-09	3.320E-10
Xe-133	1	5.491E+04	4.532E+05	1.560E-15	0.000E+00	0.000E+00
Xe-135	1	2.228E+04	3.272E+04	1.190E-14	0.000E+00	0.000E+00
Cs-134	3	7.280E+03	6.507E+07	7.570E-14	1.110E-08	1.250E-08
Cs-136	3	2.027E+03	1.132E+06	1.060E-13	1.730E-09	1.980E-09
Cs-137	3	4.538E+03	9.467E+08	2.725E-14	7.930E-09	8.630E-09
Ba-139	6	5.084E+04	4.962E+03	2.170E-15	2.400E-12	4.640E-11
Ba-140	6	4.896E+04	1.101E+06	8.580E-15	2.560E-10	1.010E-09
La-140	9	5.019E+04	1.450E+05	1.170E-13	6.870E-11	1.310E-09
La-141	9	4.640E+04	1.415E+04	2.390E-15	9.400E-12	1.570E-10
La-142	9	4.532E+04	5.550E+03	1.440E-13	8.740E-12	6.840E-11
Ce-141	8	4.492E+04	2.808E+06	3.430E-15	2.550E-11	2.420E-09
Ce-143	8	4.427E+04	1.188E+05	1.290E-14	6.230E-12	9.160E-10
Ce-144	8	3.596E+04	2.456E+07	2.773E-15	2.920E-10	1.010E-07
Pr-143	9	4.293E+04	1.172E+06	2.100E-17	1.680E-18	2.190E-09
Nd-147	9	1.838E+04	9.487E+05	6.190E-15	1.820E-11	1.850E-09
Np-239	8	5.397E+05	2.035E+05	7.690E-15	7.620E-12	6.780E-10
Pu-238	8	1.796E+02	2.769E+09	4.880E-18	3.860E-10	7.790E-05
Pu-239	8	1.200E+01	7.594E+11	4.240E-18	3.750E-10	8.330E-05
Pu-240	8	1.288E+01	2.063E+11	4.750E-18	3.760E-10	8.330E-05
Pu-241	8	6.182E+03	4.544E+08	7.250E-20	9.150E-12	1.340E-06
Am-241	9	9.528E+00	1.364E+10	8.180E-16	1.600E-09	1.200E-04
Cm-242	9	2.388E+03	1.407E+07	5.690E-18	9.410E-10	4.670E-06
Cm-244	9	2.602E+02	5.715E+08	4.910E-18	1.010E-09	6.700E-05

Nuclide	Daughter	Fraction	Daughter	Fraction	Daughter	Fraction
Kr-85m	Kr-85	0.21	none	0.00	none	0.00
Kr-87	Rb-87	1.00	none	0.00	none	0.00
Kr-88	Rb-88	1.00	none	0.00	none	0.00
Sr-90	Y-90	1.00	none	0.00	none	0.00
Sr-91	Y-91m	0.58	Y-91	0.42	none	0.00
Sr-92	Y-92	1.00	none	0.00	none	0.00
Y-93	Zr-93	1.00	none	0.00	none	0.00
Zr-95	Nb-95m	0.01	Nb-95	0.99	none	0.00
Zr-97	Nb-97m	0.95	Nb-97	0.05	none	0.00
Mo-99	Tc-99m	0.88	Tc-99	0.12	none	0.00
Tc-99m	Tc-99	1.00	none	0.00	none	0.00
Ru-103	Rh-103m	1.00	none	0.00	none	0.00
Ru-105	Rh-105	1.00	none	0.00	none	0.00
Ru-106	Rh-106	1.00	none	0.00	none	0.00
Sb-127	Te-127m	0.18	Te-127	0.82	none	0.00
Sb-129	Te-129m	0.22	Te-129	0.77	none	0.00
Te-127m	Te-127	0.98	none	0.00	none	0.00
Te-129	I-129	1.00	none	0.00	none	0.00
Te-129m	Te-129	0.65	I-129	0.35	none	0.00
Te-131m	Te-131	0.22	I-131	0.78	none	0.00
Te-132	I-132	1.00	none	0.00	none	0.00
I-131	Xe-131m	0.01	none	0.00	none	0.00
I-133	Xe-133m	0.03	Xe-133	0.97	none	0.00
I-135	Xe-135m	0.15	Xe-135	0.85	none	0.00
Xe-135	Cs-135	1.00	none	0.00	none	0.00
Cs-137	Ba-137m	0.95	none	0.00	none	0.00
Ba-140	La-140	1.00	none	0.00	none	0.00
La-141	Ce-141	1.00	none	0.00	none	0.00

Ce-143	Pr-143	1.00	none	0.00	none	0.00
Ce-144	Pr-144m	0.02	Pr-144	0.98	none	0.00
Nd-147	Pm-147	1.00	none	0.00	none	0.00
Np-239	Pu-239	1.00	none	0.00	none	0.00
Pu-238	U-234	1.00	none	0.00	none	0.00
Pu-239	U-235	1.00	none	0.00	none	0.00
Pu-240	U-236	1.00	none	0.00	none	0.00
Pu-241	U-237	0.00	Am-241	1.00	none	0.00
Am-241	Np-237	1.00	none	0.00	none	0.00
Cm-242	Pu-238	1.00	none	0.00	none	0.00
Cm-244	Pu-240	1.00	none	0.00	none	0.00

Iodine fractions
Aerosol = 9.5000E-01
Elemental = 4.8500E-02
Organic = 1.5000E-03

COMPARTMENT DATA

Compartment number 1: Containment
Natural Deposition (Powers' model): Aerosol data
Reactor type: 3
Percentile = 10 (%)

Natural Deposition: Elemental Removal Data

Time (hr)	Removal Coef. (hr^-1)
0.0000E+00	0.0000E+00

Compartment number 2: (Node 1) Inboard MSL A Volume

Compartment number 3: (Node 1) Inboard MSL B Volume

Compartment number 4: (Node 2) Outboard MSL A Volume

Compartment number 5: (Node 2) Outboard MSL B Volume

Compartment number 6: Condenser

Compartment number 7: Environment

Compartment number 8: Security Center

Compartment number 9: Hold

PATHWAY DATA

Pathway number 1: Containment to (Node 1) Inboard MSL A Volume

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	1.5240E+00	9.9980E+01	9.9690E+01	0.0000E+00
2.0000E+00	9.3060E-01	9.9980E+01	9.9690E+01	0.0000E+00
2.4000E+01	5.1270E-01	0.0000E+00	9.9970E+01	0.0000E+00
9.6000E+01	5.1270E-01	0.0000E+00	9.9990E+01	0.0000E+00
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 2: Containment to (Node 1) Inboard MSL B Volume

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	1.5240E+00	9.9910E+01	9.9480E+01	0.0000E+00
2.0000E+00	9.3060E-01	9.9910E+01	9.9480E+01	0.0000E+00
2.4000E+01	5.1270E-01	0.0000E+00	9.9890E+01	0.0000E+00
9.6000E+01	5.1270E-01	0.0000E+00	9.9980E+01	0.0000E+00
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 3: Containment to Hold (PC Leakage)

Convection Data

Time (hr)	Flow Rate (% / day)
0.0000E+00	5.0000E-01
2.4000E+01	2.5000E-01
7.2000E+02	0.0000E+00

Pathway number 4: (Node 1) Inboard MSL A Volume to (Node 2) Outboard

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	9.3060E-01	0.0000E+00	0.0000E+00	0.0000E+00
2.4000E+01	5.1270E-01	0.0000E+00	0.0000E+00	0.0000E+00
9.6000E+01	5.1270E-01	0.0000E+00	0.0000E+00	0.0000E+00
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 5: (Node 1) Inboard MSL B Volume to (Node 2) Outboard

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	9.3060E-01	0.0000E+00	0.0000E+00	0.0000E+00
2.4000E+01	5.1270E-01	0.0000E+00	0.0000E+00	0.0000E+00
9.6000E+01	5.1270E-01	0.0000E+00	0.0000E+00	0.0000E+00
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 6: (Node 2) Outboard MSL A Volume to Condenser

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	3.1880E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.4000E+01	1.5130E+00	0.0000E+00	0.0000E+00	0.0000E+00
9.6000E+01	1.1480E+00	0.0000E+00	0.0000E+00	0.0000E+00
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 7: (Node 2) Outboard MSL B Volume to Condenser

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	3.1880E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.4000E+01	1.5130E+00	0.0000E+00	0.0000E+00	0.0000E+00
9.6000E+01	1.1480E+00	0.0000E+00	0.0000E+00	0.0000E+00

7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 8: Condenser Leak to Environment

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	3.6620E+00	0.0000E+00	0.0000E+00	0.0000E+00
2.4000E+01	2.0180E+00	0.0000E+00	0.0000E+00	0.0000E+00
9.6000E+01	2.0180E+00	0.0000E+00	0.0000E+00	0.0000E+00
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 9: Filtered Intake to Security Center

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	0.0000E+00	9.9000E+01	9.5000E+01	9.5000E+01
5.0000E-01	0.0000E+00	9.9000E+01	9.5000E+01	9.5000E+01
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 10: Unfiltered Inleakage to Security Center

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	7.4880E+04	0.0000E+00	0.0000E+00	0.0000E+00
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

Pathway number 11: Security Center Exhaust

Pathway Filter: Removal Data

Time (hr)	Flow Rate (cfm)	Filter Efficiencies (%) Aerosol	Elemental	Organic
0.0000E+00	7.4880E+04	1.0000E+02	1.0000E+02	1.0000E+02
5.0000E-01	7.4880E+04	1.0000E+02	1.0000E+02	1.0000E+02
7.2000E+02	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

LOCATION DATA

Location Exclusion Area Boundary (EAB) is in compartment 7

Location X/Q Data

Time (hr)	X/Q (s * m^-3)
0.0000E+00	3.1800E-04
2.4000E+01	0.0000E+00

Location Breathing Rate Data

Time (hr)	Breathing Rate (m^3 * sec^-1)
0.0000E+00	3.5000E-04
8.0000E+00	1.8000E-04
2.4000E+01	2.3000E-04
7.2000E+02	0.0000E+00

Location Low Population Zone (LPZ) is in compartment 7

Location X/Q Data

Time (hr) X/Q (s * m^-3)

```
  0.0000E+00          5.7900E-05
  8.0000E+00          4.1000E-05
  2.4000E+01          1.9500E-05
  4.8000E+01          1.9500E-05
  7.2000E+01          1.9500E-05
  9.6000E+01          6.6800E-06
  1.2000E+02          6.6800E-06
  1.6800E+02          6.6800E-06
  3.3600E+02          6.6800E-06
  7.2000E+02          0.0000E+00

Location Breathing Rate Data
 Time (hr)         Breathing Rate (m^3 * sec^-1)
  0.0000E+00                 3.5000E-04
  8.0000E+00                 1.8000E-04
  2.4000E+01                 2.3000E-04
  7.2000E+02                 0.0000E+00
Location Security Center (Internal)     is in compartment   8

Location X/Q Data
 Time (hr)         X/Q (s * m^-3)
  0.0000E+00          3.4100E-05
  2.0000E+00          3.4100E-05
  8.0000E+00          2.0100E-05
  2.4000E+01          1.2800E-05
  9.6000E+01          5.6200E-06
  7.2000E+02          0.0000E+00

Location Breathing Rate Data
 Time (hr)         Breathing Rate (m^3 * sec^-1)
  0.0000E+00                 3.5000E-04
  7.2000E+02                 0.0000E+00

Location Occupancy Factor Data
 Time (hr)         Occupancy Factor
  0.0000E+00            1.0000E+00
  2.4000E+01            6.0000E-01
  9.6000E+01            4.0000E-01
  7.2000E+02            0.0000E+00
Location Security Center (External)     is in compartment   7

Location X/Q Data
 Time (hr)         X/Q (s * m^-3)
  0.0000E+00          3.4100E-05
  8.0000E+00          2.0100E-05
  2.4000E+01          7.6800E-06
  9.6000E+01          2.2500E-06
  7.2000E+02          0.0000E+00

Location Breathing Rate Data
 Time (hr)         Breathing Rate (m^3 * sec^-1)
  0.0000E+00                 3.5000E-04
  7.2000E+02                 0.0000E+00

USER SPECIFIED TIME STEP DATA - SUPPLEMENTAL TIME STEPS
     Time            Time step
      0.0000E+00       0.0000E+00
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/12/2006  at 11:37:45
#######################################################################
```

```
 ####   #    #  #####  #####   #    #  #####
#    #  #    #    #    #    #  #    #    #
#    #  #    #    #    #    #  #    #    #
#    #  #    #    #    #####   #    #    #
#    #  #    #    #    #       #    #    #
#    #  #    #    #    #       #    #    #
 ####    ####     #    #        ####     #
```

```
#######################################################################
                                Dose Output
#######################################################################
```

Exclusion Area Boundary (EAB) Doses:

Time (h) = 0.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	6.0364E-07	1.8676E-06	6.6979E-07
Accumulated dose (rem)	6.0364E-07	1.8676E-06	6.6979E-07

Low Population Zone (LPZ) Doses:

Time (h) = 0.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.0991E-07	3.4004E-07	1.2195E-07
Accumulated dose (rem)	1.0991E-07	3.4004E-07	1.2195E-07

Security Center (Internal) Doses:

Time (h) = 0.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.2455E-09	1.8350E-07	8.7447E-09
Accumulated dose (rem)	2.2455E-09	1.8350E-07	8.7447E-09

Security Center (External) Doses:

Time (h) = 0.5000	Whole Body	Thyroid	TEDE
Delta dose (rem)	6.4730E-08	2.0026E-07	7.1823E-08
Accumulated dose (rem)	6.4730E-08	2.0026E-07	7.1823E-08

Exclusion Area Boundary (EAB) Doses:

Time (h) = 2.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.9759E-04	5.4263E-04	3.1800E-04
Accumulated dose (rem)	2.9819E-04	5.4450E-04	3.1867E-04

Low Population Zone (LPZ) Doses:

Time (h) = 2.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	5.4184E-05	9.8800E-05	5.7899E-05
Accumulated dose (rem)	5.4293E-05	9.9140E-05	5.8021E-05

Security Center (Internal) Doses:

```
Time (h) =    2.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         1.1649E-06  5.6375E-05  3.2842E-06
Accumulated dose (rem)   1.1671E-06  5.6558E-05  3.2929E-06

Security Center (External) Doses:

Time (h) =    2.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         3.1911E-05  5.8188E-05  3.4100E-05
Accumulated dose (rem)   3.1976E-05  5.8388E-05  3.4171E-05

Exclusion Area Boundary (EAB) Doses:

Time (h) =    8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         2.4266E-02  6.4402E-02  2.6596E-02
Accumulated dose (rem)   2.4565E-02  6.4946E-02  2.6915E-02

Low Population Zone (LPZ) Doses:

Time (h) =    8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         4.4183E-03  1.1726E-02  4.8425E-03
Accumulated dose (rem)   4.4726E-03  1.1825E-02  4.9005E-03

Security Center (Internal) Doses:

Time (h) =    8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         9.7810E-05  6.8651E-03  3.4619E-04
Accumulated dose (rem)   9.8977E-05  6.9217E-03  3.4948E-04

Security Center (External) Doses:

Time (h) =    8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         2.6021E-03  6.9060E-03  2.8519E-03
Accumulated dose (rem)   2.6341E-03  6.9644E-03  2.8861E-03

Exclusion Area Boundary (EAB) Doses:

Time (h) =   24.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         1.4433E-01  5.7042E-01  1.6302E-01
Accumulated dose (rem)   1.6889E-01  6.3536E-01  1.8994E-01

Low Population Zone (LPZ) Doses:

Time (h) =   24.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         1.8608E-02  7.3545E-02  2.1019E-02
Accumulated dose (rem)   2.3081E-02  8.5370E-02  2.5919E-02

Security Center (Internal) Doses:

Time (h) =   24.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         3.4534E-04  7.0054E-02  2.6418E-03
Accumulated dose (rem)   4.4432E-04  7.6976E-02  2.9913E-03

Security Center (External) Doses:

Time (h) =   24.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)         9.1225E-03  7.0106E-02  1.1420E-02
Accumulated dose (rem)   1.1757E-02  7.7071E-02  1.4307E-02

Exclusion Area Boundary (EAB) Doses:
```

Time (h) = 48.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	1.6889E-01	6.3536E-01	1.8994E-01

Low Population Zone (LPZ) Doses:

Time (h) = 48.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	7.7231E-03	7.5043E-02	1.0103E-02
Accumulated dose (rem)	3.0804E-02	1.6041E-01	3.6022E-02

Security Center (Internal) Doses:

Time (h) = 48.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.1978E-04	4.6383E-02	1.5912E-03
Accumulated dose (rem)	5.6410E-04	1.2336E-01	4.5825E-03

Security Center (External) Doses:

Time (h) = 48.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.0417E-03	4.4975E-02	4.4680E-03
Accumulated dose (rem)	1.4798E-02	1.2205E-01	1.8775E-02

Exclusion Area Boundary (EAB) Doses:

Time (h) = 72.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	1.6889E-01	6.3536E-01	1.8994E-01

Low Population Zone (LPZ) Doses:

Time (h) = 72.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	8.3008E-03	9.7295E-02	1.1349E-02
Accumulated dose (rem)	3.9105E-02	2.5771E-01	4.7371E-02

Security Center (Internal) Doses:

Time (h) = 72.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.2375E-04	5.8298E-02	1.9503E-03
Accumulated dose (rem)	6.8785E-04	1.8166E-01	6.5328E-03

Security Center (External) Doses:

Time (h) = 72.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.2692E-03	5.8312E-02	5.0961E-03
Accumulated dose (rem)	1.8068E-02	1.8036E-01	2.3871E-02

Exclusion Area Boundary (EAB) Doses:

Time (h) = 96.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	0.0000E+00	0.0000E+00	0.0000E+00
Accumulated dose (rem)	1.6889E-01	6.3536E-01	1.8994E-01

Low Population Zone (LPZ) Doses:

Time (h) = 96.0000	Whole Body	Thyroid	TEDE
Delta dose (rem)	9.3414E-03	1.1404E-01	1.2891E-02
Accumulated dose (rem)	4.8446E-02	3.7175E-01	6.0262E-02

Security Center (Internal) Doses:

```
Time (h) =  96.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         1.3928E-04  6.8338E-02  2.2663E-03
Accumulated dose (rem)   8.2713E-04  2.5000E-01  8.7991E-03

Security Center (External) Doses:

Time (h) =  96.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         3.6791E-03  6.8349E-02  5.8065E-03
Accumulated dose (rem)   2.1747E-02  2.4871E-01  2.9677E-02

Exclusion Area Boundary (EAB) Doses:

Time (h) = 120.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   1.6889E-01  6.3536E-01  1.8994E-01

Low Population Zone (LPZ) Doses:

Time (h) = 120.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         3.3946E-03  4.2506E-02  4.7130E-03
Accumulated dose (rem)   5.1841E-02  4.1426E-01  6.4975E-02

Security Center (Internal) Doses:

Time (h) = 120.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         4.4383E-05  2.2329E-02  7.3693E-04
Accumulated dose (rem)   8.7151E-04  2.7232E-01  9.5361E-03

Security Center (External) Doses:

Time (h) = 120.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         1.1434E-03  2.1787E-02  1.8191E-03
Accumulated dose (rem)   2.2890E-02  2.7049E-01  3.1496E-02

Exclusion Area Boundary (EAB) Doses:

Time (h) = 168.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   1.6889E-01  6.3536E-01  1.8994E-01

Low Population Zone (LPZ) Doses:

Time (h) = 168.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         6.9973E-03  9.1603E-02  9.8294E-03
Accumulated dose (rem)   5.8838E-02  5.0586E-01  7.4805E-02

Security Center (Internal) Doses:

Time (h) = 168.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         8.9150E-05  4.6906E-02  1.5394E-03
Accumulated dose (rem)   9.6066E-04  3.1923E-01  1.1075E-02

Security Center (External) Doses:

Time (h) = 168.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         2.3569E-03  4.6952E-02  3.8085E-03
Accumulated dose (rem)   2.5247E-02  3.1745E-01  3.5305E-02

Exclusion Area Boundary (EAB) Doses:
```

```
Time (h) = 336.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   1.6889E-01  6.3536E-01  1.8994E-01

Low Population Zone (LPZ) Doses:

Time (h) = 336.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         2.0884E-02  3.2365E-01  3.0853E-02
Accumulated dose (rem)   7.9721E-02  8.2951E-01  1.0566E-01

Security Center (Internal) Doses:

Time (h) = 336.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         2.6609E-04  1.6574E-01  5.3712E-03
Accumulated dose (rem)   1.2267E-03  4.8497E-01  1.6447E-02

Security Center (External) Doses:

Time (h) = 336.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         7.0342E-03  1.6589E-01  1.2144E-02
Accumulated dose (rem)   3.2281E-02  4.8334E-01  4.7449E-02

Exclusion Area Boundary (EAB) Doses:

Time (h) = 720.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)   1.6889E-01  6.3536E-01  1.8994E-01

Low Population Zone (LPZ) Doses:

Time (h) = 720.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         1.8351E-02  4.3578E-01  3.1761E-02
Accumulated dose (rem)   9.8073E-02  1.2653E+00  1.3742E-01

Security Center (Internal) Doses:

Time (h) = 720.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         2.3383E-04  2.2316E-01  7.1012E-03
Accumulated dose (rem)   1.4606E-03  7.0813E-01  2.3548E-02

Security Center (External) Doses:

Time (h) = 720.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)         6.1811E-03  2.2337E-01  1.3055E-02
Accumulated dose (rem)   3.8462E-02  7.0670E-01  6.0504E-02

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#################################################################
                          I-131 Summary
#################################################################

                Containment       (Node 1) Inboard MSL  (Node 1) Inboard MSL
Time (hr)     I-131 (Curies)        I-131 (Curies)        I-131 (Curies)
   0.000        5.2640E+03            6.4922E-07            5.9299E-13
   0.401        3.3308E+06            3.2537E-01            4.0944E-10
   0.500        4.0234E+06            5.0079E-01            5.0526E-10
   0.800        7.9873E+06            1.3710E+00            1.0074E-09
   1.100        1.1677E+07            2.7806E+00            1.4981E-09
   1.400        1.5110E+07            4.6902E+00            1.9780E-09
```

1.700	1.8302E+07	7.0631E+00	2.4477E-09
2.000	2.1269E+07	9.8652E+00	2.9079E-09
2.300	1.6051E+07	1.1371E+01	1.6502E-09
2.600	1.2203E+07	1.2740E+01	1.5573E-09
2.900	9.3660E+06	1.3991E+01	1.4884E-09
3.200	7.2733E+06	1.5139E+01	1.4372E-09
3.500	5.7299E+06	1.6195E+01	1.3990E-09
3.800	4.5914E+06	1.7171E+01	1.3705E-09
4.100	3.7515E+06	1.8073E+01	1.3490E-09
4.400	3.1318E+06	1.8909E+01	1.3327E-09
4.700	2.6745E+06	1.9685E+01	1.3203E-09
5.000	2.3368E+06	2.0405E+01	1.3108E-09
5.300	2.1739E+06	2.1075E+01	1.3054E-09
5.600	2.0386E+06	2.1699E+01	1.3007E-09
5.900	1.9261E+06	2.2279E+01	1.2965E-09
6.200	1.8326E+06	2.2819E+01	1.2927E-09
6.500	1.7547E+06	2.3321E+01	1.2893E-09
6.800	1.6899E+06	2.3788E+01	1.2863E-09
7.100	1.6358E+06	2.4223E+01	1.2835E-09
7.400	1.5907E+06	2.4627E+01	1.2809E-09
7.700	1.5530E+06	2.5002E+01	1.2784E-09
8.000	1.5215E+06	2.5351E+01	1.2762E-09
8.300	1.4951E+06	2.5675E+01	1.2740E-09
8.600	1.4754E+06	2.5975E+01	1.2720E-09
8.900	1.4584E+06	2.6254E+01	1.2701E-09
9.200	1.4437E+06	2.6513E+01	1.2683E-09
9.500	1.4310E+06	2.6753E+01	1.2664E-09
9.800	1.4199E+06	2.6974E+01	1.2647E-09
10.100	1.4103E+06	2.7180E+01	1.2629E-09
10.400	1.4018E+06	2.7369E+01	1.2612E-09
24.000	1.2895E+06	2.8867E+01	1.1920E-09
48.000	1.1754E+06	2.4409E+01	9.6338E-10
72.000	1.0714E+06	2.2145E+01	8.7811E-10
96.000	9.7667E+05	2.0181E+01	8.0044E-10
120.000	8.9030E+05	1.8285E+01	7.0915E-10
168.000	7.3978E+05	1.5188E+01	5.8926E-10
336.000	3.8690E+05	7.9432E+00	3.0818E-10
720.000	8.7935E+04	1.8053E+00	7.0043E-11

Time (hr)	(Node 2) Outboard MSL I-131 (Curies)	(Node 2) Outboard MSL I-131 (Curies)	Condenser I-131 (Curies)
0.000	2.6019E-11	9.1972E-07	3.0999E-11
0.401	9.3507E-03	4.5376E-01	1.1337E-02
0.500	1.7909E-02	6.9590E-01	2.1811E-02
0.800	7.3594E-02	1.8960E+00	9.0936E-02
1.100	1.9914E-01	3.8398E+00	2.5018E-01
1.400	4.2407E-01	6.4688E+00	5.4241E-01
1.700	7.7404E-01	9.7289E+00	1.0086E+00
2.000	1.2712E+00	1.3570E+01	1.6881E+00
2.300	1.8834E+00	1.5620E+01	2.5580E+00
2.600	2.5569E+00	1.7382E+01	3.5607E+00
2.900	3.2806E+00	1.8919E+01	4.6848E+00
3.200	4.0451E+00	2.0276E+01	5.9211E+00
3.500	4.8424E+00	2.1486E+01	7.2625E+00
3.800	5.6653E+00	2.2578E+01	8.7027E+00
4.100	6.5078E+00	2.3569E+01	1.0237E+01
4.400	7.3645E+00	2.4477E+01	1.1860E+01
4.700	8.2308E+00	2.5312E+01	1.3569E+01
5.000	9.1024E+00	2.6085E+01	1.5361E+01
5.300	9.9759E+00	2.6803E+01	1.7231E+01

5.600	1.0848E+01	2.7475E+01	1.9177E+01
5.900	1.1716E+01	2.8102E+01	2.1196E+01
6.200	1.2577E+01	2.8690E+01	2.3286E+01
6.500	1.3430E+01	2.9240E+01	2.5443E+01
6.800	1.4272E+01	2.9754E+01	2.7666E+01
7.100	1.5102E+01	3.0236E+01	2.9951E+01
7.400	1.5918E+01	3.0688E+01	3.2296E+01
7.700	1.6719E+01	3.1111E+01	3.4700E+01
8.000	1.7505E+01	3.1507E+01	3.7158E+01
8.300	1.8274E+01	3.1878E+01	3.9670E+01
8.600	1.9025E+01	3.2226E+01	4.2232E+01
8.900	1.9758E+01	3.2552E+01	4.4843E+01
9.200	2.0473E+01	3.2857E+01	4.7500E+01
9.500	2.1169E+01	3.3143E+01	5.0201E+01
9.800	2.1846E+01	3.3410E+01	5.2945E+01
10.100	2.2503E+01	3.3659E+01	5.5729E+01
10.400	2.3141E+01	3.3893E+01	5.8551E+01
24.000	3.6320E+01	3.6282E+01	2.0411E+02
48.000	3.7672E+01	3.4251E+01	3.1175E+02
72.000	3.4498E+01	3.1352E+01	3.9669E+02
96.000	3.1442E+01	2.8593E+01	4.5964E+02
120.000	3.5400E+01	3.1886E+01	4.9043E+02
168.000	3.1107E+01	2.7716E+01	5.3523E+02
336.000	1.6327E+01	1.4524E+01	4.7457E+02
720.000	3.7108E+00	3.3011E+00	1.6811E+02

Time (hr)	Environment I-131 (Curies)	Security Center I-131 (Curies)	Hold I-131 (Curies)
0.000	1.7278E-17	2.0684E-20	3.0465E-04
0.401	4.5875E-06	8.0976E-10	1.4535E+02
0.500	1.1016E-05	1.5951E-09	2.2112E+02
0.800	7.2043E-05	6.8725E-09	5.9764E+02
1.100	2.6613E-04	1.9217E-08	1.2127E+03
1.400	7.2773E-04	4.2092E-08	2.0494E+03
1.700	1.6418E-03	7.8811E-08	3.0920E+03
2.000	3.2416E-03	1.3255E-07	4.3258E+03
2.300	5.7832E-03	2.0200E-07	5.4786E+03
2.600	9.4531E-03	2.8225E-07	6.3492E+03
2.900	1.4404E-02	3.7232E-07	7.0116E+03
3.200	2.0777E-02	4.7148E-07	7.5206E+03
3.500	2.8701E-02	5.7913E-07	7.9163E+03
3.800	3.8300E-02	6.9478E-07	8.2285E+03
4.100	4.9690E-02	8.1801E-07	8.4790E+03
4.400	6.2981E-02	9.4847E-07	8.6840E+03
4.700	7.8278E-02	1.0858E-06	8.8554E+03
5.000	9.5682E-02	1.2299E-06	9.0020E+03
5.300	1.1529E-01	1.3802E-06	9.1332E+03
5.600	1.3719E-01	1.5367E-06	9.2549E+03
5.900	1.6149E-01	1.6992E-06	9.3688E+03
6.200	1.8825E-01	1.8673E-06	9.4762E+03
6.500	2.1757E-01	2.0409E-06	9.5781E+03
6.800	2.4953E-01	2.2197E-06	9.6755E+03
7.100	2.8420E-01	2.4036E-06	9.7690E+03
7.400	3.2166E-01	2.5924E-06	9.8594E+03
7.700	3.6198E-01	2.7858E-06	9.9470E+03
8.000	4.0522E-01	2.9837E-06	1.0032E+04
8.300	4.5146E-01	1.8779E-06	1.0116E+04
8.600	5.0074E-01	1.9995E-06	1.0198E+04
8.900	5.5315E-01	2.1234E-06	1.0279E+04
9.200	6.0872E-01	2.2495E-06	1.0358E+04

9.500	6.6752E-01	2.3778E-06	1.0437E+04
9.800	7.2959E-01	2.5080E-06	1.0515E+04
10.100	7.9500E-01	2.6401E-06	1.0592E+04
10.400	8.6377E-01	2.7741E-06	1.0669E+04
24.000	7.9410E+00	9.6884E-06	1.3846E+04
48.000	2.1687E+01	5.1963E-06	1.5656E+04
72.000	4.0559E+01	6.6126E-06	1.7053E+04
96.000	6.3332E+01	7.6624E-06	1.8096E+04
120.000	8.8475E+01	3.5897E-06	1.8835E+04
168.000	1.4316E+02	3.9178E-06	1.9576E+04
336.000	3.3731E+02	3.4739E-06	1.7631E+04
720.000	5.9887E+02	1.2306E-06	8.1416E+03

##

Cumulative Dose Summary

##

	Exclusion Area Bounda		Low Population Zone (		Security Center (Inte	
Time (hr)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)
0.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.401	7.7862E-07	2.8319E-07	1.4177E-07	5.1562E-08	7.5973E-08	3.6389E-09
0.500	1.8676E-06	6.6979E-07	3.4004E-07	1.2195E-07	1.8350E-07	8.7447E-09
0.800	1.2180E-05	4.5184E-06	2.2177E-06	8.2268E-07	1.2232E-06	5.8900E-08
1.100	4.4922E-05	1.9738E-05	8.1791E-06	3.5939E-06	4.5706E-06	2.3401E-07
1.400	1.2267E-04	6.2201E-05	2.2335E-05	1.1325E-05	1.2594E-05	6.8456E-07
1.700	2.7629E-04	1.5343E-04	5.0306E-05	2.7935E-05	2.8556E-05	1.6189E-06
2.000	5.4450E-04	3.1867E-04	9.9140E-05	5.8021E-05	5.6558E-05	3.2929E-06
2.300	9.6941E-04	5.8241E-04	1.7651E-04	1.0604E-04	1.0111E-04	5.9755E-06
2.600	1.5811E-03	9.5685E-04	2.8787E-04	1.7422E-04	1.6554E-04	9.8395E-06
2.900	2.4035E-03	1.4484E-03	4.3762E-04	2.6372E-04	2.5242E-04	1.5001E-05
3.200	3.4585E-03	2.0610E-03	6.2971E-04	3.7526E-04	3.6410E-04	2.1552E-05
3.500	4.7659E-03	2.7965E-03	8.6775E-04	5.0918E-04	5.0273E-04	2.9568E-05
3.800	6.3441E-03	3.6551E-03	1.1551E-03	6.6550E-04	6.7029E-04	3.9108E-05
4.100	8.2103E-03	4.6357E-03	1.4949E-03	8.4404E-04	8.6862E-04	5.0221E-05
4.400	1.0380E-02	5.7362E-03	1.8900E-03	1.0444E-03	1.0994E-03	6.2948E-05
4.700	1.2870E-02	6.9537E-03	2.3433E-03	1.2661E-03	1.3644E-03	7.7320E-05
5.000	1.5693E-02	8.2847E-03	2.8573E-03	1.5084E-03	1.6650E-03	9.3366E-05
5.300	1.8863E-02	9.7254E-03	3.4344E-03	1.7708E-03	2.0028E-03	1.1111E-04
5.600	2.2393E-02	1.1272E-02	4.0771E-03	2.0523E-03	2.3791E-03	1.3056E-04
5.900	2.6295E-02	1.2919E-02	4.7876E-03	2.3522E-03	2.7952E-03	1.5175E-04
6.200	3.0581E-02	1.4663E-02	5.5681E-03	2.6698E-03	3.2524E-03	1.7468E-04
6.500	3.5262E-02	1.6499E-02	6.4204E-03	3.0041E-03	3.7519E-03	1.9937E-04
6.800	4.0349E-02	1.8424E-02	7.3466E-03	3.3545E-03	4.2949E-03	2.2582E-04
7.100	4.5852E-02	2.0431E-02	8.3485E-03	3.7201E-03	4.8823E-03	2.5405E-04
7.400	5.1780E-02	2.2518E-02	9.4278E-03	4.1001E-03	5.5153E-03	2.8407E-04
7.700	5.8142E-02	2.4681E-02	1.0586E-02	4.4938E-03	6.1948E-03	3.1587E-04
8.000	6.4946E-02	2.6915E-02	1.1825E-02	4.9005E-03	6.9217E-03	3.4948E-04
8.300	6.8678E-02	2.9093E-02	1.2306E-02	5.1813E-03	7.4302E-03	3.7272E-04
8.600	7.2645E-02	3.1328E-02	1.2818E-02	5.4695E-03	7.9160E-03	3.9466E-04
8.900	7.6851E-02	3.3617E-02	1.3360E-02	5.7646E-03	8.4313E-03	4.1767E-04
9.200	8.1300E-02	3.5956E-02	1.3934E-02	6.0662E-03	8.9763E-03	4.4175E-04
9.500	8.5996E-02	3.8342E-02	1.4539E-02	6.3739E-03	9.5516E-03	4.6690E-04
9.800	9.0940E-02	4.0774E-02	1.5177E-02	6.6873E-03	1.0157E-02	4.9314E-04
10.100	9.6136E-02	4.3247E-02	1.5846E-02	7.0063E-03	1.0794E-02	5.2045E-04
10.400	1.0159E-01	4.5761E-02	1.6549E-02	7.3303E-03	1.1462E-02	5.4884E-04
24.000	6.3536E-01	1.8994E-01	8.5370E-02	2.5919E-02	7.6976E-02	2.9913E-03
48.000	6.3536E-01	1.8994E-01	1.6041E-01	3.6022E-02	1.2336E-01	4.5825E-03
72.000	6.3536E-01	1.8994E-01	2.5771E-01	4.7371E-02	1.8166E-01	6.5328E-03
96.000	6.3536E-01	1.8994E-01	3.7175E-01	6.0262E-02	2.5000E-01	8.7991E-03

120.000	6.3536E-01	1.8994E-01	4.1426E-01	6.4975E-02	2.7232E-01	9.5361E-03
168.000	6.3536E-01	1.8994E-01	5.0586E-01	7.4805E-02	3.1923E-01	1.1075E-02
336.000	6.3536E-01	1.8994E-01	8.2951E-01	1.0566E-01	4.8497E-01	1.6447E-02
720.000	6.3536E-01	1.8994E-01	1.2653E+00	1.3742E-01	7.0813E-01	2.3548E-02

Security Center (Exte

Time (hr)	Thyroid (rem)	TEDE (rem)
0.000	0.0000E+00	0.0000E+00
0.401	8.3493E-08	3.0367E-08
0.500	2.0026E-07	7.1823E-08
0.800	1.3061E-06	4.8452E-07
1.100	4.8171E-06	2.1166E-06
1.400	1.3154E-05	6.6699E-06
1.700	2.9628E-05	1.6452E-05
2.000	5.8388E-05	3.4171E-05
2.300	1.0395E-04	6.2453E-05
2.600	1.6954E-04	1.0261E-04
2.900	2.5774E-04	1.5532E-04
3.200	3.7086E-04	2.2101E-04
3.500	5.1106E-04	2.9988E-04
3.800	6.8030E-04	3.9195E-04
4.100	8.8041E-04	4.9710E-04
4.400	1.1131E-03	6.1510E-04
4.700	1.3801E-03	7.4566E-04
5.000	1.6828E-03	8.8839E-04
5.300	2.0227E-03	1.0429E-03
5.600	2.4012E-03	1.2087E-03
5.900	2.8197E-03	1.3853E-03
6.200	3.2793E-03	1.5724E-03
6.500	3.7813E-03	1.7693E-03
6.800	4.3268E-03	1.9756E-03
7.100	4.9168E-03	2.1909E-03
7.400	5.5525E-03	2.4147E-03
7.700	6.2347E-03	2.6466E-03
8.000	6.9644E-03	2.8861E-03
8.300	7.4230E-03	3.0316E-03
8.600	7.9105E-03	3.1811E-03
8.900	8.4275E-03	3.3345E-03
9.200	8.9743E-03	3.4916E-03
9.500	9.5514E-03	3.6521E-03
9.800	1.0159E-02	3.8159E-03
10.100	1.0798E-02	3.9829E-03
10.400	1.1468E-02	4.1529E-03
24.000	7.7071E-02	1.4307E-02
48.000	1.2205E-01	1.8775E-02
72.000	1.8036E-01	2.3871E-02
96.000	2.4871E-01	2.9677E-02
120.000	2.7049E-01	3.1496E-02
168.000	3.1745E-01	3.5305E-02
336.000	4.8334E-01	4.7449E-02
720.000	7.0670E-01	6.0504E-02

```
#######################################################################
                          Worst Two-Hour Doses
#######################################################################
```

Exclusion Area Boundary (EAB)

Time (hr)	Whole Body (rem)	Thyroid (rem)	TEDE (rem)

10.4	1.8639E-02	7.8497E-02	2.1203E-02

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 12:48:41
#######################################################################

#######################################################################
                     File information
#######################################################################

 Plant file           = C:\Documents and Settings\Aleem Boatright\My Documents\My
Work\Exelon\AST\Limerick\LGS LOCA\RADTRAD\LGS LOCA ECCS Leak - Vital Area -
Security Center.psf
 Inventory file       = c:\program files\radtrad3-03\defaults\limerick ast eccs
source terms.nif
 Release file         = c:\program files\radtrad3-03\defaults\bwr_dba.rft
 Dose Conversion file = c:\program files\radtrad3-03\defaults\fgr11&12.inp




    #####    ####   #####    #  #     #  #####   #    #  #####
    #    #  #       #        #  ##    #  #    #  #    #    #
    #    #  #       #        #  # #   #  #    #  #    #    #
    #####    ####   ####     #  #  #  #  #####   #    #    #
    #            #  #        #  #   # #  #       #    #    #
    #            #  #        #  #    ##  #       #    #    #
    #        ####   #        #  #     #  #        ####     #


 Radtrad 3.03 4/15/2001
 ECCS Leak - Vital Area - Security Center
 Nuclide Inventory File:
 c:\program files\radtrad3-03\defaults\limerick ast eccs source terms.nif
 Plant Power Level:
  3.5270E+03
 Compartments:
   5
 Compartment 1:
 ECCS Fluid
   3
  9.5989E+05
   0
   0
   0
   0
   0
 Compartment 2:
 Reactor Enclosure
   3
  1.8000E+06
   0
   0
   1
   0
   0
 Compartment 3:
 Environment
   2
  0.0000E+00
```

```
  0
  0
  0
  0
  0
Compartment 4:
Security Center
  1
 7.4880E+04
  0
  0
  0
  0
  0
Compartment 5:
SGTS Node
  3
 1.0000E+00
  0
  0
  0
  0
  0
Pathways:
  6
Pathway 1:
ECCS Fluid to Reactor Enclosure
  1
  2
  2
Pathway 2:
Filtered Environment to Security Center
  3
  4
  2
Pathway 3:
Security Center to  Environment
  4
  3
  2
Pathway 4:
Unfiltered Environment to Security Center
  3
  4
  2
Pathway 5:
Reactor Enclosure to SGTS Node
  2
  5
  2
Pathway 6:
SGTS Node to  Environment
  5
  3
  2
End of Plant Model File
Scenario Description Name:

Plant Model Filename:
```

```
Source Term:
  1
  1   1.0000E+00
c:\program files\radtrad3-03\defaults\fgr11&12.inp
c:\program files\radtrad3-03\defaults\bwr_dba.rft
  0.0000E+00
  0
  0.0000E+00   9.7000E-01   3.0000E-02   1.0000E+00
Overlying Pool:
  0
  0.0000E+00
  0
  0
  0
  0
Compartments:
  5
Compartment 1:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 2:
  0
  1
  0
  0
  0
  0
  1
  5.1000E+04
  4
  0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   0.0000E+00   0.0000E+00   0.0000E+00
  2.5830E-01   9.9000E+01   9.5000E+01   9.5000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
Compartment 3:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Compartment 4:
  0
  1
  0
  0
  0
  0
```

```
  0
  0
  0
Compartment 5:
  0
  1
  0
  0
  0
  0
  0
  0
  0
Pathways:
  6
Pathway 1:
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   5.0000E+00   9.0000E+01   9.0000E+01   9.0000E+01
  2.4000E+01   5.0000E+00   9.0000E+01   9.0000E+01   9.0000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 2:
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   0.0000E+00   9.9000E+01   9.5000E+01   9.5000E+01
  5.0000E-01   0.0000E+00   9.9000E+01   9.5000E+01   9.5000E+01
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 3:
  0
  0
  0
  0
  0
  1
  3
  0.0000E+00   7.4880E+04   1.0000E+02   1.0000E+02   1.0000E+02
  5.0000E-01   7.4880E+04   1.0000E+02   1.0000E+02   1.0000E+02
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
```

```
  0
  0
  0
  0
  0
  0
Pathway 4:
  0
  0
  0
  0
  0
  1
  2
  0.0000E+00   7.4880E+04   0.0000E+00   0.0000E+00   0.0000E+00
  7.2000E+02   0.0000E+00   0.0000E+00   0.0000E+00   0.0000E+00
  0
  0
  0
  0
  0
  0
Pathway 5:
  0
  0
  0
  0
  0
  1
 10
  0.0000E+00   9.0000E+07   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   9.0000E+07   0.0000E+00   0.0000E+00   0.0000E+00
  5.8300E-02   4.0930E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.0000E-01   2.1230E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.4170E-01   1.4690E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.8330E-01   1.1430E+04   0.0000E+00   0.0000E+00   0.0000E+00
  2.2500E-01   9.4760E+03   0.0000E+00   0.0000E+00   0.0000E+00
  2.5830E-01   7.8960E+03   9.9000E+01   9.5000E+01   9.5000E+01
  2.6670E-01   6.8170E+03   9.9000E+01   9.5000E+01   9.5000E+01
  3.9583E-01   5.0000E+03   9.9000E+01   9.5000E+01   9.5000E+01
  0
  0
  0
  0
  0
  0
Pathway 6:
  0
  0
  0
  0
  0
  1
 10
  0.0000E+00   9.0000E+07   0.0000E+00   0.0000E+00   0.0000E+00
  1.6700E-02   9.0000E+07   0.0000E+00   0.0000E+00   0.0000E+00
  5.8300E-02   4.0930E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.0000E-01   2.1230E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.4170E-01   1.4690E+04   0.0000E+00   0.0000E+00   0.0000E+00
  1.8330E-01   1.1430E+04   0.0000E+00   0.0000E+00   0.0000E+00
```

```
  2.2500E-01   9.4760E+03   0.0000E+00   0.0000E+00   0.0000E+00
  2.5830E-01   7.8960E+03   9.9000E+01   9.9000E+01   9.9000E+01
  2.6670E-01   6.8170E+03   9.9000E+01   9.9000E+01   9.9000E+01
  3.9583E-01   5.0000E+03   9.9000E+01   9.9000E+01   9.9000E+01
  0
  0
  0
  0
  0
  0
Dose Locations:
  4
Location 1:
EAB
  3
  1
  2
  0.0000E+00   3.1800E-04
  8.0000E+00   0.0000E+00
  1
  2
  0.0000E+00   3.5000E-04
  8.0000E+00   0.0000E+00
  0
Location 2:
LPZ
  3
  1
  5
  0.0000E+00   5.7900E-05
  8.0000E+00   4.1000E-05
  2.4000E+01   1.9500E-05
  9.6000E+01   6.6800E-06
  7.2000E+02   2.6200E-06
  1
  4
  0.0000E+00   3.5000E-04
  8.0000E+00   1.8000E-04
  2.4000E+01   2.3000E-04
  7.2000E+02   0.0000E+00
  0
Location 3:
Security Center (Internal)
  4
  0
  1
  2
  0.0000E+00   3.5000E-04
  7.2000E+02   0.0000E+00
  1
  4
  0.0000E+00   1.0000E+00
  2.4000E+01   6.0000E-01
  9.6000E+01   4.0000E-01
  7.2000E+02   0.0000E+00
Location 4:
Security Center (External)
  3
  1
  5
```

```
  0.0000E+00   3.4100E-05
  8.0000E+00   2.0100E-05
  2.4000E+01   7.6800E-06
  9.6000E+01   2.2500E-06
  7.2000E+02   0.0000E+00
  1
  2
  0.0000E+00   3.5000E-04
  7.2000E+02   0.0000E+00
  0
 Effective Volume Location:
  1
  6
  0.0000E+00   3.4100E-05
  2.0000E+00   3.4100E-05
  8.0000E+00   2.0100E-05
  2.4000E+01   1.2800E-05
  9.6000E+01   5.6200E-06
  7.2000E+02   0.0000E+00
 Simulation Parameters:
  4
  0.0000E+00   1.6670E-03
  1.6700E-02   2.5000E-02
  2.5830E-01   1.0000E-01
  1.2000E+01   0.0000E+00
 Output Filename:
 C:\Documents and Settings\Aleem Boatright\My Documents\My
Work\Exelon\AST\Limerick\LGS LOCA\RADTRAD\LGS LOCA ECCS Leak - Vital Area -
Security Center.o0
  1
  2
  1
  0
  1
 End of Scenario File
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 12:48:41
#######################################################################

#######################################################################
                     Plant Description
#######################################################################

Number of Nuclides =  60

Inventory Power =   1.0000E+00 MWth
Plant Power Level =   3.5270E+03 MWth

Number of compartments    =   5

Compartment information

Compartment number  1  (Source term fraction =   1.0000E+00
)
Name: ECCS Fluid
Compartment volume =   9.5989E+05 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  1
   Exit Pathway Number    1: ECCS Fluid to Reactor Enclosure

Compartment number  2
Name: Reactor Enclosure
Compartment volume =   1.8000E+06 (Cubic feet)
Compartment type is Normal
Removal devices within compartment:
     Filter(s)
Pathways into and out of compartment  2
   Inlet Pathway Number   1: ECCS Fluid to Reactor Enclosure
   Exit Pathway Number    5: Reactor Enclosure to SGTS Node

Compartment number  3
Name: Environment
Compartment type is Environment
Pathways into and out of compartment  3
   Inlet Pathway Number   3: Security Center to  Environment
   Inlet Pathway Number   6: SGTS Node to  Environment
   Exit Pathway Number    2: Filtered Environment to Security Center
   Exit Pathway Number    4: Unfiltered Environment to Security Center

Compartment number  4
Name: Security Center
Compartment volume =   7.4880E+04 (Cubic feet)
Compartment type is Control Room
Pathways into and out of compartment  4
   Inlet Pathway Number   2: Filtered Environment to Security Center
   Inlet Pathway Number   4: Unfiltered Environment to Security Center
   Exit Pathway Number    3: Security Center to  Environment

Compartment number  5
Name: SGTS Node
Compartment volume =   1.0000E+00 (Cubic feet)
Compartment type is Normal
Pathways into and out of compartment  5
   Inlet Pathway Number   5: Reactor Enclosure to SGTS Node
```

```
   Exit Pathway Number     6: SGTS Node to  Environment

Total number of pathways =    6
```

```
#######################################################################
   RADTRAD Version 3.03 (Spring 2001) run on  6/13/2006  at 12:48:41
#######################################################################
```

```
 ####   #    #  #####  #####   #    #  #####
#    #  #    #    #    #    #  #    #    #
#    #  #    #    #    #    #  #    #    #
#    #  #    #    #    #####   #    #    #
#    #  #    #    #    #       #    #    #
#    #  #    #    #    #       #    #    #
 ####    ####     #    #        ####     #
```

```
#######################################################################
                                Dose Output
#######################################################################
```

Detailed model information at time (H) = 0.0167

EAB Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.2507E-05	6.7324E-03	2.4539E-04
Accumulated dose (rem)	3.2507E-05	6.7324E-03	2.4539E-04

LPZ Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	5.9187E-06	1.2258E-03	4.4679E-05
Accumulated dose (rem)	5.9187E-06	1.2258E-03	4.4679E-05

Security Center (Internal) Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.4511E-08	1.8886E-04	6.0062E-06
Accumulated dose (rem)	3.4511E-08	1.8886E-04	6.0062E-06

Security Center (External) Doses:

Time (h) = 0.0167	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.4858E-06	7.2193E-04	2.6313E-05
Accumulated dose (rem)	3.4858E-06	7.2193E-04	2.6313E-05

Detailed model information at time (H) = 0.0583

EAB Doses:

Time (h) = 0.0583	Whole Body	Thyroid	TEDE
Delta dose (rem)	3.7174E-04	7.7657E-02	2.8269E-03
Accumulated dose (rem)	4.0424E-04	8.4389E-02	3.0723E-03

LPZ Doses:

Time (h) = 0.0583	Whole Body	Thyroid	TEDE
Delta dose (rem)	6.7684E-05	1.4139E-02	5.1472E-04

```
Accumulated dose (rem)  7.3603E-05  1.5365E-02  5.5939E-04

Security Center (Internal) Doses:

Time (h) =   0.0583    Whole Body   Thyroid       TEDE
Delta dose (rem)        9.3481E-07  5.1603E-03  1.6408E-04
Accumulated dose (rem)  9.6932E-07  5.3492E-03  1.7009E-04

Security Center (External) Doses:

Time (h) =   0.0583    Whole Body   Thyroid       TEDE
Delta dose (rem)        3.9862E-05  8.3274E-03  3.0314E-04
Accumulated dose (rem)  4.3348E-05  9.0493E-03  3.2945E-04

Detailed model information at time (H) =    0.1000

EAB Doses:

Time (h) =   0.1000    Whole Body   Thyroid       TEDE
Delta dose (rem)        2.0122E-05  4.2755E-03  1.5526E-04
Accumulated dose (rem)  4.2436E-04  8.8665E-02  3.2276E-03

LPZ Doses:

Time (h) =   0.1000    Whole Body   Thyroid       TEDE
Delta dose (rem)        3.6637E-06  7.7846E-04  2.8269E-05
Accumulated dose (rem)  7.7266E-05  1.6144E-02  5.8766E-04

Security Center (Internal) Doses:

Time (h) =   0.1000    Whole Body   Thyroid       TEDE
Delta dose (rem)        7.2831E-07  4.0734E-03  1.2948E-04
Accumulated dose (rem)  1.6976E-06  9.4225E-03  2.9957E-04

Security Center (External) Doses:

Time (h) =   0.1000    Whole Body   Thyroid       TEDE
Delta dose (rem)        2.1577E-06  4.5847E-04  1.6649E-05
Accumulated dose (rem)  4.5506E-05  9.5078E-03  3.4610E-04

Detailed model information at time (H) =    0.1417

EAB Doses:

Time (h) =   0.1417    Whole Body   Thyroid       TEDE
Delta dose (rem)        3.7962E-05  8.1988E-03  2.9704E-04
Accumulated dose (rem)  4.6233E-04  9.6864E-02  3.5246E-03

LPZ Doses:

Time (h) =   0.1417    Whole Body   Thyroid       TEDE
Delta dose (rem)        6.9120E-06  1.4928E-03  5.4084E-05
Accumulated dose (rem)  8.4178E-05  1.7637E-02  6.4175E-04

Security Center (Internal) Doses:

Time (h) =   0.1417    Whole Body   Thyroid       TEDE
Delta dose (rem)        1.8843E-07  1.0733E-03  3.4104E-05
Accumulated dose (rem)  1.8861E-06  1.0496E-02  3.3368E-04
```

Security Center (External) Doses:

Time (h) = 0.1417	Whole Body	Thyroid	TEDE
Delta dose (rem)	4.0708E-06	8.7918E-04	3.1853E-05
Accumulated dose (rem)	4.9577E-05	1.0387E-02	3.7796E-04

Detailed model information at time (H) = 0.1833

EAB Doses:

Time (h) = 0.1833	Whole Body	Thyroid	TEDE
Delta dose (rem)	5.2248E-05	1.1477E-02	4.1484E-04
Accumulated dose (rem)	5.1457E-04	1.0834E-01	3.9395E-03

LPZ Doses:

Time (h) = 0.1833	Whole Body	Thyroid	TEDE
Delta dose (rem)	9.5130E-06	2.0898E-03	7.5533E-05
Accumulated dose (rem)	9.3691E-05	1.9726E-02	7.1728E-04

Security Center (Internal) Doses:

Time (h) = 0.1833	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.9533E-07	1.1329E-03	3.5987E-05
Accumulated dose (rem)	2.0814E-06	1.1629E-02	3.6966E-04

Security Center (External) Doses:

Time (h) = 0.1833	Whole Body	Thyroid	TEDE
Delta dose (rem)	5.6027E-06	1.2308E-03	4.4485E-05
Accumulated dose (rem)	5.5179E-05	1.1618E-02	4.2244E-04

Detailed model information at time (H) = 0.2250

EAB Doses:

Time (h) = 0.2250	Whole Body	Thyroid	TEDE
Delta dose (rem)	6.6379E-05	1.4812E-02	5.3422E-04
Accumulated dose (rem)	5.8095E-04	1.2315E-01	4.4737E-03

LPZ Doses:

Time (h) = 0.2250	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.2086E-05	2.6969E-03	9.7268E-05
Accumulated dose (rem)	1.0578E-04	2.2423E-02	8.1455E-04

Security Center (Internal) Doses:

Time (h) = 0.2250	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.4881E-07	1.4661E-03	4.6555E-05
Accumulated dose (rem)	2.3302E-06	1.3095E-02	4.1622E-04

Security Center (External) Doses:

Time (h) = 0.2250	Whole Body	Thyroid	TEDE
Delta dose (rem)	7.1180E-06	1.5884E-03	5.7286E-05
Accumulated dose (rem)	6.2297E-05	1.3206E-02	4.7973E-04

Detailed model information at time (H) = 0.2583

EAB Doses:

Time (h) = 0.2583	Whole Body	Thyroid	TEDE
Delta dose (rem)	6.1955E-05	1.4032E-02	5.0507E-04
Accumulated dose (rem)	6.4291E-04	1.3719E-01	4.9788E-03

LPZ Doses:

Time (h) = 0.2583	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.1281E-05	2.5549E-03	9.1960E-05
Accumulated dose (rem)	1.1706E-04	2.4978E-02	9.0651E-04

Security Center (Internal) Doses:

Time (h) = 0.2583	Whole Body	Thyroid	TEDE
Delta dose (rem)	2.3872E-07	1.4278E-03	4.5325E-05
Accumulated dose (rem)	2.5689E-06	1.4523E-02	4.6154E-04

Security Center (External) Doses:

Time (h) = 0.2583	Whole Body	Thyroid	TEDE
Delta dose (rem)	6.6436E-06	1.5047E-03	5.4160E-05
Accumulated dose (rem)	6.8941E-05	1.4711E-02	5.3389E-04

Detailed model information at time (H) = 0.2667

EAB Doses:

Time (h) = 0.2667	Whole Body	Thyroid	TEDE
Delta dose (rem)	7.6411E-09	1.7487E-06	6.2852E-08
Accumulated dose (rem)	6.4292E-04	1.3719E-01	4.9788E-03

LPZ Doses:

Time (h) = 0.2667	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.3913E-09	3.1839E-07	1.1444E-08
Accumulated dose (rem)	1.1706E-04	2.4978E-02	9.0652E-04

Security Center (Internal) Doses:

Time (h) = 0.2667	Whole Body	Thyroid	TEDE
Delta dose (rem)	5.1640E-08	3.1212E-04	9.9061E-06
Accumulated dose (rem)	2.6206E-06	1.4835E-02	4.7145E-04

Security Center (External) Doses:

Time (h) = 0.2667	Whole Body	Thyroid	TEDE
Delta dose (rem)	8.1938E-10	1.8751E-07	6.7398E-09
Accumulated dose (rem)	6.8942E-05	1.4711E-02	5.3389E-04

Detailed model information at time (H) = 0.3958

EAB Doses:

Time (h) = 0.3958	Whole Body	Thyroid	TEDE
Delta dose (rem)	1.4963E-07	3.4714E-05	1.2454E-06
Accumulated dose (rem)	6.4307E-04	1.3722E-01	4.9801E-03

LPZ Doses:

```
Time (h) =    0.3958     Whole Body   Thyroid       TEDE
Delta dose (rem)          2.7244E-08  6.3205E-06  2.2676E-07
Accumulated dose (rem)    1.1709E-04  2.4985E-02  9.0675E-04

Security Center (Internal) Doses:

Time (h) =    0.3958     Whole Body   Thyroid       TEDE
Delta dose (rem)          1.1744E-07  7.1451E-04  2.2675E-05
Accumulated dose (rem)    2.7380E-06  1.5549E-02  4.9412E-04

Security Center (External) Doses:

Time (h) =    0.3958     Whole Body   Thyroid       TEDE
Delta dose (rem)          1.6045E-08  3.7224E-06  1.3355E-07
Accumulated dose (rem)    6.8958E-05  1.4715E-02  5.3403E-04

Detailed model information at time (H) =    0.5000

EAB Doses:

Time (h) =    0.5000     Whole Body   Thyroid       TEDE
Delta dose (rem)          1.4236E-07  3.4395E-05  1.2275E-06
Accumulated dose (rem)    6.4321E-04  1.3726E-01  4.9813E-03

LPZ Doses:

Time (h) =    0.5000     Whole Body   Thyroid       TEDE
Delta dose (rem)          2.5920E-08  6.2625E-06  2.2349E-07
Accumulated dose (rem)    1.1711E-04  2.4991E-02  9.0697E-04

Security Center (Internal) Doses:

Time (h) =    0.5000     Whole Body   Thyroid       TEDE
Delta dose (rem)          6.8977E-10  4.4015E-06  1.3955E-07
Accumulated dose (rem)    2.7387E-06  1.5554E-02  4.9426E-04

Security Center (External) Doses:

Time (h) =    0.5000     Whole Body   Thyroid       TEDE
Delta dose (rem)          1.5265E-08  3.6883E-06  1.3163E-07
Accumulated dose (rem)    6.8973E-05  1.4718E-02  5.3416E-04

Detailed model information at time (H) =    2.0000

EAB Doses:

Time (h) =    2.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)          1.0509E-05  3.5296E-03  1.2138E-04
Accumulated dose (rem)    6.5372E-04  1.4079E-01  5.1027E-03

LPZ Doses:

Time (h) =    2.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)          1.9134E-06  6.4266E-04  2.2101E-05
Accumulated dose (rem)    1.1903E-04  2.5634E-02  9.2907E-04

Security Center (Internal) Doses:

Time (h) =    2.0000     Whole Body   Thyroid       TEDE
Delta dose (rem)          4.1765E-08  3.7082E-04  1.1690E-05
```

```
Accumulated dose (rem)  2.7804E-06  1.5924E-02  5.0595E-04

Security Center (External) Doses:

Time (h) =   2.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        1.1269E-06  3.7849E-04  1.3016E-05
Accumulated dose (rem)  7.0100E-05  1.5097E-02  5.4717E-04

Detailed model information at time (H) =    8.0000

EAB Doses:

Time (h) =   8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        6.2283E-05  3.8135E-02  1.2515E-03
Accumulated dose (rem)  7.1600E-04  1.7892E-01  6.3542E-03

LPZ Doses:

Time (h) =   8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        1.1340E-05  6.9434E-03  2.2787E-04
Accumulated dose (rem)  1.3037E-04  3.2577E-02  1.1569E-03

Security Center (Internal) Doses:

Time (h) =   8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        2.5253E-07  4.0853E-03  1.2765E-04
Accumulated dose (rem)  3.0330E-06  2.0010E-02  6.3360E-04

Security Center (External) Doses:

Time (h) =   8.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        6.6788E-06  4.0893E-03  1.3420E-04
Accumulated dose (rem)  7.6779E-05  1.9186E-02  6.8138E-04

Detailed model information at time (H) =   24.0000

EAB Doses:

Time (h) =  24.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  7.1600E-04  1.7892E-01  6.3542E-03

LPZ Doses:

Time (h) =  24.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        9.5225E-06  6.1914E-03  2.0095E-04
Accumulated dose (rem)  1.3989E-04  3.8768E-02  1.3579E-03

Security Center (Internal) Doses:

Time (h) =  24.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        1.7737E-07  5.9159E-03  1.8309E-04
Accumulated dose (rem)  3.2103E-06  2.5926E-02  8.1669E-04

Security Center (External) Doses:

Time (h) =  24.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        4.6684E-06  5.9020E-03  1.8715E-04
Accumulated dose (rem)  8.1447E-05  2.5088E-02  8.6853E-04
```

```
Detailed model information at time (H) =   96.0000

EAB Doses:

Time (h) =  96.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  7.1600E-04  1.7892E-01  6.3542E-03

LPZ Doses:

Time (h) =  96.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        5.9473E-06  1.2504E-02  3.8856E-04
Accumulated dose (rem)  1.4584E-04  5.1272E-02  1.7465E-03

Security Center (Internal) Doses:

Time (h) =  96.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        9.1579E-08  7.6411E-03  2.3394E-04
Accumulated dose (rem)  3.3019E-06  3.3567E-02  1.0506E-03

Security Center (External) Doses:

Time (h) =  96.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        2.3423E-06  7.4938E-03  2.3166E-04
Accumulated dose (rem)  8.3789E-05  3.2582E-02  1.1002E-03

Detailed model information at time (H) =  720.0000

EAB Doses:

Time (h) = 720.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        0.0000E+00  0.0000E+00  0.0000E+00
Accumulated dose (rem)  7.1600E-04  1.7892E-01  6.3542E-03

LPZ Doses:

Time (h) = 720.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        3.1051E-06  1.1198E-02  3.4409E-04
Accumulated dose (rem)  1.4894E-04  6.2470E-02  2.0905E-03

Security Center (Internal) Doses:

Time (h) = 720.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        4.0065E-08  5.7979E-03  1.7659E-04
Accumulated dose (rem)  3.3420E-06  3.9365E-02  1.2272E-03

Security Center (External) Doses:

Time (h) = 720.0000    Whole Body   Thyroid       TEDE
Delta dose (rem)        1.0459E-06  5.7396E-03  1.7582E-04
Accumulated dose (rem)  8.4835E-05  3.8322E-02  1.2760E-03

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#####################################################################
                          I-131 Summary
#####################################################################

                ECCS Fluid          Reactor Enclosure        Environment
Time (hr)    I-131 (Curies)          I-131 (Curies)        I-131 (Curies)
```

0.000	5.2650E+03	2.8156E-05	1.7552E-05
0.017	1.5826E+05	1.6158E-03	3.9685E-02
0.058	5.5239E+05	5.7218E-03	4.9755E-01
0.100	9.4735E+05	9.5773E-01	5.2277E-01
0.142	1.3422E+06	2.4010E+00	5.7117E-01
0.183	1.7359E+06	4.3338E+00	6.3896E-01
0.225	2.1305E+06	6.7650E+00	7.2649E-01
0.258	2.4456E+06	9.0623E+00	8.0946E-01
0.267	2.5250E+06	9.5676E+00	8.0947E-01
0.396	3.7457E+06	1.8885E+01	8.0968E-01
0.500	4.7297E+06	2.8315E+01	8.0988E-01
0.800	9.4488E+06	6.9565E+01	8.1106E-01
1.100	1.4157E+07	1.2793E+02	8.1350E-01
1.400	1.8855E+07	1.9623E+02	8.1754E-01
1.700	2.3543E+07	2.7027E+02	8.2336E-01
2.000	2.8220E+07	3.4759E+02	8.3107E-01
2.300	2.8186E+07	4.0818E+02	8.4059E-01
2.600	2.8153E+07	4.4341E+02	8.5127E-01
2.900	2.8121E+07	4.6379E+02	8.6263E-01
3.200	2.8088E+07	4.7548E+02	8.7438E-01
3.500	2.8055E+07	4.8208E+02	8.8636E-01
3.800	2.8022E+07	4.8571E+02	8.9846E-01
4.100	2.7989E+07	4.8759E+02	9.1063E-01
4.400	2.7956E+07	4.8846E+02	9.2283E-01
4.700	2.7924E+07	4.8873E+02	9.3504E-01
5.000	2.7891E+07	4.8865E+02	9.4725E-01
5.300	2.7858E+07	4.8836E+02	9.5947E-01
5.600	2.7826E+07	4.8796E+02	9.7167E-01
5.900	2.7793E+07	4.8749E+02	9.8386E-01
6.200	2.7761E+07	4.8697E+02	9.9604E-01
6.500	2.7728E+07	4.8644E+02	1.0082E+00
6.800	2.7696E+07	4.8589E+02	1.0204E+00
7.100	2.7663E+07	4.8533E+02	1.0325E+00
7.400	2.7631E+07	4.8477E+02	1.0446E+00
7.700	2.7598E+07	4.8420E+02	1.0567E+00
8.000	2.7566E+07	4.8364E+02	1.0688E+00
8.300	2.7534E+07	4.8307E+02	1.0809E+00
8.600	2.7502E+07	4.8251E+02	1.0930E+00
8.900	2.7469E+07	4.8195E+02	1.1050E+00
9.200	2.7437E+07	4.8138E+02	1.1171E+00
9.500	2.7405E+07	4.8082E+02	1.1291E+00
9.800	2.7373E+07	4.8026E+02	1.1411E+00
10.100	2.7341E+07	4.7969E+02	1.1531E+00
10.400	2.7309E+07	4.7913E+02	1.1651E+00
24.000	2.5897E+07	4.5435E+02	1.6914E+00
96.000	1.9550E+07	3.4300E+02	4.0508E+00
720.000	1.7099E+06	3.0000E+01	1.0683E+01

Time (hr)	Security Center I-131 (Curies)	SGTS Node I-131 (Curies)
0.000	2.0964E-08	1.5642E-11
0.017	3.5358E-05	8.9766E-10
0.058	2.4870E-04	3.1788E-09
0.100	3.6153E-05	5.3207E-07
0.142	2.7978E-05	1.3339E-06
0.183	3.5669E-05	2.4076E-06
0.225	4.4890E-05	3.7583E-06
0.258	5.1321E-05	5.0346E-06
0.267	3.1012E-05	2.6576E-07
0.396	5.3431E-08	5.2456E-07

0.500	4.4779E-08	7.8652E-07
0.800	1.1174E-07	1.9324E-06
1.100	2.0818E-07	3.5535E-06
1.400	3.2177E-07	5.4507E-06
1.700	4.4527E-07	7.5074E-06
2.000	5.7445E-07	9.6553E-06
2.300	6.7876E-07	1.1338E-05
2.600	7.3955E-07	1.2317E-05
2.900	7.7474E-07	1.2883E-05
3.200	7.9493E-07	1.3208E-05
3.500	8.0635E-07	1.3391E-05
3.800	8.1264E-07	1.3492E-05
4.100	8.1592E-07	1.3544E-05
4.400	8.1744E-07	1.3568E-05
4.700	8.1793E-07	1.3576E-05
5.000	8.1782E-07	1.3573E-05
5.300	8.1736E-07	1.3566E-05
5.600	8.1669E-07	1.3554E-05
5.900	8.1591E-07	1.3541E-05
6.200	8.1505E-07	1.3527E-05
6.500	8.1416E-07	1.3512E-05
6.800	8.1324E-07	1.3497E-05
7.100	8.1231E-07	1.3481E-05
7.400	8.1137E-07	1.3466E-05
7.700	8.1042E-07	1.3450E-05
8.000	8.0948E-07	1.3434E-05
8.300	4.7658E-07	1.3419E-05
8.600	4.7603E-07	1.3403E-05
8.900	4.7547E-07	1.3387E-05
9.200	4.7491E-07	1.3372E-05
9.500	4.7436E-07	1.3356E-05
9.800	4.7380E-07	1.3340E-05
10.100	4.7325E-07	1.3325E-05
10.400	4.7269E-07	1.3309E-05
24.000	4.4825E-07	1.2621E-05
96.000	2.1549E-07	9.5278E-06
720.000	8.2753E-09	8.3333E-07

```
#######################################################################
                        Cumulative Dose Summary
#######################################################################
```

	EAB		LPZ		Security Center (Inte	
Time (hr)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)	Thyroid (rem)	TEDE (rem)
0.000	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
0.017	6.7324E-03	2.4539E-04	1.2258E-03	4.4679E-05	1.8886E-04	6.0062E-06
0.058	8.4389E-02	3.0723E-03	1.5365E-02	5.5939E-04	5.3492E-03	1.7009E-04
0.100	8.8665E-02	3.2276E-03	1.6144E-02	5.8766E-04	9.4225E-03	2.9957E-04
0.142	9.6864E-02	3.5246E-03	1.7637E-02	6.4175E-04	1.0496E-02	3.3368E-04
0.183	1.0834E-01	3.9395E-03	1.9726E-02	7.1728E-04	1.1629E-02	3.6966E-04
0.225	1.2315E-01	4.4737E-03	2.2423E-02	8.1455E-04	1.3095E-02	4.1622E-04
0.258	1.3719E-01	4.9788E-03	2.4978E-02	9.0651E-04	1.4523E-02	4.6154E-04
0.267	1.3719E-01	4.9788E-03	2.4978E-02	9.0652E-04	1.4835E-02	4.7145E-04
0.396	1.3722E-01	4.9801E-03	2.4985E-02	9.0675E-04	1.5549E-02	4.9412E-04
0.500	1.3726E-01	4.9813E-03	2.4991E-02	9.0697E-04	1.5554E-02	4.9426E-04
0.800	1.3745E-01	4.9883E-03	2.5027E-02	9.0825E-04	1.5574E-02	4.9491E-04
1.100	1.3786E-01	5.0026E-03	2.5102E-02	9.1085E-04	1.5616E-02	4.9625E-04
1.400	1.3854E-01	5.0259E-03	2.5224E-02	9.1509E-04	1.5687E-02	4.9848E-04
1.700	1.3951E-01	5.0591E-03	2.5401E-02	9.2114E-04	1.5789E-02	5.0169E-04

2.000	1.4079E-01	5.1027E-03	2.5634E-02	9.2907E-04	1.5924E-02	5.0595E-04
2.300	1.4236E-01	5.1558E-03	2.5920E-02	9.3875E-04	1.6091E-02	5.1120E-04
2.600	1.4412E-01	5.2150E-03	2.6240E-02	9.4953E-04	1.6279E-02	5.1709E-04
2.900	1.4598E-01	5.2775E-03	2.6580E-02	9.6090E-04	1.6478E-02	5.2335E-04
3.200	1.4790E-01	5.3416E-03	2.6930E-02	9.7257E-04	1.6684E-02	5.2980E-04
3.500	1.4986E-01	5.4064E-03	2.7285E-02	9.8437E-04	1.6893E-02	5.3636E-04
3.800	1.5182E-01	5.4715E-03	2.7643E-02	9.9623E-04	1.7104E-02	5.4296E-04
4.100	1.5379E-01	5.5366E-03	2.8002E-02	1.0081E-03	1.7315E-02	5.4957E-04
4.400	1.5577E-01	5.6014E-03	2.8361E-02	1.0199E-03	1.7527E-02	5.5618E-04
4.700	1.5773E-01	5.6660E-03	2.8719E-02	1.0316E-03	1.7738E-02	5.6277E-04
5.000	1.5969E-01	5.7303E-03	2.9076E-02	1.0433E-03	1.7948E-02	5.6934E-04
5.300	1.6165E-01	5.7942E-03	2.9432E-02	1.0550E-03	1.8158E-02	5.7589E-04
5.600	1.6360E-01	5.8578E-03	2.9787E-02	1.0666E-03	1.8366E-02	5.8241E-04
5.900	1.6554E-01	5.9210E-03	3.0140E-02	1.0781E-03	1.8575E-02	5.8890E-04
6.200	1.6747E-01	5.9838E-03	3.0493E-02	1.0895E-03	1.8782E-02	5.9537E-04
6.500	1.6940E-01	6.0464E-03	3.0843E-02	1.1009E-03	1.8989E-02	6.0181E-04
6.800	1.7132E-01	6.1086E-03	3.1193E-02	1.1122E-03	1.9194E-02	6.0822E-04
7.100	1.7323E-01	6.1704E-03	3.1541E-02	1.1235E-03	1.9399E-02	6.1460E-04
7.400	1.7513E-01	6.2320E-03	3.1887E-02	1.1347E-03	1.9604E-02	6.2096E-04
7.700	1.7703E-01	6.2932E-03	3.2233E-02	1.1458E-03	1.9807E-02	6.2730E-04
8.000	1.7892E-01	6.3542E-03	3.2577E-02	1.1569E-03	2.0010E-02	6.3360E-04
8.300	1.7892E-01	6.3542E-03	3.2702E-02	1.1611E-03	2.0143E-02	6.3774E-04
8.600	1.7892E-01	6.3542E-03	3.2826E-02	1.1652E-03	2.0261E-02	6.4143E-04
8.900	1.7892E-01	6.3542E-03	3.2950E-02	1.1693E-03	2.0379E-02	6.4510E-04
9.200	1.7892E-01	6.3542E-03	3.3074E-02	1.1734E-03	2.0497E-02	6.4876E-04
9.500	1.7892E-01	6.3542E-03	3.3197E-02	1.1775E-03	2.0615E-02	6.5241E-04
9.800	1.7892E-01	6.3542E-03	3.3320E-02	1.1816E-03	2.0731E-02	6.5604E-04
10.100	1.7892E-01	6.3542E-03	3.3442E-02	1.1856E-03	2.0848E-02	6.5966E-04
10.400	1.7892E-01	6.3542E-03	3.3564E-02	1.1896E-03	2.0964E-02	6.6326E-04
24.000	1.7892E-01	6.3542E-03	3.8768E-02	1.3579E-03	2.5926E-02	8.1669E-04
96.000	1.7892E-01	6.3542E-03	5.1272E-02	1.7465E-03	3.3567E-02	1.0506E-03
720.000	1.7892E-01	6.3542E-03	6.2470E-02	2.0905E-03	3.9365E-02	1.2272E-03

	Security Center (Exte	
Time (hr)	Thyroid (rem)	TEDE (rem)
0.000	0.0000E+00	0.0000E+00
0.017	7.2193E-04	2.6313E-05
0.058	9.0493E-03	3.2945E-04
0.100	9.5078E-03	3.4610E-04
0.142	1.0387E-02	3.7796E-04
0.183	1.1618E-02	4.2244E-04
0.225	1.3206E-02	4.7973E-04
0.258	1.4711E-02	5.3389E-04
0.267	1.4711E-02	5.3389E-04
0.396	1.4715E-02	5.3403E-04
0.500	1.4718E-02	5.3416E-04
0.800	1.4740E-02	5.3491E-04
1.100	1.4784E-02	5.3644E-04
1.400	1.4856E-02	5.3894E-04
1.700	1.4960E-02	5.4250E-04
2.000	1.5097E-02	5.4717E-04
2.300	1.5265E-02	5.5288E-04
2.600	1.5454E-02	5.5922E-04
2.900	1.5654E-02	5.6592E-04
3.200	1.5860E-02	5.7279E-04
3.500	1.6070E-02	5.7974E-04
3.800	1.6280E-02	5.8673E-04
4.100	1.6492E-02	5.9370E-04
4.400	1.6703E-02	6.0066E-04

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   4.700 1.6914E-02 6.0758E-04
   5.000 1.7124E-02 6.1447E-04
   5.300 1.7334E-02 6.2133E-04
   5.600 1.7543E-02 6.2814E-04
   5.900 1.7751E-02 6.3492E-04
   6.200 1.7958E-02 6.4166E-04
   6.500 1.8165E-02 6.4837E-04
   6.800 1.8371E-02 6.5504E-04
   7.100 1.8576E-02 6.6167E-04
   7.400 1.8780E-02 6.6827E-04
   7.700 1.8983E-02 6.7484E-04
   8.000 1.9186E-02 6.8138E-04
   8.300 1.9305E-02 6.8521E-04
   8.600 1.9424E-02 6.8903E-04
   8.900 1.9542E-02 6.9282E-04
   9.200 1.9660E-02 6.9660E-04
   9.500 1.9777E-02 7.0037E-04
   9.800 1.9894E-02 7.0411E-04
  10.100 2.0011E-02 7.0784E-04
  10.400 2.0127E-02 7.1156E-04
  24.000 2.5088E-02 8.6853E-04
  96.000 3.2582E-02 1.1002E-03
 720.000 3.8322E-02 1.2760E-03

#####################################################################
                        Worst Two-Hour Doses
#####################################################################

EAB
   Time    Whole Body    Thyroid        TEDE
   (hr)      (rem)        (rem)         (rem)
    0.0    6.5372E-04   1.4079E-01   5.1027E-03
```

Calculation No. LM-0646, Rev. 2
"Re-analysis of Loss of Coolant Accident (LOCA) Using Alternative Source Term Methodology"
Attachment H
Evaluation of High Wind Speed Conditions

Regulatory Guide 1.183, Appendix A, Section 4.3 is as follows:

> *The effect of high wind speeds on the ability of the secondary containment to maintain a negative pressure should be evaluated on an individual case basis. The wind speed to be assumed is the 1-hour average value that is exceeded only 5% of the total number of hours in the data set. Ambient temperatures used in these assessments should be the 1-hour average value that is exceeded only 5% or 95% of the total numbers of hours in the data set, whichever is conservative for the intended use (e.g., if high temperatures are limiting, use those exceeded only 5%).*

LGS Response:

As noted on the Page 2 of this Attachment the wind speed only exceeded 5% of the time is 19.7 mph, based on measurements at the 175 ft met tower elevation. This location is conservative for the top of the Reactor Enclosures and is used in this evaluation.

Pages 3 through 9 evaluate the effects of a wind striking the Reactor Enclosure. This wind creates a negative pressure region along the roof and rear side and a positive pressure region on the upwind side of the Reactor Enclosure. This evaluation shows that an adequate vacuum can be obtained even up to a wind speed of 35 mph. As noted on page 6, these wind speeds can result in inleakage increases, for instance at high wind speed:

In-Leakage Surface	ΔP at 35 mph	Inleakage Flow Rate Factor
Windward Side	1.017	2.49
Leeward Side	0.309	1.15
Refuel Floor	0.545	1.66
	ΔP at 20 mph	
Windward Side	0.490	1.55
Leeward Side	0.269	1.08
Refuel Floor	0.346	1.24
	ΔP at 0 mph	
No Wind Case	**0.25**	**1.00**

These potential increases in flow are accommodated by changes in damper positioning. Increased flow removes activity from the secondary containment at a faster rate, but this is offset by the X/Qs expected at these elevated wind speeds. These are impacted by the fact that wind speed is in the denominator of derivation equations, and high wind speeds are generally associated with atmospheric stability classes that result in better dispersion.

From traci.thomas@wgint.com (Traci Thomas)

Date Friday, February 6, 2004 10:48 am

To "Paul Reichert" <paul.reichert@wgint.com>

Cc "Harold Rothstein" <harold.rothstein@wgint.com>, "Jack Robinson" <jack.robinson@wgint.com>

Subject Limerick wind speed not exceeded more than 5% of the time

Paul,

As you requested, we have analyzed Exelon's Limerick Generating Station meteorological database for the years 1996 through 2000 in order to determine the wind speed value that is not exceeded more than 5% of the time. We found that within the five-year period, there are 43688 valid wind speeds available from the 30-foot meteorological tower level, and 43767 valid speeds from the 175-foot level. Listing these data in order of ascending magnitude, first for 30-ft speed, and then for 175-ft speed, resulted in demonstrating that the wind speed not exceeded more than 5% of the time is 13.7 mph at 30 feet and 19.7 mph at 175 feet.

Traci

Limerick Generating Station
P.O. Box 2300
Sanatoga, PA 19464
(610) 718-3426

Exelon Corporation

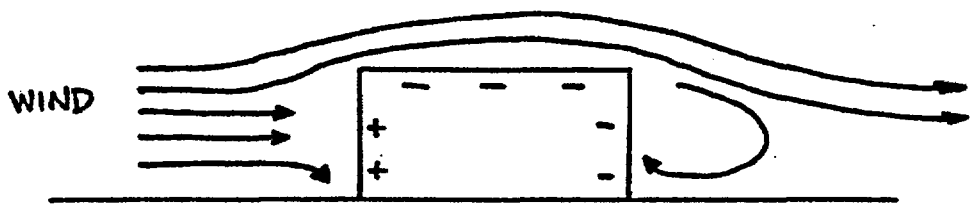
Fax

To:	TOM MSCISZ	From:	MIKE McGILL
Fax:	803-5651	Pages:	7
Phone:		Date:	2/5/04
Re:		CC:	

☒ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

• Comments:

THE WIND STRIKING A BUILDING CREATES A NEGATIVE PRESSURE REGION ALONG THE ROOF AND REAR SIDE AND A POSITIVE PRESSURE REGION ON THE UPWIND SIDE AS SHOWN BELOW.



THE WIND VELOCITY PRESSURE AT THE ROOF LEVEL IS CALCULATED AS FOLLOWS.

$$P_V = 0.000482\, V^2$$

WHERE:

P_V = WIND VELOCITY PRESSURE (IN. W.G.)
V = WIND SPEED (MPH)

THE PRESSURE ON THE BUILDING SURFACE, RELATIVE TO THE LOCAL ATMOSPHERIC PRESSURE IS CALCULATED AS FOLLOWS:

$$P_S = C_P \times P_V$$

WHERE:

P_S = SURFACE PRESSURE (IN. W.G.)
C_P = SURFACE PRESSURE COEFFICIENT

FROM TABLE 2 OF CHAPTER 14 OF ASHRAE, THE C_P FOR A FLAT ROOF (i.e. LGS) WITH A 90° WIND DIRECTION IS -0.5 (THE NEGATIVE SIGN INDICATES THAT THE SURFACE PRESSURE IS LESS THAN THE UPWIND PRESSURE). C_P FOR UPWIND WALLS IS + 0.8 AND REAR IS - 0.4. THE USE OF 90° DIRECTION IS THE WORST CASE.

196-20215 10-80

CALCULATION SHEET

PHILADELPHIA ELECTRIC CO.

NAME _____

LOCATION _____ DATE _____ SHEET NO. 2 OF 6

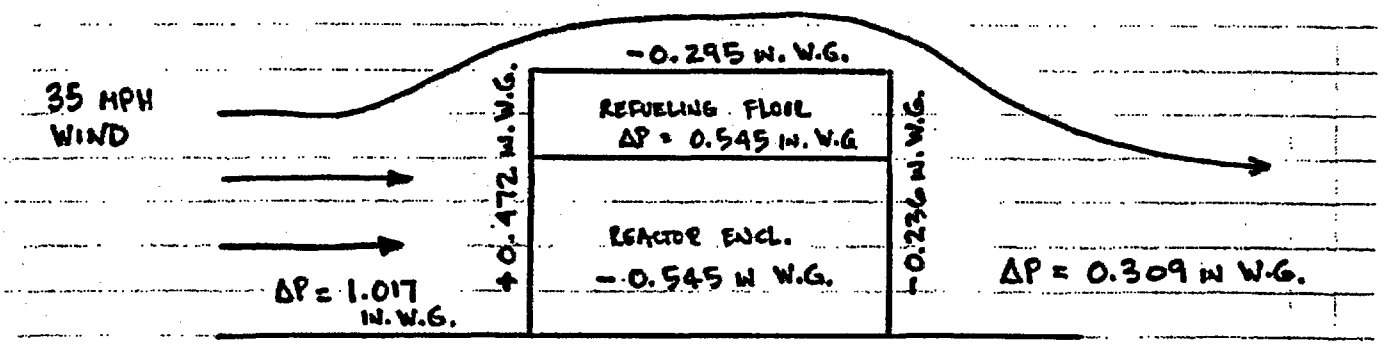
SUBJECT _____ JOB/CA NO. _____

WITH THE ABOVE INFORMATION THE FOLLOWING DATA WAS TABULATED

WIND SPEED	P_V (IN. W.G.)	ROOF SURFACE PRESSURE	PRESSURE UPWIND WALL	PRESSURE REAR WALL
0	0.000	0.000	0.000	0.000
5	0.012	-0.006	0.010	-0.005
10	0.048	-0.024	0.039	-0.019
15	0.109	-0.054	0.087	-0.044
20	0.193	-0.096	0.155	-0.077
25	0.302	-0.151	0.241	-0.121
30	0.434	-0.217	0.347	-0.174
35	0.591	-0.295	0.472	-0.236
40	0.771	-0.386	0.617	-0.308
7	0.024	-0.012	0.019	-0.010
10	0.048	-0.024	0.039	-0.020
13.2	0.084	0.042	0.0672	-0.0336

THE PRESENT DESIGN OF THE SGTS WILL MAINTAIN A -0.25 IN W.G. BUILDING PRESSURE RELATIVE TO THE OUTSIDE AIR PRESSURE SENSOR LOCATED ON THE ROOF (THIS IS THE WORST CASE LOCATION)

FROM THE TABULATED DATA ABOVE, A PRESSURE PROFILE OF LGS CAN BE DRAWN TO ILLUSTRATE THE AFFECTS OF WIND SPEED. WIND SPEEDS OF 0, 20, AND 35 MPH WERE CHOOSEN



ΔP = OUTSIDE / INSIDE

195-20219 10-80

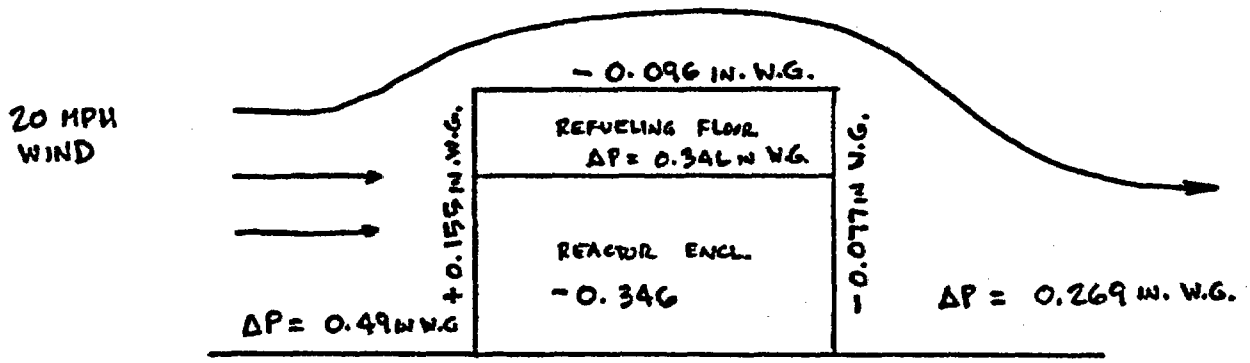
CALCULATION SHEET

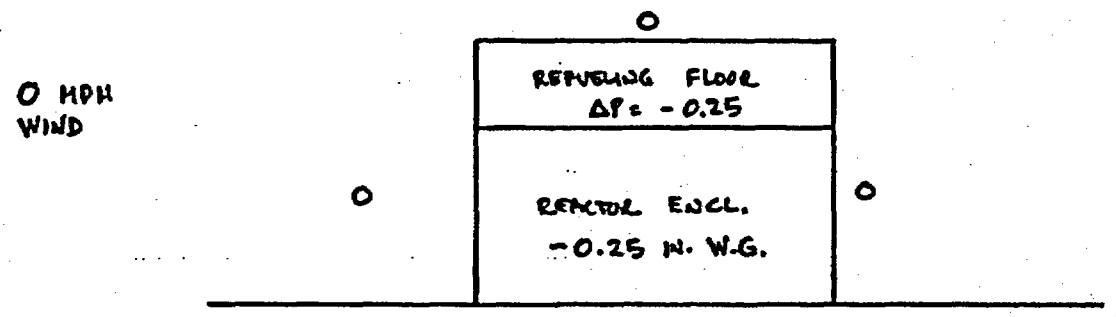
PHILADELPHIA ELECTRIC CO.

NAME

LOCATION DATE SHEET NO. 3 OF 6

SUBJECT JOB/CA NO.





IT CAN BE SEEN FROM THE ABOVE ILLUSTRATIONS, THAT EVEN THOUGH THE REACTOR ENCLOSURE IS MAINTAINED AT A -0.25 IN. W.G., THE ΔP ACROSS THE EXTERIOR WALLS AND THE REFUEL FLOOR / REACTOR ENCLOSURE INTERFACE FAR EXCEED THE 0.25 IN. W.G.. THIS WILL AND DOES RESULT IN EXCESSIVE IN-LEAKAGE AS SHOWN BELOW.

THE GENERAL EQUATION GOVERNING INFILTRATION THROUGH A WALL IS:

$$Q = C(\Delta P)^n$$

WHERE:

Q = CUBIC FEET PER MINUTE (CFM)
C = FLOW COEFFICIENT
ΔP = PRESSURE DIFFERENCE BETWEEN TWO LOCATIONS
n = FLOW EXPONENT, USUALLY BETWEEN 0.5 & 1.0. USE 0.65 FOR LEAKAGE OPENINGS

$$\therefore \quad Q = C(\Delta P)^{0.65}$$

FROM THIS EQUATION YOU CAN SEE THAT THE INCREASE IN THE ΔPs RESULTING FROM WINDS WILL INCREASE THE INFILTRATION LEAKAGE.

WIND SURFACE PRESSURES

The curvature of wind streamlines passing over a building generates surface pressures dependent on the dynamic pressure of the approach wind[4,5,6] (see Chapter 22).

Approach wind gusts and high levels of turbulent fluctuation generated by flow separation cause surface pressure to fluctuate rapidly with time. If wind direction does not change, these fluctuations are random, with time periods as short as 0.5 s. An average surface pressure may be defined over a time period of about 10 min. The fluctuating pressures can then be treated as a random variation superimposed on the average pressure.

Both the average and the fluctuating surface pressures are directly proportional to the velocity pressure P in the approach wind. Thus,

$$P_v = 0.00642 \ \varrho U_H^2 \qquad (1)$$

$$= 0.000482 U_H^2 \qquad (1a)$$

where

P_v = wind velocity pressure at roof level, in. H_2O
ϱ = air density, lb/ft^3
U_H = wind speed at roof level, fpm ← should be MPH see 1977 Handbook

The constant 0.00048 in Eq.(1a) is based on a standard air density of 0.075 lb/ft^3.

Computing the Surface Pressure

The pressure on a building surface, relative to local atmospheric pressure, may be computed from the pressure coefficient C_p defined as

$$P_s = C_p \cdot P_v \qquad (2)$$

where

P_s = wind pressure on building surface, in. H_2O
C_p = pressure coefficient, dimensionless.

The pressure P_s is relative to local atmospheric pressure at ground level away from any influence of the building. For system design, the differential pressure between the building surface and interior must be estimated. Internal pressure depends on building surface pressures, leakage characteristics and intake and exhaust fan systems (see Chapter 22). Changes in wind direction cause considerable variation in system operating conditions by varying intake and exhaust pressures.

By definition of surface pressure coefficient C_p in Eq.(3), positive values are associated with stagnation regions, where surface pressure is higher than the upstream barometric reference pressure. In separated flow regions on the roof, sides and rear of flat roofed buildings, surface pressures are always less than the upwind barometric reference pressure and, thus, have negative coefficients.

Average surface pressure coefficients for a cubical building (Fig. 5) show that C_p varies greatly with position on the building. When the wind strikes a building at angles other than perpendicular to a wall, the strong vortices along upwind

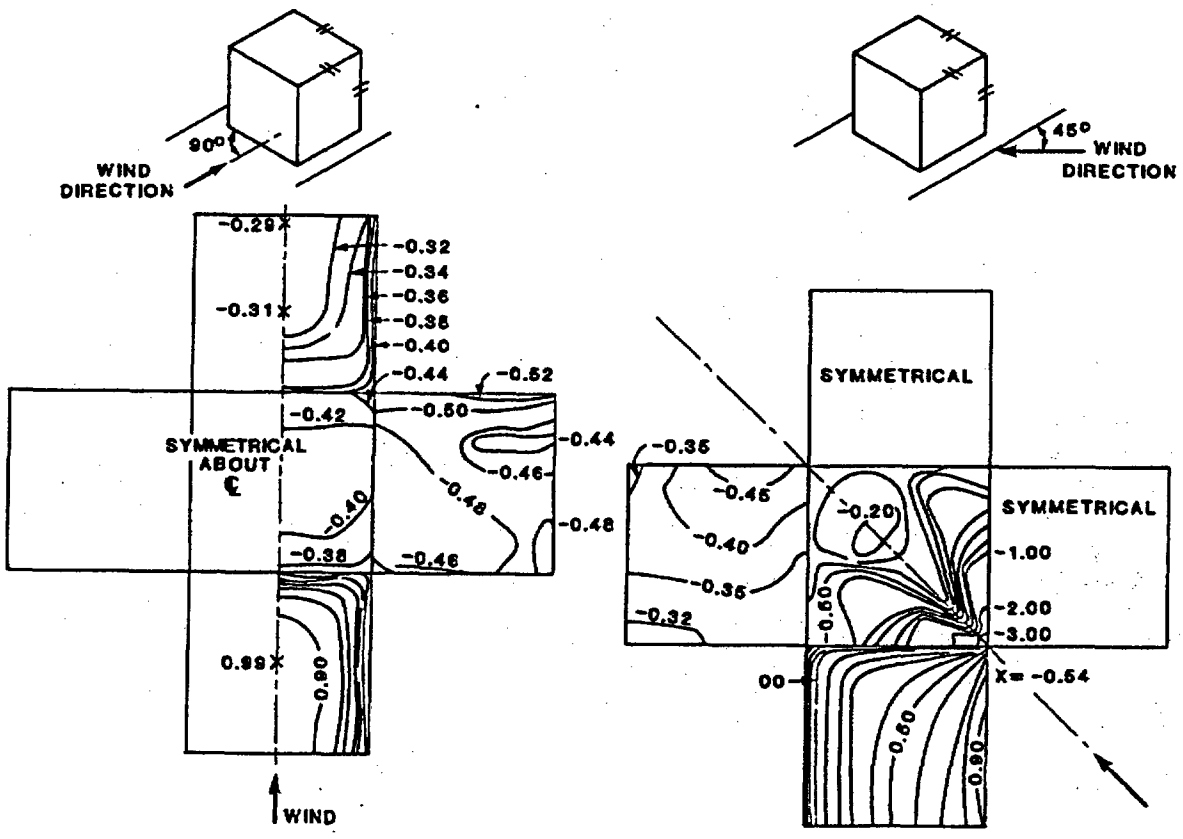


Fig. 5 Surface Pressure Coefficients on Cubical Building[5,6]

roof edges cause large surface pressure variations on the roof. The high velocities in these roof vortices generate large negative pressure coefficients. The largest variations in pressure occur near edges (Fig. 5), but the center of the roof retains a relatively constant pressure coefficient of −0.4 for the two wind directions considered.

Except for the large variations in pressure close to the edges of building surfaces, the surface pressure coefficients in Table 2 are representative average values applicable to a variety of rectangular building shapes. Surface pressures on pitched roofs depend on roof pitch angle, and whether the pitch is windward or leeward. For a roof pitch less than 20°, negative pressures occur on the windward pitched surface with C_p approximately −1.0 near the upwind edge and an average value of about −0.3. For pitch in the range 25° to 45°, C_p is positive on the windward roof. On the downwind side of a pitched roof the pressure coefficients are relatively constant over the roof surface, with C_p values about −0.5. Wall pressures are relatively unaffected by roof pitch. The differential pressure for an interior space at any point is the difference between external pressure, computed using the coefficients in Table 2, plus the interior pressure (which can be negative).

Surface Pressure on Taller Buildings

When airport wind speed measurements of U_Z at height Z are used in the calculation of surface pressure P_s, they must be extrapolated to corresponding values of U_H at height H since available pressure coefficients $C_{p,H}$ are referred to U_H. The extrapolation is made with the power law for neutral stability, since pressures are of concern mainly at high wind speeds that occur only with neutral stability. The power law is:

$$U_H/U_z = (H/Z)^{0.25} \tag{3}$$

and Eq. (3) becomes:

$$P_s = 0.5\, C_{p,H} \rho\, U_z^2\, (H/Z)^{0.5} \tag{4}$$

For convenience, Eq. (4) can be written:

$$P_s = 0.5\, C_{p,z} \rho\, U_z^2 \tag{5}$$

where:

$$C_{p,Z} = C_{p,H}\, (H/Z)^{0.5} \tag{6}$$

Fluctuating Pressure

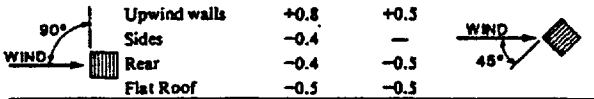
Wind turbulence and flow fluctuations in recirculating flow zones can generate large momentary pressure fluctuations, that cause vibration and intermittent opening and closing of backflow dampers and other short term variations in system operation. On the upwind surface, turbulence in the approach flow causes pressure fluctuations. Upwind structures and terrain irregularities determine the magnitude of these effects. On downwind walls, the building flow separations also influence pressure fluctuations. Large negative pressure peaks (with C_p from −3.0 to −5.0) occur close to sharp building corners where local vortex systems form. These peaks generally have time periods from one to several seconds.[4]

Effects Caused by Adjacent Buildings

A new building can considerably alter flow patterns and surface pressures on existing buildings. This may require changing the height of exhaust stacks and rebalancing or redesigning intake and exhaust systems. The effects of a nearby building are complicated because, as wind direction changes, the building induces upwind, side and downwind effects.

Table 2 Representative Average Surface Pressure Coefficients

Location	Wind Direction 90°	Wind Direction 45°
Upwind walls	+0.8	+0.5
Sides	−0.4	—
Rear	−0.4	−0.5
Flat Roof	−0.5	−0.5



An upwind building creates a low velocity, highly turbulent wake that alters the flow patterns over the downwind building. An upwind building can generate significant effects for a distance approximately twice as long as the zone of recirculating flow that exists behind it. This recirculating flow zone (Fig. 4) depends on the dimensions of the building and is typically five to ten times the minimum building dimension facing the wind (width W or height H), with a zone of downwind influence 10 to 20 building heights or widths. An adjacent building can cause wind speed to increase by channeling flow between the two buildings, resulting in negative pressure coefficients as low as −2.0.

A building downwind of an existing structure generally has little effect on pressure coefficients, but can substantially alter the zone of recirculating flow on the downwind face of the building.

ATMOSPHERIC DISPERSION OF BUILDING EXHAUST GAS

General Description and Definitions

A building exhaust system is frequently used to release a mixture of pure gas and building air at concentration C_e into the atmosphere through a stack or a flush vent in the building surface. The emission opening is the *source*. The effluent subsequently mixes with atmospheric air to form a field of concentration C around the building. A fresh air intake or a person located in the field of C is a *receptor*. A receptor is said to be contaminated if C at the receptor location is larger than a specified allowable concentration C_{allow}. Dispersion calculations are made to provide an estimate of C for comparison with C_{allow}.

It is often convenient to express the field of C as a field of dilution D between source and receptor, with D defined as:

$$D = C_e/C \tag{7}$$

D has a minimum value of 1 at the source where $C = C_e$ and approaches ∞ as C approaches 0 at great distances from the source.

If C is replaced by C_{allow} in Eq. (7), the required atmospheric dilution D_{req} is obtained to meet the allowable concentration at the receptor:

$$D_{req} = C_e/C_{allow} \tag{8}$$

The source concentration C_e is given by:

$$C_e = Q/Q_e = Q/A_e V_e \tag{9}$$

where:

Q = pure gas release rate (mass/time)
Q_e = effluent mixture release rate (vol/time)
A_e = internal stack or vent area (length^2)
V_e = emission velocity (length/time)

Computer Disclosure Sheet

Discipline Nuclear

Client: Exelon Corporation
Project: Limerick Generating Station AST LOCA

Date: June, 2006
Job No.

Program(s) used	Rev No.	Rev Date	Calculation Set No.: LM-0646, Rev. 2
Atts. B, C, and E Spreadsheets	N/A	N/A	

Status [ ] Prelim.
[X] Final
[ ] Void

WGI Prequalification [ ] Yes
[X] No

Run No. Description:

Analysis Description: Spreadsheets were used to execute arithmetic manipulations of numbers, for various applications within the attachments of this analysis. As a first step, it was verified that the spreadsheets duplicated the calculated values from the previous checked revision of the analysis.

The attached computer output has been reviewed, the input data checked,
And the results approved for release. Input criteria for this analysis were established.

By: On: 5/2006 – 6/2006
Run by: A. Boatright
Checked by: P. Reichert
Approved by: H. Rothstein

Remarks:
These spreadsheets were applied in a straight-forward manner and each formula utilized was hand checked to ensure correctness.

Computer Disclosure Sheet

Discipline Nuclear

Client: Exelon Corporation
Project: Limerick Generating Station AST LOCA

Date: June, 2006
Job No.

Program(s) used:	Rev No.	Rev Date	Calculation Set No.: LM-0646, Rev. 2
RADTRAD 3.03 - Att. A, C, and G	0	1/2003	

Status [ ] Prelim.
[X] Final
[ ] Void

WGI Prequalification [X] Yes
[ ] No

Run No. Description:

Analysis Description: RADTRAD output files for the primary LOCA dose assessments are in Attachment A, with input described in the calculation. In Attachment C RADTRAD is used to determine the whole body (shine) dose of a given source. In Attachment G, RADTRAD is used to calculate doses near Security Building, as illustrative for Vital Area access. As a first step, it was verified that the model duplicated the calculated values from the previous checked revision of the analysis.

The attached computer output has been reviewed, the input data checked,
And the results approved for release. Input criteria for this analysis were established.

By: On: 5/2006 – 6/2006

Run by: A. Boatright

Checked by: P. Reichert

Approved by: H. Rothstein

Remarks:

The RADTRAD computer code is applied in a manner fitting its intended purpose, and well within it's operating parameters. All outputs were hand checked. Attachments A include the Nuclide Information File and Release Fraction and Timing File used by the RADTRAD code and generated specifically for the Limerick Generating Station. Both were also hand checked for accuracy.

Computer Disclosure Sheet

Discipline Nuclear

Client: Exelon Corporation
Project: Limerick Generating Station AST LOCA

Date: June, 2006
Job No.

Program(s) used:	Rev No.	Rev Date	Calculation Set No.: LM-0646, Rev. 2
MicroShield 5.05 (MC-201)	0	9/2001	

Status [ ] Prelim.
[X] Final
[ ] Void

WGI Prequalification [X] Yes
[ ] No

Run No. Description:

Analysis Description: MicroShield is used to calculate doses post-LOCA doses through Control Room shield walls. As a first step, it was verified that the model duplicated the calculated values from the previous checked revision of the analysis.

The attached computer output has been reviewed, the input data checked,
And the results approved for release. Input criteria for this analysis were established.

By: On 5/2006 – 6/2006

Run by: P. Reichert P. Reichert

Checked by: A. Boatright Alan E. Boatright

Approved by: H. Rothstein Harold Rothstein

Remarks:

Computer Disclosure Sheet

Discipline Nuclear

Client: Exelon Corporation
Project: Limerick Generating Station AST LOCA

Date: June, 2006
Job No.

Program(s) used:	Rev No.	Rev Date	Calculation Set No.: LM-0646, Rev. 2
RDTRDYYY	N/A	N/A	

Status [ ] Prelim.
[X] Final
[ ] Void

WGI Prequalification [ ] Yes
[X] No

Run No. Description:

Analysis Description: The RDTRDYYY program is prepared, ad hoc, to extract from RADTRAD output files the calculated activities in a compartment as a function of time. The program then linearly integrates the activity for each isotope over each time interval. The success of extraction can be performed by inspection. The success of integration is confirmed by spot-checking.

The attached computer output has been reviewed, the input data checked,
And the results approved for release. Input criteria for this analysis were established.

By: On: 5/2006 – 6/2006

Run by: P. Reichert P. Reichert

Checked by: A. Boatright Alan Boatright

Approved by: H. Rothstein Harold Rothstein

Remarks:

ATTACHMENT 3

LIMERICK GENERATING STATION
UNITS 1 AND 2

Docket Nos. 50-352
50-353

License Nos. NPF-39
NPF-85

Supplement to License Amendment Request for
"LGS Alternative Source Term Implementation"

LGS RERS Design Analysis, M-76-07, Rev. 5

1 OF 2

CALCULATION COVER SHEET

PROJECT Limerick Gen. Station Unit 1 & 2 JOB NO. 8031 DISCIPLINE Mechanical

SUBJECT RECIRCULATION AIR MIXING STUDY FILE NO.

CALC. NO. M-76-07

NO. OF SHEETS 7

RECORD OF ISSUES

NO.	DESCRIPTION	BY	DATE	CHKD	DATE	APPRD	DATE	
5	Final calc. Revised for calc. screening only. Added sheet 1A, list of MDCPs, DCPs etc. reviewed.	PM	1/9/90	MLK	1-17-90	HW	1/25/90	4-4-91 91-9104

CALCULATION SCREENING FOR THE AS-BUILT DESIGN

The purpose of this calculation revision is to document that the calculation results and conclusions are still applicable to the as-built design of the plant, including modifications.

[X] Reviewer has determined the calculation results and conclusions are applicable to the as-built design of the plant because:

___ the original design margin was large and subsequent modifications have had little or no impact on the design margin.

X there have been no modifications to the system which affect this calculation.

___ the pre-op test results (as adjusted to agree with calculation assumptions, where appropriate) are consistent with the calculation and subsequent mods have not significantly affected the calculation results.

___ Other:

[ ] Reviewer has determined the calculation results and conclusions are no longer applicable to the as-built design of the plant because:

___ the calculation design margin has already been exceeded.

___ Other:

[ ] Reviewer cannot determine that the calculation results and conclusions are applicable to the as-built design of the plant in the time available. Further technical evaluation is recommended.

Refer to Sheet 1A for a list of MDCPs, DCPs, design documents and pre-op test results that were reviewed during the calculation screening review.

Utilization of this calculation by persons, without access to the pertinent factors and without proper regard for its purpose, could lead to erroneous conclusions. Should it become necessary to use any of this calculation in your work in the future, it is suggested that the calculation be reviewed with authorized Bechtel personnel, to ensure that the purposes, assumptions, judgments and limitations are thoroughly understood. Bechtel cannot assume responsibility for the use of calculations not under our direct control.

00 1 0 4 0 0 8 3

CALCULATION COVER SHEET

2 of 2

PROJECT LIMERICK GENERATING STATION JOB NO. 13031 DISCIPLINE MECHANICAL

SUBJECT REACTOR BLDG. RECIRC. AIR MIXING STUDY FILE NO. –

CALC. NO. M-16-7

NO. OF SHEETS 67 A

CHT 1/24/90

RECORD OF ISSUES

NO.	DESCRIPTION	BY	DATE	CHKD	DATE	APPRD	DATE	
4	FINAL CALCULATION / ISSUE NEW COVER SHEET, REVISION 8. REVISED ALL SHTS	L. Kuo	11.16.83	OHR	11-17-83	RJC	11-21-83	5-11-84 4D072 SY

00 1 0 4 0 0 8 4

BECHTEL

CALCULATION SHEET

SIGNATURE L. Kuo DATE 10-1-70

TITLE LIMERICK GENERATING STATION, UNITS 1 & 2 JOB NO. 8031

SUBJECT REACTOR BLDG RECIRC. AIR MIXING STUDY SHEET NO. 1 of 6

CALCULATED BY L. Kuo

CHECKED BY M. KUNDUROGLU

DATE CHECKED 4.21.71

M-114-2 (76-7)

STATEMENT OF PROBLEM TO DETERMINE THE BLDG. AIR MIXING RATE WHEN 60,000 CFM RECIRCULATION FAN IS OPERATED

3 Due to revised Reactor Enclosure design, recirculation to the refueling floor volume is no longer applicable. The refueling floor will be permanently separated from the reactor enclosure recirc. system. Reference alternate 7A per BLP-25840 4/21/82 #124214

PSAR CHECKED — NO CHANGE REQD E.R. 7/6/73

SOURCES OF DATA:

1. LAYOUT DRAWINGS
2. DESIGN CRITERIA
3. Calc. M-76-1, Rev 4
4.
5.
6.

SOURCES OF FORMULAE & REFERENCES

1. DESIGN CRITERIA
2. PSAR PARAGRAPH 5.3.2.2
3.
4.
5.
6.

TYPE OF CALCULATION: PRELIMINARY ☐ FINAL ☒

SUPERSEDES CALCULATION DATED

REFERENCE P & ID M-76 ENTITLED REACTOR BLDG AIR FLOW DIAG

REVISION 1 DATED 7/9/73, BY R.W. SPEIDEL (Changes No. Only)

REVISION 2 DATED 4/20/77, BY Gary James Hidle 4/20/77

REVISION 3 DATED 3/15/83, BY Michael Zayka 3/15/83 APPR. 3/15/83

REVISION 4 DATED , BY

BECHTEL

CALCULATION SHEET

GRA 4/20/77 FILE M-76-7
OHR 9/11/89

DESIGNER L. Kuo DATE 9-26-70 CHECKER M.K. UDUPOGLU DATE 4.21.71

TITLE LIMERICK GENERATING STATION, UNITS 1 & 2 JOB NO. 8081

SUBJECT RECIRCULATION AIR MIXING STUDY SHEET NO. 2 OF 6

THIS PAGE IS VOID 3

REACTOR BLDG. VOLUME = ~~3,200,000~~ 2,900,000 FT.^{3}

RECIRCULATION AIR = 60,000 CFM.

AIR CHANGES PER MINUTE = $\frac{60000}{\cancel{3200000}\ 2.9\times10^6}$ = ~~0.01875~~ 0.02069 OR ~~1.875%~~ 2.069%

AFTER 1ST. MINUTE, CONTAINMENT AIR REMAIN IN THE BLDG.

= 1 − ~~.01875~~ .02069 = ~~.98125 %~~ .97931

2ND. MINUTE, CONTAINMENT AIR REMAIN = ~~(.98125)^2~~ (.97931)^2

— — — — — — — — — —

nTH. MINUTE, CONTAINMENT AIR REMAIN = ~~(.98125)^n~~ (.97931)^n

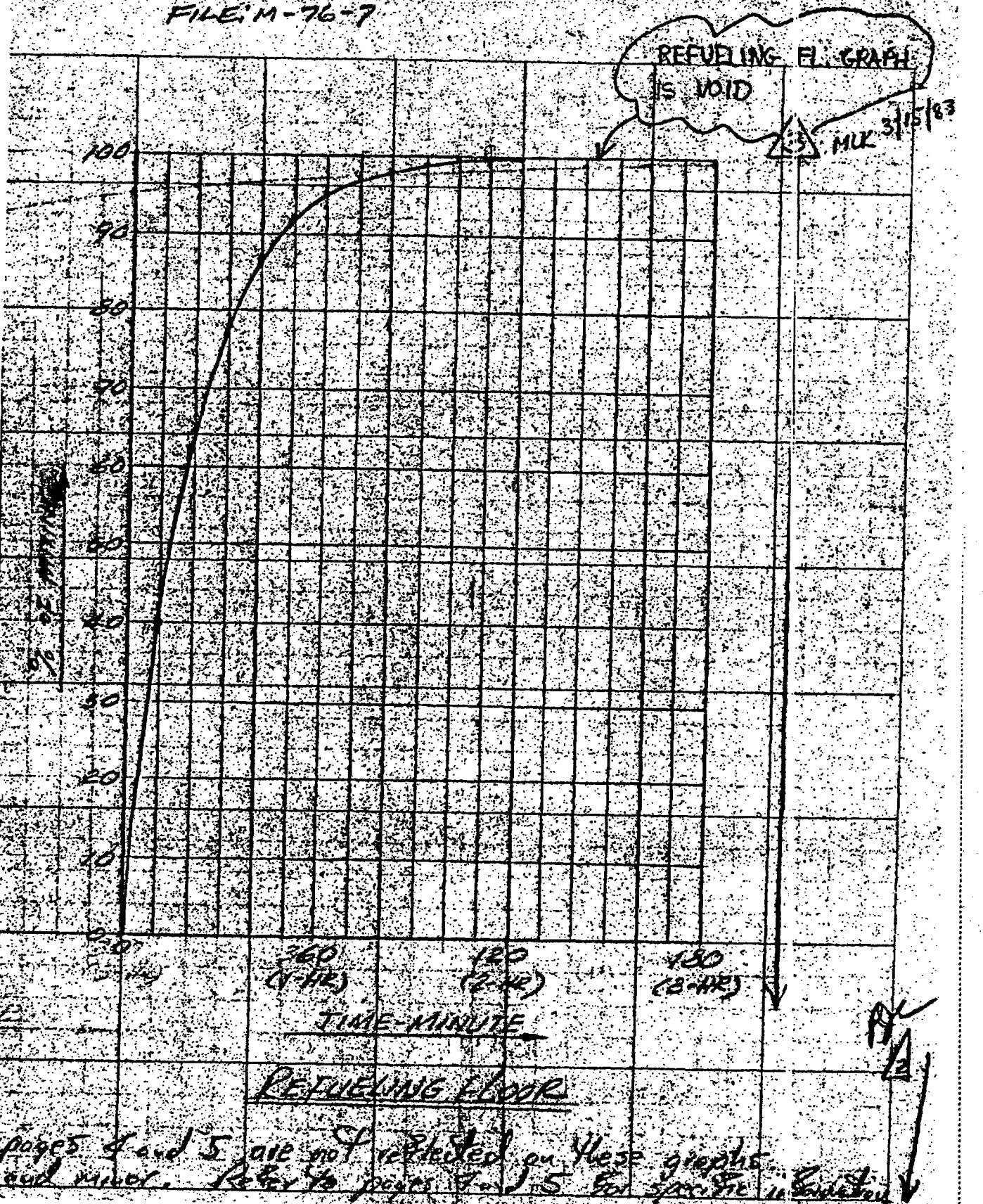
% OF MIXING = $[1-(\cancel{.98125}\ .97931)^n]\times100$ = ~~$[1-e^{-.0188n}]\times100$~~

TIME n-MIN.	% OF MIXING		TIME n-MIN.	% OF MIXING	
0	0		200	~~97.20~~	
10	~~17.1~~	18.8	210	~~98.14~~	
20	~~32.5~~	34.2	220	~~98.66~~	
30	~~44.4~~	46.6	230	~~98.69~~	
40	~~53.1~~	56.6	240	~~98.93~~	99.34
50	~~61.2~~	64.8	250	~~99.12~~	
60	~~68.2~~	71.5	260	~~99.27~~	
70	~~73.4~~	76.8	270	~~99.40~~	
80	~~78.0~~	81.2	280	~~99.50~~	
90	~~81.7~~	84.7	290	~~99.58~~	
100	~~84.9~~	87.6	300	~~99.66~~	99.81
110	~~86.6~~	89.9	320	~~99.62~~	
120	~~89.7~~	91.8	340	~~99.87~~	
130	~~91.4~~		360	~~99.89~~	99.95
140	~~92.9~~		380	~~99.94~~	
150	~~94.1~~		400	~~99.98~~	
160	~~95.2~~		420	~~99.98~~	99.98
170	~~96.0~~		440	~~99.976~~	
180	~~96.7~~	97.6	460	~~99.988~~	
190	~~97.2~~		480	~~99.995~~	99.95

0 0 0

CHKD BY:
M. KUNDUPOGLU 5.7.71

FILE: M-76-7



pages 4 and 5 are not reflected on these graphs and minor. Refer to pages 4 and 5 for specific information

0512 13-701

CALCULATION SHEET

GJA 4/20/77
RSK 4/27/77
OHR 3/17/89
FILE: M-76-7

DESIGNER L. Kuo DATE 2-19-71 CHECKER M. Kuo UPDATED DATE 5.7.71

TITLE LIMERICK GENERATING STATION, UNITS 1 & 2 JOB NO. 8081

SUBJECT RECIRCULATION AIR MIXING STUDY SHEET NO. 4 of 6

REACTOR BLDG. VOLUME (BELOW REFUELING FLOOR) = ~~202,000~~ 1,800,000 FT³

RECIRCULATION AIR = 60,000 CFM

AIR CHANGES PER MINUTE = $\frac{60000}{\cancel{202000}\ 1,800,000} = \cancel{0.0297}\ 0.0333$

% OF MIXING = $\left\{1 - e^{-\cancel{0.0297}\ 0.0333\,n}\right\} \times 100$

TIME n-MIN.	% OF MIXING
0	0.0
10	~~25.6~~ 28.8
20	~~45.0~~ 49.3
30	~~59.7~~ 63.9
40	~~69.5~~ 74.3
50	~~77.3~~ 81.7
60	~~83.1~~ 86.9
70	~~87.5~~ 90.7
80	~~90.7~~ 93.4
90	~~93.1~~ 95.3
100	~~94.9~~ 96.6
110	~~96.2~~ 97.6
120	~~97.2~~ 98.3
130	~~97.9~~ 98.8
140	~~98.4~~ 99.1
150	~~98.84~~ 99.4
160	~~99.13~~ 99.6
170	~~99.36~~ 99.7
180	~~99.52~~ 99.8

0513 (3-70)

CALCULATION SHEET

GTA 4/20/77 4/22/77 ORR 4/17/83

FILE M-76-7

DESIGNER L. Kuo DATE 5-7-71 CHECKER M. KULDUROGLU DATE 5.7.71

TITLE LIMERICK GENERATING STATION, UNITS 1 & 2 JOB NO. 2081

SUBJECT RECIRCULATION AIR MIXING STUDY SHEET NO. 5 OF 6

THIS PAGE IS VOID

REFUELING FLOOR VOLUME = ~~1,180,000~~ 1,100,000 CFM.

RECIRCULATION AIR = 60,000 CFM.

AIR CHANGES PER MINUTE = $\frac{60000}{\cancel{1180000}\ 1100000} = \cancel{0.051}\ 0.054$ MLK 3/16/83

% OF MIXING = $\left[1 - \cancel{e^{-0.051t}}\right] \times 100$

$\left[1 - (.946)^n\right]$

TIME n-MIN.	% OF MIXING
0	0
10	~~40.0~~ ~~45.6~~
20	~~64.0~~ ~~67.0~~
30	~~78.4~~ 81.1
40	~~87.0~~ 89.1
50	~~92.2~~ 93.7
60	~~95.3~~ 96.4
70	~~97.2~~ 97.9
80	~~98.3~~ 98.8
90	~~98.9~~ 99.3
100	~~99.39~~ 99.6
110	~~99.63~~ 99.8
120	~~99.78~~ 99.9

BECHTEL

CALCULATION SHEET

SIGNATURE L. Kao

GTA 4/20/77 JK 4/21/77 DAR 3/1/82

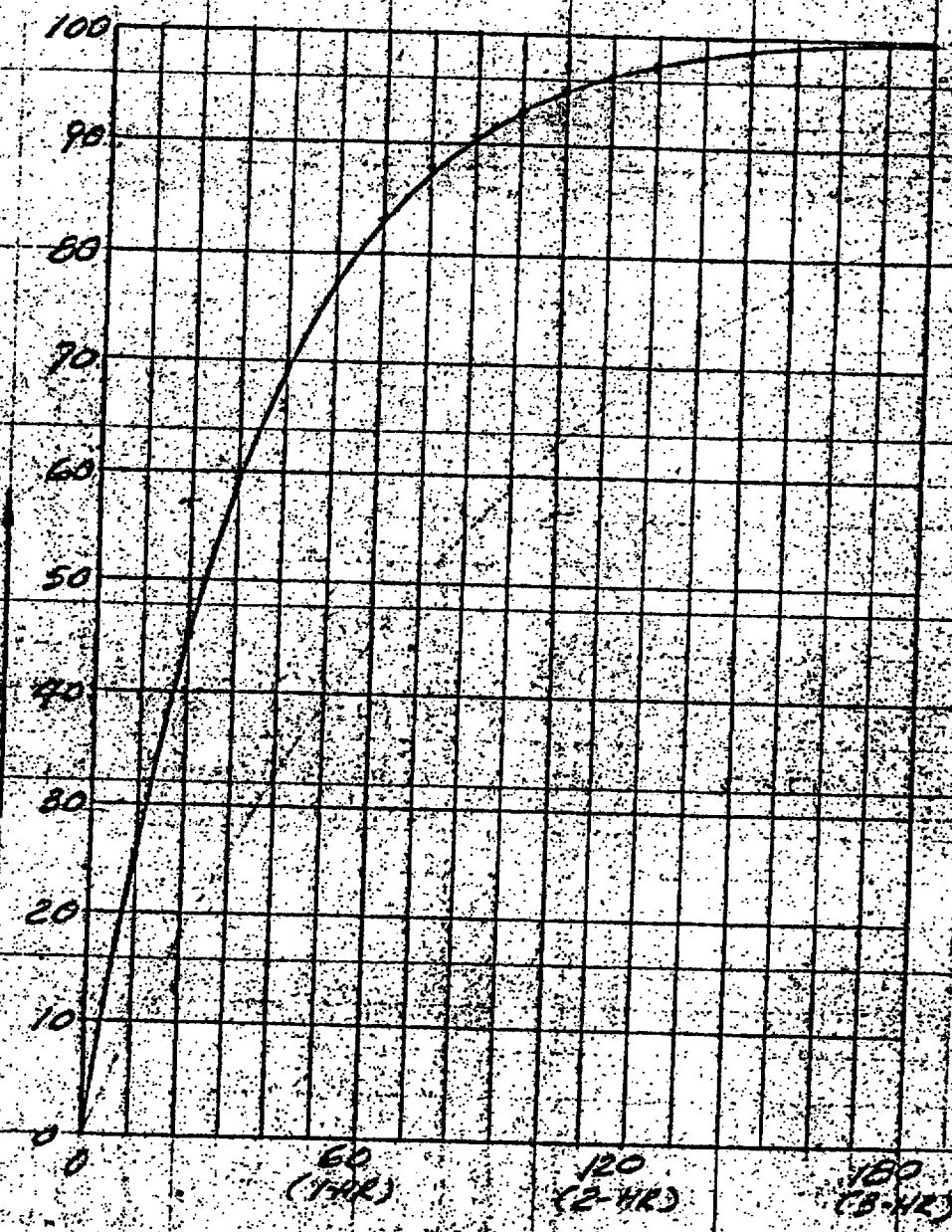
DATE 2-19-71

TITLE LIMERICK GENERATING STATION, UNITS 1 & 2

JOB NO. 8031

SUBJECT RECIRCULATION AIR MIXING STUDY

SHEET NO. 6 OF 6



BLDG. BELOW REFUEL FLOOR

NOTE: The revised numbers (% of mixing) indicated on the chart in the information is conservative