

Table 6.2.1-1—Loss of Coolant Accidents
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Case	Break Location	Break Type ⁷	Cd	Single Failure	ECCS	Offsite Power Configuration	Back Pressure
1	Hot Leg	DEG	1.0	SIS/RHR Heat Exchangers	Max	LOOP	60 psia
2	Hot Leg	DEG	1.0	1 Train ECCS	Min	LOOP	60 psia
3	Hot Leg	DEG	1.0	1 Train ECCS	Min	No LOOP	60 psia
4	Hot Leg	DEG	1.0	SIS/RHR Heat Exchangers	Max	No LOOP	60 psia
5	Hot Leg	DEG	0.8	1 Train ECCS	Min	LOOP	60 psia
6	Hot Leg	DEG	0.6	1 Train ECCS	Min	LOOP	60 psia
7	Hot Leg	Split	0.8	1 Train ECCS	Min	LOOP	60 psia
7A	Hot Leg	DEG	1.0	1 Train ECCS	Min	LOOP	14.7 psia
7C	Hot Leg	Split	1.0	1 Train ECCS	Min	LOOP	14.7 psia
8	Pump Suction	DEG	1.0	SIS/RHR Heat Exchangers	Max	LOOP	60 psia
9	Pump Suction	DEG	1.0	1 Train ECCS	Min	LOOP	60 psia
10	Pump Suction	DEG	1.0	1 Train ECCS	Min	No LOOP	60 psia
10B	Pump Suction	DEG	1.0	SIS/RHR Heat Exchangers	Max	No LOOP	60 psia
11	Pump Suction	DEG	1.0	1 Train ECCS	Min	No LOOP	60 psia
12	Pump Suction	DEG	0.8	1 Train ECCS	Min	No LOOP	60 psia
13	Pump Suction	DEG	0.6	1 Train ECCS	Min	No LOOP	60 psia
14	Pump Suction	Split	0.8	1 Train ECCS	Min	No LOOP	60 psia
14B	Pump Suction	Split	0.8	1 Train ECCS	Min	No LOOP	14.7 psia
14C	Pump Suction	Split	0.8	1 Train ECCS	Min	No LOOP	76.7 psia
14D ¹	Pump Suction	Split	0.8	1 Train ECCS	Min	No LOOP	60 psia
14E	Pump Suction	Split	1.0	1 Train ECCS	Min	No LOOP	14.7 psia
15	Pump Discharge	DEG	1.0	SIS/RHR Heat Exchangers	Max	LOOP	60 psia

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Case	Break Location	Break Type ⁷	Cd	Single Failure	ECCS	Offsite Power Configuration	Back Pressure
16	Pump Discharge	DEG	1.0	1 Train ECCS	Min	LOOP	60 psia
17	Pump Discharge	DEG	1.0	1 Train ECCS	Min	No LOOP	60 psia
18	Pump Discharge	DEG	1.0	SIS/RHR Heat Exchangers	Max	No LOOP	60 psia
19 ²	Pump Discharge	DEG	1.0	1 Train ECCS	Min	No LOOP	60 psia
20 ³	Pump Discharge	DEG	1.0	1 Train ECCS	Min	No LOOP	60 psia
21	Pump Discharge	DEG	0.8	1 Train ECCS	Min	No LOOP	60 psia
22	Pump Discharge	Split	0.8	1 Train ECCS	Min	No LOOP	60 psia
23	Pump Discharge	Split	0.6	1 Train ECCS	Min	No LOOP	60 psia
24	Pump Discharge	DEG	0.6	1 Train ECCS	Min	No LOOP	60 psia
25	Pump Discharge	Split	1.0	1 Train ECCS	Min	No LOOP	60 psia
26	Pump Discharge	Split	1.0	1 Train ECCS	Min	No LOOP	14.7 psia
27	Pump Discharge	Split	1.0	1 Train ECCS	Min	No LOOP	76.7 psia
28 ¹	Pump Discharge	Split	1.0	1 Train ECCS	Min	No LOOP	60 psia
29 ⁴	Pump Discharge	Split	1.0	1 Train ECCS	Min	No LOOP	60 psia
30 ⁵	Pump Discharge	Split	1.0	1 Train ECCS	Min	No LOOP	60 psia
31 ⁶	Pump Discharge	Split	1.0	1 Train ECCS	Min	No LOOP	60 psia
32 ¹⁶	Hot Leg	DEG	1.0	1 Train ECCS ¹³	Min	No LOOP	Note 8
32A ¹⁶	Hot Leg	DEG	1.0	1 Train ECCS ¹³	Min	LOOP	Note 8
32B ¹⁶	Hot Leg	Split	1.0	1 Train ECCS ¹³	Min	LOOP	Note 8
32C ¹⁶	Hot Leg	Split	0.8	1 Train ECCS ¹³	Min	LOOP	Note 8
32D ¹⁶	Hot Leg	Split	0.6	1 Train ECCS ¹³	Min	LOOP	Note 8

Table 6.2.1-1—Loss of Coolant Accidents
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Case	Break Location	Break Type ⁷	Cd	Single Failure	ECCS	Offsite Power Configuration	Back Pressure
33 ¹⁶	Pump Suction	DEG	1.0	1 Train ECCS ⁹	Min	No LOOP	Note 8
34 ¹⁶	Pump Suction	DEG	1.0	1 Train ECCS ¹⁰	Min	No LOOP	Note 8
34A ¹⁶	Pump Suction	DEG	1.0	1 Train ECCS ^{10,11,13}	Min	No LOOP	Note 8
34B ¹⁶	Pump Suction	DEG	0.8	1 Train ECCS ^{10,11,13}	Min	No LOOP	Note 8
34C ¹⁶	Pump Suction	DEG	0.6	1 Train ECCS ^{10,11,13}	Min	No LOOP	Note 8
34D ¹⁶	Pump Suction	DEG	1.0	1 Train ECCS ^{10,11,13}	Min	LOOP	Note 8
34E ¹⁶	Pump Suction	DEG	0.8	1 Train ECCS ^{10,11,13}	Min	LOOP	Note 8
34F ¹⁶	Pump Suction	DEG	0.6	1 Train ECCS ^{10,11,13}	Min	LOOP	Note 8
34G ¹⁶	Pump Suction	Split	1.0	1 Train ECCS ^{10,11,13}	Min	No LOOP	Note 8
34H ¹⁶	Pump Suction	Split	0.8	1 Train ECCS ^{10,11,13}	Min	No LOOP	Note 8
34I ¹⁶	Pump Suction	Split	0.6	1 Train ECCS ^{10,11,13}	Min	No LOOP	Note 8
34J ¹⁶	Pump Suction	Split	1.0	1 Train ECCS ^{10,11,13}	Min	LOOP	Note 8
34K ¹⁶	Pump Suction	Split	0.8	1 Train ECCS ^{10,11,13}	Min	LOOP	Note 8
34L ¹⁶	Pump Suction	Split	0.6	1 Train ECCS ^{10,11,13}	Min	LOOP	Note 8
35	Case not used						
36 ¹⁶	Pump Suction	DEG	1.0	1 Train ECCS ^{10, 15}	Min	No LOOP	Note 8
37 ¹⁶	Pump Suction	DEG	1.0	1 Train ECCS ^{10, 12}	Min	No LOOP	Note 8
38 ¹⁶	Pump Suction	DEG	1.0	1 Train ECCS ¹⁰	Min	LOOP	Note 8
39 ¹⁶	Pump Suction	DEG	1.0	1 Train ECCS ^{10, 11}	Min	No LOOP	Note 8
40 ¹⁶	Pump Suction	DEG	1.0	1 Train ECCS ^{10, 11, 13}	Min	No LOOP	Note 8
41 ¹⁶	Pump Discharge	DEG	1.0	1 Train ECCS ^{9, 11, 13}	Min	No LOOP	Note 8

Table 6.2.1-1—Loss of Coolant Accidents
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Case	Break Location	Break Type ⁷	Cd	Single Failure	ECCS	Offsite Power Configuration	Back Pressure
41A ¹⁶	Pump Discharge	DEG	1.0	1 Train ECCS ^{9,11,13}	Min	LOOP	Note 8
41B ¹⁶	Pump Discharge	Split	1.0	1 Train ECCS ^{9,11,13}	Min	LOOP	Note 8
41B ¹⁶	Pump Discharge	Split	0.8	1 Train ECCS ^{9,11,13}	Min	LOOP	Note 8
41D ¹⁶	Pump Discharge	Split	0.6	1 Train ECCS ^{9,11,13}	Min	LOOP	Note 8
42	Pump Discharge	0.5 ft ² (9 in)	1.0	1 Train ECCS	Min	LOOP	Note 8
43	Pump Discharge	0.1963 ft ² (6 in)	1.0	1 Train ECCS	Min	LOOP	Note 8
44	Pump Discharge	0.0491 ft ² (3 in)	1.0	1 Train ECCS	Min	LOOP	Note 8
45	Hot Leg	0.0491 ft ² (3 in)	1.0	1 Train ECCS	Min	LOOP	Note 8
46	Hot Leg	0.0491 ft ² (3 in)	1.0	1 Train ECCS ¹⁴	Min	LOOP	Note 8

Notes:

1. Increased IRWST Temperature to 248°F.
2. Based on Case 17 with the percentage of LHSI to the intact loop to be 0%.
3. Based on Case 17 with the percentage of LHSI to the intact loop to be 25%.
4. Based on Case 25 with instantaneous feedwater isolation.
5. Long-Term LOCA Run Based on Case 25.

6. Increased IRWST Temperature to 170°F.
7. DEG = double-ended guillotine.
8. Containment pressure used in the M&E calculation matched the predicted GOTHIC pressure profile.
9. Two available ECCS trains aligned to one intact loop and one broken loop.
10. Two available ECCS trains aligned two intact loops.
11. Partial Cooldown not credited.
12. RCP anti-rotation device not credited.
13. All Containment doors remain closed.
14. Rupture foils assumed to remain closed.
15. Hot leg nozzle gap remains open during reflood.
16. GOTHIC multi-node sub-divided containment model.

Table 6.2.1-2—Main Steam Line Breaks
Sheet 1 of 2

Case	Power Level (RTP)	Break Type¹	Size	Single Failure	Offsite Power Configuration
1	100%	DEG	1.4 ft ²	MSIV	Available
2	100%	Split	1.0 ft ²	MSIV	Available
3	100%	Split	0.7 ft ²	MSIV	Available
4	100%	Split	0.52 ft ²	MSIV	Available
5	100%	Split	0.3 ft ²	MSIV	Available
6	80%	DEG	1.4 ft ²	MSIV	Available
7	80%	Split	1.0 ft ²	MSIV	Available
8	80%	Split	0.7 ft ²	MSIV	Available
9	80%	Split	0.52 ft ²	MSIV	Available
10	80%	Split	0.3 ft ²	MSIV	Available
11	60%	DEG	1.4 ft ²	MSIV	Available
12	60%	Split	1.0 ft ²	MSIV	Available
13	60%	Split	0.7 ft ²	MSIV	Available
14	60%	Split	0.52 ft ²	MSIV	Available
15	60%	Split	0.3 ft ²	MSIV	Available
16	50%	DEG	1.4 ft ²	MSIV	Available
17	50%	Split	1.0 ft ²	MSIV	Available
18	50%	Split	0.7 ft ²	MSIV	Available
19	50%	Split	0.52 ft ²	MSIV	Available
20	50%	Split	0.3 ft ²	MSIV	Available
21	40%	DEG	1.4 ft ²	MSIV	Available
22	40%	Split	1.0 ft ²	MSIV	Available
22(A)	40%	Split	3.0 ft ²	MSIV	Available
22(B)	40%	Split	1.72 ft ²	MSIV	Available
23	40%	Split	0.7 ft ²	MSIV	Available
24	40%	Split	0.52 ft ²	MSIV	Available
25	40%	Split	0.3 ft ²	MSIV	Available
26	20%	DEG	1.4 ft ²	MSIV	Available
26(A)	20%	DEG ²	1.4ft ²	MSIV	Available
26(B)	20%	DEG ^{2, 3}	1.4ft ²	MSIV	Available

Table 6.2.1-2—Main Steam Line Breaks
Sheet 2 of 2

Case	Power Level (RTP)	Break Type¹	Size	Single Failure	Offsite Power Configuration
26(C)	20%	Split	8.25 ft ²	MSIV	Available
26(D)	20%	Split	4.12 ft ²	MSIV	Available
26(E)	20%	Split	3.0 ft ²	MSIV	Available
26(F)	20%	Split	1.72 ft ²	MSIV	Available
27	20%	Split	1.0 ft ²	MSIV	Available
28	20%	Split	0.7 ft ²	MSIV	Available
29	20%	Split	0.52 ft ²	MSIV	Available
30	20%	Split	0.3 ft ²	MSIV	Available
31	0%	DEG	1.4 ft ²	MSIV	Available
32	0%	Split	1.0 ft ²	MSIV	Available
32(A)	0%	Split	8.25 ft ²	MSIV	Available
32(B)	0%	Split	4.12 ft ²	MSIV	Available
32(C)	0%	Split	3.0 ft ²	MSIV	Available
32(D)	0%	Split	1.72 ft ²	MSIV	Available
32(E)	0%	Split ²	1.72 ft ²	MSIV	Available
33	0%	Split	0.7 ft ²	MSIV	Available
34	0%	Split	0.52 ft ²	MSIV	Available
35	0%	Split	0.3 ft ²	MSIV	Available
35(A)	0%	Split ³	0.3 ft ²	MSIV	Available
36	0%	Split	0.2 ft ²	MSIV	Available
37	0%	Split	0.15 ft ²	MSIV	Available
38	0%	Split	0.1 ft ²	MSIV	Available
39	0%	Split	0.01 ft ²	MSIV	Available
40	0%	Split	0.005 ft ²	MSIV	Available

Notes:

1. DEG = double-ended guillotine.
2. No EFW supplied to broken SG.
3. Break located in the accessible space outside the SG towers.

Table 6.2.1-3—LHSI Heat Exchanger Data

Parameter	Analytical Inputs
No. of shell side passes	1
Number of tube side passes	1 (U-Tube Design)
No. of tubes	1088
Tube material	Austenitic steel (stainless steel)
Tube thickness	0.04 in
Total tube side flow area	1.311 ft ²
Tube internal diameter	0.47 in
Tube outer diameter	0.55 in
Shell outer diameter	3.9 ft
Shell wall thickness	0.71 in
Tube side fouling resistance	1.70×10^{-4} (ft ² -hr-°F/BTU)
Shell side fouling resistance	2.84×10^{-4} (ft ² -hr-°F/BTU)
CCW flow rate at inlet of RHRS heat exchanger	608.5 lb _m /s
CCW temperature at inlet of RHRS heat exchanger	113 °F
Total tube side surface area (total inside surface area of tubes)	4751.5 ft ²
Total shell side surface area (total outside surface area of tubes)	5560.3 ft ²
Overall heat transfer coefficient	444.9 (BTU/ft ² -hr-°F)

Table 6.2.1-4—Containment Heat Sink Inventory
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	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
	Containment Wall with Steel Liner	0.0002	0	0.006	0.003	1.222	9177
1	Access to RB annulus	0.0002	0	0.006	0.003	1.306	77.56
2	Lower annulus rooms L1 & 2 to RB annulus	0.0002	0	0.006	0.003	1.306	151.24
3	Lower annulus rooms L3 & 4 to RB annulus	0.0002	0	0.006	0.003	1.306	151.24
4	Hot piping to RB annulus	0.0002	0	0.006	0.003	1.306	178.38
5	Middle annulus rooms L1 & 2 to RB annulus	0.0002	0	0.006	0.003	1.306	1140.81
6	Middle annulus rooms L3 & 4 to RB annulus	0.0002	0	0.006	0.003	1.3055	1269.38
7	Access to RB annulus	0.0002	0	0.006	0.003	1.306	65.95
8	Middle annulus rooms L3 & 4 to RB annulus	0.0002	0	0.006	0.003	1.306	130.42
9	Lower & upper dome L1, 2, 3 & 4 to RB annulus	0.0002	0	0.006	0.003	1.306	517.31
10	Upper annulus rooms L1 & 2 to RB annulus	0.0002	0	0.006	0.003	1.306	330.64
11	Upper annulus rooms L3 & 4 to RB annulus	0.0002	0	0.006	0.003	1.306	330.64
12	Staircase (south) to RB annulus	0.0002	0	0.006	0.003	1.306	43.7
13	Lower & upper dome L1, 2, 3 & 4 to RB annulus	0.0002	0	0.006	0.003	1.3	2309.5
14	Lower & upper dome L1, 2, 3 & 4 to RB annulus	0.0002	0	0.006	0.003	1	2480
	IRWST Vertical Wall (in contact with IRWST)	0	0	0.004	0	1.404	669
1	Spreading rooms to IRWST	0	0	0.004	0	1.2	42.06
2	IRWST to SG blowdown (LCQ) HX etc.	0	0	0.004	0	0.3	19.66
3	IRWST to components	0	0	0.004	0	0.8	37.96
4	IRWST to elevator	0	0	0.004	0	0.74	2.08
5	IRWST to lower annulus rooms L1 & 2	0	0	0.004	0	1.5	560

Table 6.2.1-4—Containment Heat Sink Inventory
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	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
6	IRWST to hot piping	0	0	0.004	0	1.5	6.88
	IRWST Vertical Wall (to Containment Atmosphere)	0.0004	0	0	0	1.404	669
1	Spreading rooms to IRWST	0.0004	0	0	0	1.2	42.06
2	IRWST to SG blowdown (LCQ) HX etc.	0.0004	0	0	0	0.3	19.66
3	IRWST to components	0.0004	0	0	0	0.8	37.96
4	IRWST to elevator	0.0004	0	0	0	0.74	2.08
5	IRWST to lower annulus rooms L1 & L2	0.0004	0	0	0	1.5	560
6	IRWST to hot piping	0.0004	0	0	0	1.5	6.88
	IRWST horizontal wall (Heavy Floor)	0.001	0	0	0	1.434	547
1	IRWST to SG blowdown (LCQ) HX etc.	0.001	0	0	0	1	64.64
2	IRWST to components	0.001	0	0	0	0.8	46.56
3	IRWST to lower equipment rooms L1	0.001	0	0	0	1.5	78.8
4	IRWST to lower equipment rooms L2	0.001	0	0	0	1.5	139.2
5	IRWST to lower equipment rooms L3	0.001	0	0	0	1.5	139.2
6	IRWST to lower equipment rooms L4	0.001	0	0	0	1.5	78.8
	IRWST Horizontal Wall (IRWST Ceiling)	0	0	0.004	0	1.5	436
1	IRWST to lower equipment rooms L1	0	0	0.004	0	1.5	78.8
2	IRWST to lower equipment rooms L2	0	0	0.004	0	1.5	139.2
3	IRWST to lower equipment rooms L3	0	0	0.004	0	1.5	139.2
4	IRWST to lower equipment rooms L4	0	0	0.004	0	1.5	78.8

Table 6.2.1-4—Containment Heat Sink Inventory
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	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
	IRWST Basemat	0	0	0.004	0	4	590
1	IRWST to ground	0	0	0.004	0	4	590
	Building Basemat (Excluding IRWST)	0.001	0	0	0	4.0	720
1	Spreading rooms to ground	0.001	0	0	0	4.0	175
2	Access area to ground	0.001	0	0	0	4.0	80
3	SIS pipe penetrations to ground (To SB 1&2)	0.001	0	0	0	4.0	144
4	SIS pipe penetrations to ground (To SB 3&4)	0.001	0	0	0	4.0	142
5	Fuel Building penetrations to ground	0.001	0	0	0	4.0	172
6	Elevator shaft penetrations to ground	0.001	0	0	0	4.0	6.72
	Vertical wall to accessible space	0.0004	0	0	0	0.39	8342
1	access to elevator	0.0004	0	0	0	0.1	52.34
2	lower annulus rooms L1 & 2 to elevator	0.0004	0	0	0	0.1	12.54
3	lower annulus rooms L1 & 2 to access	0.0004	0	0	0	0.1	14.08
4	lower annulus rooms L3 & 4 to access	0.0004	0	0	0	0.1	27.56
5	lower annulus rooms L1 & 2 to hot piping	0.0004	0	0	0	0.15	20.8
6	lower annulus rooms L3 & 4 to hot piping	0.0004	0	0	0	0.15	20.8
7	middle annulus rooms L1 & 2 to staircase (south)	0.0004	0	0	0	0.15	362.82
8	middle annulus rooms L1 & 2 to elevator	0.0004	0	0	0	0.1	178.94
9	Internal wall in middle annulus rooms L1 & 2	0.0004	0	0	0	0.1322	186.96
10	Internal wall in middle annulus rooms L1 & 2	0.0004	0	0	0	0.25	190.24
11	middle annulus rooms L1 & 2 to access	0.0004	0	0	0	0.1	17.8
12	middle annulus rooms L3 & 4 to access	0.0004	0	0	0	0.1	16.38

Table 6.2.1-4—Containment Heat Sink Inventory
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	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
13	Internal wall in middle annulus rooms L3 & 4	0.0004	0	0	0	0.25	203.96
14	middle annulus rooms L1 & 2 to staircase (north)	0.0004	0	0	0	0.15	229.12
15	middle annulus rooms L3 & 4 to staircase (north)	0.0004	0	0	0	0.15	223.08
16	middle annulus rooms L1 & 2 to middle annulus rooms L3 & 4	0.0004	0	0	0	0.7132	365.38
17	Internal wall in middle annulus rooms L3 & 4	0.0004	0	0	0	0.6	28.28
18	Internal wall in middle annulus rooms L1 & 2	0.0004	0	0	0	0.755	47.6
19	middle annulus rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.4443	105.12
20	middle annulus rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.7	156.32
21	middle annulus rooms L1 & 2 to staircase (north)	0.0004	0	0	0	0.5	25.2
22	middle annulus rooms L1 & 2 to elevator	0.0004	0	0	0	0.5	102.74
23	Internal wall in middle annulus rooms L1 & 2	0.0004	0	0	0	0.5	35.3
24	middle annulus rooms L1 & 2 to upper annulus rooms L1 & 2	0.0004	0	0	0	0.5	350.76
25	upper annulus rooms L1 & 2 to staircase (north)	0.0004	0	0	0	0.15	80.34
26	upper annulus rooms L3 & 4 to staircase (north)	0.0004	0	0	0	0.15	110.26
27	upper annulus rooms L1 & 2 to staircase (north)	0.0004	0	0	0	0.5	16.32
28	upper annulus rooms L1 & 2 to elevator	0.0004	0	0	0	0.1	123.1
29	upper annulus rooms L1 & 2 to elevator	0.0004	0	0	0	0.5	13.68
30	upper annulus rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.65	14.4

Table 6.2.1-4—Containment Heat Sink Inventory
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	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
31	lower & upper dome L1, 2, 3 & 4 to staircase (south)	0.0004	0	0	0	0.15	58.22
32	Internal wall in upper annulus rooms L1 & 2	0.0004	0	0	0	0.5	14.04
33	upper annulus rooms L1 & 2 to staircase (south)	0.0004	0	0	0	0.15	29.62
34	upper annulus rooms L3 & 4 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.5	31.48
35	Internal wall in upper annulus rooms L3 & 4	0.0004	0	0	0	0.15	200.28
36	Internal wall in lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.44115	541.32
37	upper annulus rooms L1 & 2 to staircase (north)	0.0004	0	0	0	0.25	29.92
38	upper annulus rooms L1 & 2 to elevator	0.0004	0	0	0	0.25	25.08
39	Internal wall in upper annulus rooms L1 & 2	0.0004	0	0	0	0.25	37.68
40	upper annulus rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.25	26.04
41	SG blowdown (LCQ) HX etc. to elevator	0.0004	0	0	0	0.4	8.32
42	SG blowdown (LCQ) HX etc. to access	0.0004	0	0	0	0.1	37.19
43	SG blowdown (LCQ) HX etc. to lower annulus rooms L1 & 2	0.0004	0	0	0	0.4	5.02
44	SG blowdown (LCQ) HX etc. to lower annulus rooms L3 & 4	0.0004	0	0	0	0.15	5.12
45	Components to hot piping	0.0004	0	0	0	0.5	77.08
46	Components to hot piping	0.0004	0	0	0	0.15	9.28
47	lower equipment rooms L1 to staircase (south)	0.0004	0	0	0	0.6	60.19
48	lower equipment rooms L1 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.6	178.12

Table 6.2.1-4—Containment Heat Sink Inventory
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	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
49	lower equipment rooms L1 to components	0.0004	0	0	0	0.2742	30.19
50	lower equipment rooms L2 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.6	174.71
51	lower equipment rooms L3 to middle annulus rooms L3 & 4	0.0004	0	0	0	0.6	177.35
52	lower equipment rooms L4 to middle annulus rooms L3 & 4	0.0004	0	0	0	0.6	201.09
53	surge line, below to elevator	0.0004	0	0	0	0.4779	44.6
54	Components to middle annulus rooms L1 & 2	0.0004	0	0	0	0.4	35.02
55	surge line, below to middle annulus rooms L1 & 2	0.0004	0	0	0	0.6	12.46
56	surge line, below to middle annulus rooms L3 & 4	0.0004	0	0	0	0.43975	9.11
57	Components to middle annulus rooms L3 & 4	0.0004	0	0	0	0.3	6.76
58	Components to middle annulus rooms L3 & 4	0.0004	0	0	0	0.4	33.44
59	Components to middle annulus rooms L3 & 4	0.0004	0	0	0	0.15	17.01
60	surge line, below to access	0.0004	0	0	0	0.4	48.55
61	reactor cavity to upper annulus rooms L1 & 2	0.0004	0	0	0	0.5	42.23
62	surge line, below to staircase (north)	0.0004	0	0	0	0.6	28.68
63	surge line, below to elevator	0.0004	0	0	0	0.6	12.12
64	surge line, below to middle annulus rooms L3 & 4	0.0004	0	0	0	0.6	14.14
65	reactor cavity to middle annulus rooms L1 & 2	0.0004	0	0	0	0.4	16.8
66	reactor cavity to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.4	23.04
67	middle equipment rooms L1 to staircase (south)	0.0004	0	0	0	0.6	56.65

Table 6.2.1-4—Containment Heat Sink Inventory
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	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
68	middle equipment rooms L1 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.6	114.61
69	middle equipment rooms L2 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.6	128.02
70	middle equipment rooms L3 to middle annulus rooms L3 & 4	0.0004	0	0	0	0.6	157.44
71	middle equipment rooms L4 to middle annulus rooms L3 & 4	0.0004	0	0	0	0.6	138.92
72	surge line, below to staircase (north)	0.0004	0	0	0	0.5	34.46
73	surge line, below to middle annulus rooms L1 & 2	0.0004	0	0	0	0.5	29.64
74	surge line, below to middle annulus rooms L1 & 2	0.0004	0	0	0	0.275	42.08
75	middle equipment rooms L2 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.4	26.3
76	middle equipment rooms L1 to staircase (south)	0.0004	0	0	0	0.15	8.4
77	PZR to staircase (north)	0.0004	0	0	0	0.5	39.12
78	middle equipment rooms L1 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.10695	79.38
79	middle equipment rooms L4 to middle annulus rooms L3 & 4	0.0004	0	0	0	0.10965	86.6
80	PZR to middle annulus rooms L3 & 4	0.0004	0	0	0	0.5	42.7
81	PZR to middle annulus rooms L1 & 2	0.0004	0	0	0	0.4	32.31
82	upper equipment rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.15	156.04

Table 6.2.1-4—Containment Heat Sink Inventory
Sheet 8 of 22

	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
83	upper equipment rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.4423	316.84
84	upper equipment rooms L1 & 2 to upper annulus rooms L1 & 2	0.0004	0	0	0	0.5	277.91
85	upper equipment rooms L1 & 2 to staircase (south)	0.0004	0	0	0	0.5	16.4
86	upper equipment rooms L1 & 2 to upper annulus rooms L1 & 2	0.0004	0	0	0	0.25	43.19
87	upper equipment rooms L3 & 4 to upper annulus rooms L3 & 4	0.0004	0	0	0	0.5	227.72
88	upper equipment rooms L3 & 4 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.25	29.77
89	upper equipment rooms L3 & 4 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.4431	321.22
90	upper equipment rooms L3 & 4 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.15	156.04
91	PZR to upper annulus rooms L3 & 4	0.0004	0	0	0	0.5	47.59
92	PZR to upper annulus rooms L1 & 2	0.0004	0	0	0	0.4	66.57
93	upper equipment rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.25	15.09
94	PZR to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.4	17.48
	Vertical wall to non-accessible space	0.0004	0	0	0	0.501	11032
1	spreading rooms to components	0.0004	0	0	0	0.6	91.12
2	spreading rooms to components	0.0004	0	0	0	0.25	91.4
3	spreading rooms to lower equipment rooms L4	0.0004	0	0	0	0.27265	41.92

Table 6.2.1-4—Containment Heat Sink Inventory
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	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
4	spreading rooms to components	0.0004	0	0	0	0.4	25.18
5	Internal wall in SG blowdown (LCQ) HX etc.	0.0004	0	0	0	0.25	12.64
6	RPV pit to SG blowdown (LCQ) HX etc.	0.0004	0	0	0	1.36	5.2
7	Internal wall in components	0.0004	0	0	0	0.25365	299.32
8	RPV pit to components	0.0004	0	0	0	1.36	105.6
9	Internal wall in components	0.0004	0	0	0	0.2	46.9
10	lower equipment rooms L1 to RPV pit	0.0004	0	0	0	1.01135	65.1
11	lower equipment rooms L2 to RPV pit	0.0004	0	0	0	1.0228	61.42
12	RPV pit to lower equipment rooms L3	0.0004	0	0	0	1.0228	61.42
13	RPV pit to lower equipment rooms L4	0.0004	0	0	0	1.0212	63.48
14	RPV pit to surge line, below	0.0004	0	0	0	0.82845	26.88
15	lower equipment rooms L1 to lower equipment rooms L4	0.0004	0	0	0	0.25	30.96
16	lower equipment rooms L2 to surge line, below	0.0004	0	0	0	0.4564	154.18
17	lower equipment rooms L3 to surge line, below	0.0004	0	0	0	0.44975	174.86
18	lower equipment rooms L4 to components	0.0004	0	0	0	0.25	7.46
19	lower equipment rooms L4 to components	0.0004	0	0	0	0.6	34.4
20	Internal wall in surge line, below	0.0004	0	0	0	0.25	154.68
21	Internal wall in components	0.0004	0	0	0	0.4	26.66
22	lower equipment rooms L1 to reactor cavity	0.0004	0	0	0	0.6	68.24
23	lower equipment rooms L2 to reactor cavity	0.0004	0	0	0	0.6	30.48
24	reactor cavity to lower equipment rooms L3	0.0004	0	0	0	0.6	30.48

Table 6.2.1-4—Containment Heat Sink Inventory
Sheet 10 of 22

	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
25	reactor cavity to lower equipment rooms L4	0.0004	0	0	0	0.6	65.2
26	Internal wall in reactor cavity	0.0004	0	0	0	0.6	21.74
27	reactor cavity to surge line, below	0.0004	0	0	0	0.6	164.8
28	middle equipment rooms L1 to reactor cavity	0.0004	0	0	0	0.6	569.6
29	middle equipment rooms L2 to reactor cavity	0.0004	0	0	0	0.6	255.12
30	reactor cavity to middle equipment rooms L3	0.0004	0	0	0	0.6	250.64
31	reactor cavity to middle equipment rooms L4	0.0004	0	0	0	0.6	572.64
32	reactor cavity to PZR	0.0004	0	0	0	0.6	132.54
33	Internal wall in equipment rooms L1	0.0004	0	0	0	0.5	84.46
34	lower equipment rooms L1 to lower equipment rooms L2	0.0004	0	0	0	0.5	168.92
35	Internal wall in lower equipment rooms L2	0.0004	0	0	0	0.5	175.48
36	lower equipment rooms L2 to reactor cavity	0.0004	0	0	0	0.4	25.2
37	Internal wall in lower equipment rooms L3	0.0004	0	0	0	0.5	175.48
38	lower equipment rooms L3 to lower equipment rooms L4	0.0004	0	0	0	0.5	168.92
39	Internal wall in lower equipment rooms L4	0.0004	0	0	0	0.5	168.92
40	lower equipment rooms L4 to middle equipment rooms L4	0.0004	0	0	0	0.6	83.78
41	Internal wall in surge line, below	0.0004	0	0	0	0.4	163.86
42	reactor cavity to surge line, below	0.0004	0	0	0	0.25	29.62
43	reactor cavity to surge line, below	0.0004	0	0	0	0.4	17
44	Internal wall in middle equipment rooms L1	0.0004	0	0	0	0.5	127.08

Table 6.2.1-4—Containment Heat Sink Inventory
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	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
45	middle equipment rooms L1 to middle equipment rooms L2	0.0004	0	0	0	0.75105	62.14
46	Internal wall in middle equipment rooms L2	0.0004	0	0	0	0.5	126.28
47	middle equipment rooms L2 to surge line, below	0.0004	0	0	0	0.4	110.16
48	Internal wall in middle equipment rooms L3	0.0004	0	0	0	0.5	126.48
49	middle equipment rooms L3 to surge line, below	0.0004	0	0	0	0.4	114
50	middle equipment rooms L3 to middle equipment rooms L4	0.0004	0	0	0	0.75155	61.94
51	Internal wall in middle equipment rooms L4	0.0004	0	0	0	0.5	127.52
52	surge line, below to PZR	0.0004	0	0	0	0.275	176.42
53	Internal wall in middle equipment rooms L1	0.0004	0	0	0	0.6	76.72
54	middle equipment rooms L1 to middle equipment rooms L2	0.0004	0	0	0	0.5	61.8
55	middle equipment rooms L2 to PZR	0.0004	0	0	0	0.4	17.84
56	middle equipment rooms L3 to PZR	0.0004	0	0	0	0.4	85
57	middle equipment rooms L3 to middle equipment rooms L4	0.0004	0	0	0	0.5	61.8
58	Internal wall in middle equipment rooms L4	0.0004	0	0	0	0.6	71.04
59	Internal wall in PZR	0.0004	0	0	0	0.4	50.76
60	Internal wall in upper equipment rooms L1 & 2	0.0004	0	0	0	0.4535	226.34
61	Internal wall in upper equipment rooms L3 & 4	0.0004	0	0	0	0.4535	226.34
62	upper equipment rooms L3 & 4 to PZR	0.0004	0	0	0	0.25	102
63	SG blowdown (LCQ) HX etc. to elevator	0.0004	0	0	0	0.4	8.32

Table 6.2.1-4—Containment Heat Sink Inventory
Sheet 12 of 22

	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
64	SG blowdown (LCQ) HX etc. to access	0.0004	0	0	0	0.1	37.19
65	SG blowdown (LCQ) HX etc. to lower annulus rooms L1 & 2	0.0004	0	0	0	0.4	5.02
66	SG blowdown (LCQ) HX etc. to lower annulus rooms L3 & 4	0.0004	0	0	0	0.15	5.12
67	Components to hot piping	0.0004	0	0	0	0.5	77.08
68	Components to hot piping	0.0004	0	0	0	0.15	9.28
69	lower equipment rooms L1 to staircase (south)	0.0004	0	0	0	0.6	60.19
70	lower equipment rooms L1 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.6	178.12
71	lower equipment rooms L1 to components	0.0004	0	0	0	0.2742	30.19
72	lower equipment rooms L2 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.6	174.71
73	lower equipment rooms L3 to middle annulus rooms L3 & 4	0.0004	0	0	0	0.6	177.35
74	lower equipment rooms L4 to middle annulus rooms L3 & 4	0.0004	0	0	0	0.6	201.09
75	surge line, below to elevator	0.0004	0	0	0	0.4779	44.6
76	Components to middle annulus rooms L1 & 2	0.0004	0	0	0	0.4	35.02
77	surge line, below to middle annulus rooms L1 & 2	0.0004	0	0	0	0.6	12.46
78	surge line, below to middle annulus rooms L3 & 4	0.0004	0	0	0	0.43975	9.11
79	Components to middle annulus rooms L3 & 4	0.0004	0	0	0	0.3	6.76
80	Components to middle annulus rooms L3 & 4	0.0004	0	0	0	0.4	33.44
81	Components to middle annulus rooms L3 & 4	0.0004	0	0	0	0.15	17.01

Table 6.2.1-4—Containment Heat Sink Inventory
Sheet 13 of 22

	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
82	surge line, below to access	0.0004	0	0	0	0.4	48.55
83	reactor cavity to upper annulus rooms L1 & 2	0.0004	0	0	0	0.5	42.23
84	surge line, below to staircase (north)	0.0004	0	0	0	0.6	28.68
85	surge line, below to elevator	0.0004	0	0	0	0.6	12.12
86	surge line, below to middle annulus rooms L3 & 4	0.0004	0	0	0	0.6	14.14
87	reactor cavity to middle annulus rooms L1 & 2	0.0004	0	0	0	0.4	16.8
88	reactor cavity to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.4	23.04
89	middle equipment rooms L1 to staircase (south)	0.0004	0	0	0	0.6	56.65
90	middle equipment rooms L1 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.6	114.61
91	middle equipment rooms L2 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.6	128.02
92	middle equipment rooms L3 to middle annulus rooms L3 & 4	0.0004	0	0	0	0.6	157.44
93	middle equipment rooms L4 to middle annulus rooms L3 & 4	0.0004	0	0	0	0.6	138.92
94	surge line, below to staircase (north)	0.0004	0	0	0	0.5	34.46
95	surge line, below to middle annulus rooms L1 & 2	0.0004	0	0	0	0.5	29.64
96	surge line, below to middle annulus rooms L1 & 2	0.0004	0	0	0	0.275	42.08
97	middle equipment rooms L2 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.4	26.3
98	middle equipment rooms L1 to staircase (south)	0.0004	0	0	0	0.15	8.4
99	PZR to staircase (north)	0.0004	0	0	0	0.5	39.12

Table 6.2.1-4—Containment Heat Sink Inventory
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	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
100	middle equipment rooms L1 to middle annulus rooms L1 & 2	0.0004	0	0	0	0.10695	79.38
101	middle equipment rooms L4 to middle annulus rooms L3 & 4	0.0004	0	0	0	0.10965	86.6
102	PZR to middle annulus rooms L3 & 4	0.0004	0	0	0	0.5	42.7
103	PZR to middle annulus rooms L1 & 2	0.0004	0	0	0	0.4	32.31
104	upper equipment rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.15	156.04
105	upper equipment rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.4423	316.84
106	upper equipment rooms L1 & 2 to upper annulus rooms L1 & 2	0.0004	0	0	0	0.5	277.91
107	upper equipment rooms L1 & 2 to staircase (south)	0.0004	0	0	0	0.5	16.4
108	upper equipment rooms L1 & 2 to upper annulus rooms L1 & 2	0.0004	0	0	0	0.25	43.19
109	upper equipment rooms L3 & 4 to upper annulus rooms L3 & 4	0.0004	0	0	0	0.5	227.72
110	upper equipment rooms L3 & 4 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.25	29.77
111	upper equipment rooms L3 & 4 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.4431	321.22
112	upper equipment rooms L3 & 4 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.15	156.04
113	PZR to upper annulus rooms L3 & 4	0.0004	0	0	0	0.5	47.59
114	PZR to upper annulus rooms L1 & 2	0.0004	0	0	0	0.4	66.57

Table 6.2.1-4—Containment Heat Sink Inventory
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	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
115	upper equipment rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.25	15.09
116	PZR to lower & upper dome L1, 2, 3 & 4	0.0004	0	0	0	0.4	17.48
	Horizontal wall (floor/ceiling) to accessible space	0.001	0	0	0	0.318	8056
1	Internal wall in access	0.001	0	0	0	0.3	23.94
2	lower annulus rooms L1 & 2 to middle annulus rooms L1 & 2	0.001	0	0	0	0.3	595.74
3	lower annulus rooms L3 & 4 to middle annulus rooms L3 & 4	0.001	0	0	0	0.3	756.3
4	staircase (south) to hot piping	0.001	0	0	0	0.3	32.22
5	middle annulus rooms L1 & 2 to hot piping	0.001	0	0	0	0.3	286.54
6	middle annulus rooms L3 & 4 to hot piping	0.001	0	0	0	0.3	250
7	Internal wall in middle annulus rooms L1 & 2	0.001	0	0	0	0.25	560.4
8	Internal wall in middle annulus rooms L3 & 4	0.001	0	0	0	0.25	498.8
9	Internal wall in middle annulus rooms L3 & 4	0.001	0	0	0	0.14925	782.62
10	middle annulus rooms L1 & 2 to middle annulus rooms L3 & 4	0.001	0	0	0	0.95	36.6
11	access to staircase (north)	0.001	0	0	0	0.25	48.4
12	middle annulus rooms L1 & 2 to access	0.001	0	0	0	0.25	47
13	middle annulus rooms L3 & 4 to access	0.001	0	0	0	0.25	52.2
14	Internal wall in middle annulus rooms L1 & 2	0.001	0	0	0	0.15	719.68
15	Internal wall in lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.15	17.38

Table 6.2.1-4—Containment Heat Sink Inventory
Sheet 16 of 22

	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
16	middle annulus rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.5	167
17	middle annulus rooms L1 & 2 to staircase (south)	0.001	0	0	0	0.5	40.82
18	middle annulus rooms L3 & 4 to upper annulus rooms L3 & 4	0.001	0	0	0	0.5	366.08
19	middle annulus rooms L3 & 4 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.5	335.16
20	middle annulus rooms L1 & 2 to upper annulus rooms L1 & 2	0.001	0	0	0	0.5	84.26
21	Internal wall in upper annulus rooms L1 & 2	0.001	0	0	0	0.25	359
22	Internal wall in upper annulus rooms L3 & 4	0.001	0	0	0	0.25	430
23	Internal wall in upper annulus rooms L1 & 2	0.001	0	0	0	0.5	132
24	upper annulus rooms L1 & 2 to staircase (south)	0.001	0	0	0	0.25	98.1
25	lower & upper dome L1, 2, 3 & 4 to staircase (north)	0.001	0	0	0	0.25	29
26	lower & upper dome L1, 2, 3 & 4 to elevator	0.001	0	0	0	0.15	13.44
27	upper annulus rooms L3 & 4 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.25	224
28	upper annulus rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.5	132
29	Components to hot piping	0.001	0	0	0	0.3	11.3
30	Components to middle annulus rooms L1 & 2	0.001	0	0	0	0.3	9.55
31	Components to staircase (south)	0.001	0	0	0	0.3	7.75
32	Components to middle annulus rooms L3 & 4	0.001	0	0	0	0.26235	27.1
33	Components to middle annulus rooms L1 & 2	0.001	0	0	0	0.95	23.7

Table 6.2.1-4—Containment Heat Sink Inventory
Sheet 17 of 22

	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
34	Components to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.95	26.4
35	reactor cavity to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.6	490.84
36	middle equipment rooms L1 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.5	69.8
37	middle equipment rooms L2 to upper annulus rooms L1 & 2	0.001	0	0	0	0.5	6.78
38	middle equipment rooms L3 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.5	17.08
39	middle equipment rooms L4 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.5	35.88
40	middle equipment rooms L1 to upper annulus rooms L1 & 2	0.001	0	0	0	0.5	47.8
41	middle equipment rooms L4 to upper annulus rooms L3 & 4	0.001	0	0	0	0.5	24.51
42	PZR to upper annulus rooms L1 & 2	0.001	0	0	0	0.5	12.88
43	upper equipment rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.25	32
44	upper equipment rooms L3 & 4 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.25	34
45	PZR to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.25	60
	Horizontal wall (floor/ceiling) to non-accessible space	0.001	0	0	0	0.439	3068
1	spreading rooms to components	0.001	0	0	0	0.7	463.72
2	spreading rooms to components	0.001	0	0	0	0.15	33.4

Table 6.2.1-4—Containment Heat Sink Inventory
Sheet 18 of 22

	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
3	Internal wall in components	0.001	0	0	0	0.7	26.8
4	surge line, below to SG blowdown (LCQ) HX etc.	0.001	0	0	0	0.3	273.84
5	lower equipment rooms L4 to components	0.001	0	0	0	0.3	138.48
6	lower equipment rooms L1 to components	0.001	0	0	0	0.3	81.14
7	Internal wall in components	0.001	0	0	0	0.3	165.68
8	RPV pit to reactor cavity	0.001	0	0	0	0.3	76
9	lower equipment rooms L1 to reactor cavity	0.001	0	0	0	0.6	44.4
10	lower equipment rooms L2 to reactor cavity	0.001	0	0	0	0.68	5.4
11	lower equipment rooms L3 to surge line, below	0.001	0	0	0	0.88	5.4
12	reactor cavity to lower equipment rooms L4	0.001	0	0	0	0.6	56
13	Internal wall in surge line, below	0.001	0	0	0	0.3	226.4
14	reactor cavity to surge line, below	0.001	0	0	0	0.68	17.2
15	reactor cavity to components	0.001	0	0	0	0.6	34.2
16	lower equipment rooms L4 to middle equipment rooms L4	0.001	0	0	0	0.15	61.78
17	Internal wall in surge line, below	0.001	0	0	0	0.15	218
18	reactor cavity to surge line, below	0.001	0	0	0	0.15	17.38
19	middle equipment rooms L3 to PZR	0.001	0	0	0	0.5	9.48
20	Internal wall in PZR	0.001	0	0	0	0.5	80.48
21	Internal wall in upper equipment rooms L3 & 4	0.001	0	0	0	0.15	4.4
22	Internal wall in PZR	0.001	0	0	0	0.25	90.8
23	Components to hot piping	0.001	0	0	0	0.3	11.3

Table 6.2.1-4—Containment Heat Sink Inventory
Sheet 19 of 22

	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
24	Components to middle annulus rooms L1 & 2	0.001	0	0	0	0.3	9.55
25	Components to staircase (south)	0.001	0	0	0	0.3	7.75
26	Components to middle annulus rooms L3 & 4	0.001	0	0	0	0.26235	27.1
27	Components to middle annulus rooms L1 & 2	0.001	0	0	0	0.95	23.7
28	Components to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.95	26.4
29	reactor cavity to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.6	490.84
30	middle equipment rooms L1 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.5	69.8
31	middle equipment rooms L2 to upper annulus rooms L1 & 2	0.001	0	0	0	0.5	6.78
32	middle equipment rooms L3 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.5	17.08
33	middle equipment rooms L4 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.5	35.88
34	middle equipment rooms L1 to upper annulus rooms L1 & 2	0.001	0	0	0	0.5	47.8
35	middle equipment rooms L4 to upper annulus rooms L3 & 4	0.001	0	0	0	0.5	24.51
36	PZR to upper annulus rooms L1 & 2	0.001	0	0	0	0.5	12.88
37	upper equipment rooms L1 & 2 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.25	32
38	upper equipment rooms L3 & 4 to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.25	34
39	PZR to lower & upper dome L1, 2, 3 & 4	0.001	0	0	0	0.25	60

Table 6.2.1-4—Containment Heat Sink Inventory
Sheet 20 of 22

	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
	Thick steel	0.0002	0.04	0	0	0	2470
1	Components to hot piping	0.0002	0.3	0	0	0	8
2	lower & upper dome L1, 2, 3 & 4 to RB annulus	0.0002	0.05	0	0	0	57
3	Internal steel in lower & upper dome L1, 2, 3 & 4	0.0002	0.0388	0	0	0	1942.8
4	Internal steel in lower & upper dome L1, 2, 3 & 4	0.0002	0.0371	0	0	0	462
	Medium steel	0.0002	0.0086	0	0	0	13230
1	Internal steel in components	0.0002	0.0086	0	0	0	23.72
2	Internal steel in IRWST	0.0002	0.0086	0	0	0	59.8
3	Internal steel in SG blowdown (LCQ) HX etc.	0.0002	0.0086	0	0	0	2.54
4	Internal steel in access	0.0002	0.0086	0	0	0	44.99
5	Internal steel in lower annulus rooms L3 & 4	0.0002	0.0086	0	0	0	37.64
6	Internal steel in hot piping	0.0002	0.0086	0	0	0	35.31
7	Internal steel in lower annulus rooms L1 & 2	0.0002	0.0086	0	0	0	36.47
8	Internal steel in lower equipment rooms L3	0.0002	0.0086	0	0	0	398.32
9	Internal steel in lower equipment rooms L4	0.0002	0.0086	0	0	0	432.57
10	Internal steel in lower equipment rooms L1	0.0002	0.0086	0	0	0	432.57
11	Internal steel in lower equipment rooms L2	0.0002	0.0086	0	0	0	398.32
12	Internal steel in middle annulus rooms L3 & 4	0.0002	0.0086	0	0	0	1928.98
13	Internal steel in middle annulus rooms L1 & 2	0.0002	0.0086	0	0	0	1790.91
14	Internal steel in surge line, below	0.0002	0.0086	0	0	0	48.78
15	Internal steel in middle equipment rooms L3	0.0002	0.0086	0	0	0	926.23
16	Internal steel in middle equipment rooms L4	0.0002	0.0086	0	0	0	881.02

Table 6.2.1-4—Containment Heat Sink Inventory
Sheet 21 of 22

	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
17	Internal steel in middle equipment rooms L1	0.0002	0.0086	0	0	0	881.02
18	Internal steel in middle equipment rooms L2	0.0002	0.0086	0	0	0	926.23
19	Internal steel in PZR	0.0002	0.0086	0	0	0	11.84
20	Internal steel in upper equipment rooms L3 & 4	0.0002	0.0086	0	0	0	818.35
21	Internal steel in upper equipment rooms L1 & 2	0.0002	0.0086	0	0	0	818.35
22	Internal steel in upper annulus rooms L3 & 4	0.0002	0.0086	0	0	0	40.2
23	Internal steel in lower & upper dome L1, 2, 3 & 4	0.0002	0.0086	0	0	0	2194.65
24	Internal steel in upper annulus rooms L1 & 2	0.0002	0.0086	0	0	0	57.34
25	Internal steel in staircase (south)	0.0002	0.0086	0	0	0	4.29
	Thin steel	0.0002	0.0015	0	0	0	8640
1	Internal steel in components	0.0002	0.0015	0	0	0	26.76
2	Internal steel in IRWST	0.0002	0.0015	0	0	0	67.5
3	Internal steel in SG blowdown (LCQ) HX etc.	0.0002	0.0015	0	0	0	4.3
4	Internal steel in access	0.0002	0.0015	0	0	0	60.84
5	Internal steel in lower annulus rooms L3 & 4	0.0002	0.0015	0	0	0	50.93
6	Internal steel in hot piping	0.0002	0.0015	0	0	0	47.78
7	Internal steel in lower annulus rooms L1 & 2	0.0002	0.0015	0	0	0	49.36
8	Internal steel in lower equipment rooms L3	0.0002	0.0015	0	0	0	192.5
9	Internal steel in lower equipment rooms L4	0.0002	0.0015	0	0	0	209.05
10	Internal steel in lower equipment rooms L1	0.0002	0.0015	0	0	0	209.05
11	Internal steel in lower equipment rooms L2	0.0002	0.0015	0	0	0	192.5
12	Internal steel in middle annulus rooms L3 & 4	0.0002	0.0015	0	0	0	1671.17

Table 6.2.1-4—Containment Heat Sink Inventory
Sheet 22 of 22

	Description	Thickness, m					Total Surface, m ²
		Paint	C-Steel	S-Steel	Air	Concrete	
13	Internal steel in middle annulus rooms L1 & 2	0.0002	0.0015	0	0	0	1606.45
14	Internal steel in surge line, below	0.0002	0.0015	0	0	0	109.56
15	Internal steel in middle equipment rooms L3	0.0002	0.0015	0	0	0	454.34
16	Internal steel in middle equipment rooms L4	0.0002	0.0015	0	0	0	427.97
17	Internal steel in middle equipment rooms L1	0.0002	0.0015	0	0	0	428.09
18	Internal steel in middle equipment rooms L2	0.0002	0.0015	0	0	0	454.31
19	Internal steel in PZR	0.0002	0.0015	0	0	0	16.03
20	Internal steel in upper equipment rooms L3 & 4	0.0002	0.0015	0	0	0	415.34
21	Internal steel in upper equipment rooms L1 & 2	0.0002	0.0015	0	0	0	415.34
22	Internal steel in upper annulus rooms L3 & 4	0.0002	0.0015	0	0	0	54.4
23	Internal steel in lower & upper dome L1, 2, 3 & 4	0.0002	0.0015	0	0	0	1392.85
24	Internal steel in upper annulus rooms L1 & 2	0.0002	0.0015	0	0	0	77.6
25	Internal steel in staircase (south)	0.0002	0.0015	0	0	0	5.8
				Cumulative Available Surface Area			67,646 (728,136 ft ²)
				Minimum Surface Area			64,998 (699,633 ft ²)

Table 6.2.1-5—Containment Initial and Boundary Conditions

Item	Parameter	Analytical Value	
1	Containment Free Volume	2,754,237 ft ³ 78,000 m ³	
2	Initial IRWST Water Volume	50,996 ft ³ 1444 m ³	
3	Initial IRWST Water Temperature	122°F 50°C	
4	Initial Containment Pressure	15.96 psia 1.1 bar	
5	Initial Containment Temperature	Service Compartments	Equipment Compartments
		86°F	131°F
		30°C	55°C
6	Initial Relative Humidity	≤30%	
7	Outside or Ambient Temperature	Insulated boundary condition to maximize containment temperature and pressure	