Appendix 6.9.6

ABRIDGED SUMMARY TABLES OF CRITICALITY CALCULATION RESULTS

This appendix contains the summary tables for calculation results identified in Sects. 6.4, 6.5, 6.6, and 6.7 of this document. The index is as follows:

CYLINDER CONTENT

Table 6.9.6-1   Results for the 3.24-in.-diam cylinder HEU content in CV calculation model.

Table 6.9.6-2   Results for the 3.24-in.-diam cylinder HEU content in bare and water reflected package calculation models.

Table 6.9.6-3   Results for the 3.24-in.-diam cylinder HEU content in package calculation models.

SQUARE BAR CONTENT

Table 6.9.6-4   Results for the 2.29-in square bar HEU content in CV calculation model.

Table 6.9.6-5   Results for the 2.29-in square bar HEU content in packaging calculation model.

CYLINDER CONTENT

Table 6.9.6-6   Results for the 4.25-in.-diam cylinder HEU content in CV calculation model.

Table 6.9.6-7   Results for the 4.25-in.-diam cylinder HEU content in packaging calculation models.

SLUGS CONTENT

Table 6.9.6-8   Results for 1.5-in.-diam × 2.0-in.-tall slug HEU metal content in CV calculation model.

Table 6.9.6-9   Results for the 1.5-in.-diam × 2.0-in.-tall slug HEU metal content in packaging calculation model.

BROKEN METAL CONTENT

Table 6.9.6-10   Results for HEU broken metal content in CV calculation model.

Table 6.9.6-11   Results for HEU broken metal content in packaging calculation model.

HEU PRODUCT OXIDE CONTENT

Table 6.9.6-12   Results for HEU oxide content in CV calculation model.

Table 6.9.6-13   Results for HEU oxide content in packaging calculation model.

6-167

UNX CRYSTAL CONTENT

HEU SKULL OXIDE CONTENT

UNIRRADIATED TRIGA REACTOR FUEL ELEMENT CONTENT

AIR TRANSPORT CONTENT

Table 6.9.6-1. Results for 3.24 in.-diameter cylinder HEU metal content in CV calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	mocfr	k$_{eff}$	σ	k$_{eff}$+2σ				
flooded containment vessel, reflected													
no can spacers (np thickness = 0.0 in.)													
cvcrcyt11_36_1_1	0.0	36000	36000	0	0.00	1.0e-20	0.90460	0.00107	0.90673				
cvcrcyt11_36_1_6	0.0	36000	36000	829	0.60	1.0e-01	0.90726	0.00124	0.90973				
cvcrcyt11_36_1_7	0.0	36000	36000	1657	1.20	2.0e-01	0.91182	0.00120	0.91422				
cvcrcyt11_36_1_8	0.0	36000	36000	2486	1.80	3.0e-01	0.91690	0.00139	0.91967				
cvcrcyt11_36_1_9	0.0	36000	36000	3315	2.40	4.0e-01	0.92263	0.00119	0.92500				
cvcrcyt11_36_1_10	0.0	36000	36000	4143	3.00	5.0e-01	0.92840	0.00115	0.93071				
cvcrcyt11_36_1_11	0.0	36000	36000	4972	3.60	6.0e-01	0.93827	0.00112	0.94050				
cvcrcyt11_36_1_12	0.0	36000	36000	5801	4.21	7.0e-01	0.94633	0.00127	0.94886				
cvcrcyt11_36_1_13	0.0	36000	36000	6629	4.81	8.0e-01	0.95397	0.00120	0.95636				
cvcrcyt11_36_1_14	0.0	36000	36000	7458	5.41	9.0e-01	0.96276	0.00137	0.96551				
cvcrcyt11_36_1_15	0.0	36000	36000	8287	6.01	1.0e+00	0.97121	0.00125	0.97371				
cvcrcyt11_36_1	0.0	36000	36000	8287	6.01	1.0e+00	0.97121	0.00125	0.97371				
cvcrcyt11_35_1	0.0	35000	35000	8340	6.22	1.0e+00	0.96937	0.00120	0.97177				
cvcrcyt11_34_1	0.0	34000	34000	8393	6.44	1.0e+00	0.96886	0.00120	0.97126				
cvcrcyt11_33_1	0.0	33000	33000	8446	6.68	1.0e+00	0.96531	0.00111	0.96754				
cvcrcyt11_32_1	0.0	32000	32000	8499	6.93	1.0e+00	0.96360	0.00120	0.96600				
cvcrcyt11_31_1	0.0	31000	31000	8552	7.20	1.0e+00	0.95960	0.00122	0.96205				
cvcrcyt11_30_1	0.0	30000	30000	8605	7.49	1.0e+00	0.95842	0.00128	0.96097				
cvcrcyt11_29_1	0.0	29000	29000	8658	7.79	1.0e+00	0.95488	0.00115	0.95717				
cvcrcyt11_28_1	0.0	28000	28000	8711	8.12	1.0e+00	0.95409	0.00118	0.95645				
cvcrcyt11_27_1	0.0	27000	27000	8764	8.47	1.0e+00	0.94797	0.00113	0.95023				
cvcrcyt11_26_1	0.0	26000	26000	8817	8.85	1.0e+00	0.94376	0.00124	0.94623				
cvcrcyt11_25_1	0.0	25000	25000	8870	9.26	1.0e+00	0.94075	0.00141	0.94357				
cvcrcyt11_24_1	0.0	24000	24000	8923	9.70	1.0e+00	0.93510	0.00133	0.93776				

Table 6.9.6-1. Results for 3.24 in.-diameter cylinder HEU metal content in CV calculation model

case name	np (in)	U (g)	^{235}U (g)	H_2O (g)	h/x	mocfr	k_{eff}	σ	$k_{eff}+2\sigma$
cvcrcyt11_23_1	0.0	23000	23000	8977	10.19	1.0e+00	0.93038	0.00130	0.93298
cvcrcyt11_22_1	0.0	22000	22000	9030	10.71	1.0e+00	0.92658	0.00106	0.92870
cvcrcyt11_21_1	0.0	21000	21000	9083	11.29	1.0e+00	0.92046	0.00118	0.92282
cvcrcyt11_20_1	0.0	20000	20000	9136	11.92	1.0e+00	0.91168	0.00125	0.91418
cvcrcyt11_19_1	0.0	19000	19000	9189	12.62	1.0e+00	0.90618	0.00128	0.90874
cvcrcyt11_18_1	0.0	18000	18000	9242	13.40	1.0e+00	0.89978	0.00124	0.90226
with can spacers (np thickness=1.4 in.)									
cvcrcyt11_36_2_1	1.4	36000	36000	0	0.00	1.0e-20	0.83041	0.00103	0.83248
cvcrcyt11_36_2_6	1.4	36000	36000	767	0.56	1.0e-01	0.82885	0.00106	0.83096
cvcrcyt11_36_2_7	1.4	36000	36000	1535	1.11	2.0e-01	0.83022	0.00104	0.83230
cvcrcyt11_36_2_8	1.4	36000	36000	2302	1.67	3.0e-01	0.83492	0.00104	0.83699
cvcrcyt11_36_2_9	1.4	36000	36000	3069	2.23	4.0e-01	0.84066	0.00123	0.84311
cvcrcyt11_36_2_10	1.4	36000	36000	3837	2.78	5.0e-01	0.84789	0.00102	0.84993
cvcrcyt11_36_2_11	1.4	36000	36000	4604	3.34	6.0e-01	0.85423	0.00101	0.85624
cvcrcyt11_36_2_12	1.4	36000	36000	5371	3.89	7.0e-01	0.86190	0.00106	0.86403
cvcrcyt11_36_2_13	1.4	36000	36000	6139	4.45	8.0e-01	0.86687	0.00118	0.86923
cvcrcyt11_36_2_14	1.4	36000	36000	6906	5.01	9.0e-01	0.87589	0.00113	0.87816
cvcrcyt11_36_2_15	1.4	36000	36000	7673	5.56	1.0e+00	0.88436	0.00111	0.88657
cvcrcyt11_36_2	1.4	36000	36000	7673	5.56	1.0e+00	0.88436	0.00111	0.88657
cvcrcyt11_35_2	1.4	35000	35000	7726	5.76	1.0e+00	0.88274	0.00108	0.88491
cvcrcyt11_34_2	1.4	34000	34000	7779	5.97	1.0e+00	0.87740	0.00119	0.87977
cvcrcyt11_33_2	1.4	33000	33000	7832	6.19	1.0e+00	0.87234	0.00112	0.87459
cvcrcyt11_32_2	1.4	32000	32000	7885	6.43	1.0e+00	0.86817	0.00108	0.87033
cvcrcyt11_31_2	1.4	31000	31000	7938	6.68	1.0e+00	0.86047	0.00124	0.86295
cvcrcyt11_30_2	1.4	30000	30000	7992	6.95	1.0e+00	0.85525	0.00117	0.85760

Table 6.9.6-2. Results for 3.24 in.-diameter cylinder HEU metal content in bare and water reflected packaging calculation models

case name	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	nlf	k_{eff}	σ	$k_{eff}+2\sigma$	case name	nlf	k_{eff}	σ	$k_{eff}+2\sigma$
content in flooded CV, single package bare										content in flooded CV, single package reflected				
no can spacers (np thickness = 0.0 in.)										no can spacers (np thickness = 0.0 in.)				
ncsbcyt11_36_1_1	36000	36000	8287	6.01	1.0e-20	0.4744	0.90856	0.00115	0.91087	ncsrcyt11_36_1_1	0.0021	0.91542	0.00120	0.91782
ncsbcyt11_36_1_2	36000	36000	8287	6.01	1.0e-05	0.4749	0.90825	0.00100	0.91026	ncsrcyt11_36_1_2	0.0021	0.91477	0.00123	0.91724
ncsbcyt11_36_1_3	36000	36000	8287	6.01	1.0e-04	0.4747	0.90817	0.00121	0.91059	ncsrcyt11_36_1_3	0.0022	0.91550	0.00111	0.91772
ncsbcyt11_36_1_4	36000	36000	8287	6.01	1.0e-03	0.4744	0.90926	0.00134	0.91194	ncsrcyt11_36_1_4	0.0022	0.91636	0.00117	0.91869
ncsbcyt11_36_1_5	36000	36000	8287	6.01	1.0e-02	0.4730	0.90883	0.00108	0.91100	ncsrcyt11_36_1_5	0.0022	0.91537	0.00109	0.91755
ncsbcyt11_36_1_6	36000	36000	8287	6.01	1.0e-01	0.4510	0.91550	0.00112	0.91774	ncsrcyt11_36_1_6	0.0019	0.92121	0.00133	0.92386
ncsbcyt11_36_1_8	36000	36000	8287	6.01	3.0e-01	0.3899	0.92546	0.00134	0.92814	ncsrcyt11_36_1_8	0.0016	0.92807	0.00112	0.93032
ncsbcyt11_36_1_15	36000	36000	8287	6.01	1.0e+00	0.1823	0.95215	0.00119	0.95454	ncsrcyt11_36_1_15	0.0007	0.95213	0.00129	0.95472
ncsbcyt11_36_1_15	36000	36000	8287	6.01	1.0e+00	0.1823	0.95215	0.00119	0.95454	ncsrcyt11_36_1_15	0.0007	0.95213	0.00129	0.95472
ncsbcyt11_35_1_15	35000	35000	8340	6.22	1.0e+00	0.1838	0.94834	0.00122	0.95077	ncsrcyt11_35_1_15	0.0008	0.94870	0.00107	0.95083
ncsbcyt11_34_1_15	34000	34000	8393	6.44	1.0e+00	0.1842	0.94748	0.00113	0.94975	ncsrcyt11_34_1_15	0.0008	0.94742	0.00124	0.94990
ncsbcyt11_33_1_15	33000	33000	8446	6.68	1.0e+00	0.1853	0.94613	0.00118	0.94850	ncsrcyt11_33_1_15	0.0008	0.94478	0.00119	0.94716
ncsbcyt11_32_1_15	32000	32000	8499	6.93	1.0e+00	0.1863	0.94237	0.00106	0.94448	ncsrcyt11_32_1_15	0.0007	0.94247	0.00111	0.94468
ncsbcyt11_31_1_15	31000	31000	8552	7.20	1.0e+00	0.1867	0.94052	0.00106	0.94264	ncsrcyt11_31_1_15	0.0008	0.94091	0.00107	0.94306
ncsbcyt11_30_1_15	30000	30000	8605	7.49	1.0e+00	0.1882	0.93819	0.00110	0.94039	ncsrcyt11_30_1_15	0.0007	0.94139	0.00137	0.94412
ncsbcyt11_29_1_15	29000	29000	8658	7.79	1.0e+00	0.1894	0.93483	0.00104	0.93692	ncsrcyt11_29_1_15	0.0007	0.93406	0.00108	0.93622
ncsbcyt11_28_1_15	28000	28000	8711	8.12	1.0e+00	0.1894	0.93339	0.00102	0.93543	ncsrcyt11_28_1_15	0.0008	0.93012	0.00124	0.93261
ncsbcyt11_27_1_15	27000	27000	8764	8.47	1.0e+00	0.1911	0.92636	0.00112	0.92860	ncsrcyt11_27_1_15	0.0008	0.92820	0.00122	0.93064
ncsbcyt11_26_1_15	26000	26000	8817	8.85	1.0e+00	0.1919	0.92366	0.00115	0.92597	ncsrcyt11_26_1_15	0.0008	0.92396	0.00141	0.92679
ncsbcyt11_25_1_15	25000	25000	8870	9.26	1.0e+00	0.1928	0.92122	0.00122	0.92366	ncsrcyt11_25_1_15	0.0008	0.91761	0.00102	0.91966
ncsbcyt11_24_1_15	24000	24000	8923	9.70	1.0e+00	0.1948	0.91432	0.00108	0.91648	ncsrcyt11_24_1_15	0.0008	0.91466	0.00107	0.91680
ncsbcyt11_23_1_15	23000	23000	8977	10.19	1.0e+00	0.1965	0.91055	0.00130	0.91314	ncsrcyt11_23_1_15	0.0008	0.91172	0.00116	0.91403
ncsbcyt11_22_1_15	22000	22000	9030	10.71	1.0e+00	0.1969	0.90695	0.00121	0.90936	ncsrcyt11_22_1_15	0.0008	0.90680	0.00153	0.90986
ncsbcyt11_21_1_15	21000	21000	9083	11.29	1.0e+00	0.1984	0.90241	0.00124	0.90490	ncsrcyt11_21_1_15	0.0009	0.90125	0.00113	0.90352

6-171

Table 6.9.6-2. Results for 3.24 in.-diameter cylinder HEU metal content in bare and water reflected packaging calculation models

case name	U (g)	^{235}U (g)	H_2O (g)	h/x	moifr	nlf	k_{eff}	σ	$k_{eff}+2\sigma$	case name	nlf	k_{eff}	σ	$k_{eff}+2\sigma$
ncsbcyt11_20_1_15	20000	20000	9136	11.92	1.0e+00	0.2007	0.89477	0.00125	0.89726	ncsrcyt11_20_1_15	0.0009	0.89481	0.00109	0.89698
ncsbcyt11_19_1_15	19000	19000	9189	12.62	1.0e+00	0.2026	0.88819	0.00113	0.89044	ncsrcyt11_19_1_15	0.0008	0.88857	0.00136	0.89129
ncsbcyt11_18_1_15	18000	18000	9242	13.40	1.0e+00	0.2037	0.88255	0.00126	0.88507	ncsrcyt11_18_1_15	0.0008	0.88157	0.00127	0.88410
with can spacers (np thickness = 1.4 in.)										with can spacers (np thickness = 1.4 in.)				
ncsbcyt11_36_2_1	36000	36000	7673	5.56	1.0e-20	0.4882	0.83390	0.00106	0.83603	ncsrcyt11_36_2_1	0.0022	0.83904	0.00110	0.84125
ncsbcyt11_36_2_2	36000	36000	7673	5.56	1.0e-05	0.4879	0.83481	0.00142	0.83764	ncsrcyt11_36_2_2	0.0021	0.84122	0.00110	0.84342
ncsbcyt11_36_2_3	36000	36000	7673	5.56	1.0e-04	0.4883	0.83383	0.00100	0.83583	ncsrcyt11_36_2_3	0.0022	0.84013	0.00106	0.84225
ncsbcyt11_36_2_4	36000	36000	7673	5.56	1.0e-03	0.4880	0.83530	0.00126	0.83783	ncsrcyt11_36_2_4	0.0022	0.84001	0.00112	0.84224
ncsbcyt11_36_2_5	36000	36000	7673	5.56	1.0e-02	0.4861	0.83461	0.00120	0.83702	ncsrcyt11_36_2_5	0.0021	0.84128	0.00115	0.84359
ncsbcyt11_36_2_6	36000	36000	7673	5.56	1.0e-01	0.4642	0.83979	0.00110	0.84199	ncsrcyt11_36_2_6	0.0020	0.84524	0.00116	0.84755
ncsbcyt11_36_2_8	36000	36000	7673	5.56	3.0e-01	0.4000	0.84736	0.00123	0.84982	ncsrcyt11_36_2_8	0.0016	0.84947	0.00103	0.85153
ncsbcyt11_36_2_15	36000	36000	7673	5.56	1.0e+00	0.1881	0.87048	0.00109	0.87266	ncsrcyt11_36_2_15	0.0008	0.87062	0.00122	0.87305
ncsbcyt11_36_2_15	36000	36000	7673	5.56	1.0e+00	0.1881	0.87048	0.00109	0.87266	ncsrcyt11_36_2_15	0.0008	0.87062	0.00122	0.87305
ncsbcyt11_35_2_15	35000	35000	7726	5.76	1.0e+00	0.1879	0.86609	0.00114	0.86836	ncsrcyt11_35_2_15	0.0007	0.86649	0.00118	0.86886
ncsbcyt11_34_2_15	34000	34000	7779	5.97	1.0e+00	0.1885	0.86151	0.00103	0.86358	ncsrcyt11_34_2_15	0.0008	0.86038	0.00129	0.86296
ncsbcyt11_33_2_15	33000	33000	7832	6.19	1.0e+00	0.1901	0.85729	0.00099	0.85927	ncsrcyt11_33_2_15	0.0007	0.85903	0.00106	0.86115
ncsbcyt11_32_2_15	32000	32000	7885	6.43	1.0e+00	0.1908	0.85350	0.00116	0.85582	ncsrcyt11_32_2_15	0.0007	0.85357	0.00108	0.85573
ncsbcyt11_31_2_15	31000	31000	7938	6.68	1.0e+00	0.1922	0.84914	0.00108	0.85129	ncsrcyt11_31_2_15	0.0008	0.84895	0.00123	0.85142
ncsbcyt11_30_2_15	30000	30000	7992	6.95	1.0e+00	0.1913	0.84250	0.00100	0.84450	ncsrcyt11_30_2_15	0.0008	0.84343	0.00114	0.84572

Table 6.9.6-3. Results for 3.24 in.-diameter cylinder HEU metal content in packaging calculation model

case name	np (in)	U (g)	²³⁵U (g)	H₂O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
content in flooded containment vessel, single package reflected													
NCT										HAC			
no can spacers (np thickness = 0.0 in.)													
ncsrcyt11_36_1_1	0.0	36000	36000	8287	6.01	1.0e-20	0.91542	0.00120	0.91782	hcsrcyt12_36_1_1	0.91636	0.00117	0.91869
ncsrcyt11_36_1_2	0.0	36000	36000	8287	6.01	1.0e-05	0.91477	0.00123	0.91724	hcsrcyt12_36_1_2	0.91593	0.00138	0.91869
ncsrcyt11_36_1_3	0.0	36000	36000	8287	6.01	1.0e-04	0.91550	0.00111	0.91772	hcsrcyt12_36_1_3	0.91660	0.00134	0.91929
ncsrcyt11_36_1_4	0.0	36000	36000	8287	6.01	1.0e-03	0.91636	0.00117	0.91869	hcsrcyt12_36_1_4	0.91565	0.00122	0.91810
ncsrcyt11_36_1_5	0.0	36000	36000	8287	6.01	1.0e-02	0.91537	0.00109	0.91755	hcsrcyt12_36_1_5	0.91489	0.00120	0.91729
ncsrcyt11_36_1_6	0.0	36000	36000	8287	6.01	1.0e-01	0.92121	0.00133	0.92386	hcsrcyt12_36_1_6	0.92198	0.00104	0.92407
ncsrcyt11_36_1_8	0.0	36000	36000	8287	6.01	3.0e-01	0.92807	0.00112	0.93032	hcsrcyt12_36_1_8	0.92950	0.00125	0.93201
ncsrcyt11_36_1_15	0.0	36000	36000	8287	6.01	1.0e+00	0.95213	0.00129	0.95472	hcsrcyt12_36_1_15	0.95112	0.00120	0.95353
ncsrcyt11_36_1_15	0.0	36000	36000	8287	6.01	1.0e+00	0.95213	0.00129	0.95472	hcsrcyt12_36_1_15	0.95112	0.00120	0.95353
ncsrcyt11_35_1_15	0.0	35000	35000	8340	6.22	1.0e+00	0.94870	0.00107	0.95083	hcsrcyt12_35_1_15	0.94915	0.00120	0.95155
ncsrcyt11_34_1_15	0.0	34000	34000	8393	6.44	1.0e+00	0.94742	0.00124	0.94990	hcsrcyt12_34_1_15	0.94863	0.00113	0.95088
ncsrcyt11_33_1_15	0.0	33000	33000	8446	6.68	1.0e+00	0.94478	0.00119	0.94716	hcsrcyt12_33_1_15	0.94610	0.00123	0.94856
ncsrcyt11_32_1_15	0.0	32000	32000	8499	6.93	1.0e+00	0.94247	0.00111	0.94468	hcsrcyt12_32_1_15	0.94528	0.00141	0.94810
ncsrcyt11_31_1_15	0.0	31000	31000	8552	7.20	1.0e+00	0.94091	0.00107	0.94306	hcsrcyt12_31_1_15	0.94090	0.00107	0.94304
ncsrcyt11_30_1_15	0.0	30000	30000	8605	7.49	1.0e+00	0.94139	0.00137	0.94412	hcsrcyt12_30_1_15	0.94035	0.00120	0.94275
ncsrcyt11_29_1_15	0.0	29000	29000	8658	7.79	1.0e+00	0.93406	0.00108	0.93622	hcsrcyt12_29_1_15	0.93540	0.00112	0.93765
ncsrcyt11_28_1_15	0.0	28000	28000	8711	8.12	1.0e+00	0.93012	0.00124	0.93261	hcsrcyt12_28_1_15	0.93239	0.00118	0.93475
ncsrcyt11_27_1_15	0.0	27000	27000	8764	8.47	1.0e+00	0.92820	0.00122	0.93064	hcsrcyt12_27_1_15	0.93043	0.00144	0.93331
ncsrcyt11_26_1_15	0.0	26000	26000	8817	8.85	1.0e+00	0.92396	0.00141	0.92679	hcsrcyt12_26_1_15	0.92632	0.00119	0.92870
ncsrcyt11_25_1_15	0.0	25000	25000	8870	9.26	1.0e+00	0.91761	0.00102	0.91966	hcsrcyt12_25_1_15	0.92218	0.00109	0.92436
ncsrcyt11_24_1_15	0.0	24000	24000	8923	9.70	1.0e+00	0.91466	0.00107	0.91680	hcsrcyt12_24_1_15	0.91688	0.00117	0.91922
ncsrcyt11_23_1_15	0.0	23000	23000	8977	10.19	1.0e+00	0.91172	0.00116	0.91403	hcsrcyt12_23_1_15	0.91134	0.00119	0.91371
ncsrcyt11_22_1_15	0.0	22000	22000	9030	10.71	1.0e+00	0.90680	0.00153	0.90986	hcsrcyt12_22_1_15	0.90850	0.00113	0.91077

Table 6.9.6-3. Results for 3.24 in.-diameter cylinder HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncsrcyt11_21_1_15	0.0	21000	21000	9083	11.29	1.0e+00	0.90125	0.00113	0.90352	hcsrcyt12_21_1_15	0.90188	0.00124	0.90437
ncsrcyt11_20_1_15	0.0	20000	20000	9136	11.92	1.0e+00	0.89481	0.00109	0.89698	hcsrcyt12_20_1_15	0.89612	0.00115	0.89842
ncsrcyt11_19_1_15	0.0	19000	19000	9189	12.62	1.0e+00	0.88857	0.00136	0.89129	hcsrcyt12_19_1_15	0.89080	0.00122	0.89323
ncsrcyt11_18_1_15	0.0	18000	18000	9242	13.40	1.0e+00	0.88157	0.00127	0.88410	hcsrcyt12_18_1_15	0.88276	0.00128	0.88532
with can spacers (np thickness = 1.4 in.)													
ncsrcyt11_36_2_1	1.4	36000	36000	7673	5.56	1.0e-20	0.83904	0.00110	0.84125	hcsrcyt12_36_2_1	0.84250	0.00103	0.84456
ncsrcyt11_36_2_2	1.4	36000	36000	7673	5.56	1.0e-05	0.84122	0.00110	0.84342	hcsrcyt12_36_2_2	0.84146	0.00118	0.84382
ncsrcyt11_36_2_3	1.4	36000	36000	7673	5.56	1.0e-04	0.84013	0.00106	0.84225	hcsrcyt12_36_2_3	0.84182	0.00105	0.84392
ncsrcyt11_36_2_4	1.4	36000	36000	7673	5.56	1.0e-03	0.84001	0.00112	0.84224	hcsrcyt12_36_2_4	0.83975	0.00103	0.84181
ncsrcyt11_36_2_5	1.4	36000	36000	7673	5.56	1.0e-02	0.84128	0.00115	0.84359	hcsrcyt12_36_2_5	0.84070	0.00129	0.84328
ncsrcyt11_36_2_6	1.4	36000	36000	7673	5.56	1.0e-01	0.84524	0.00116	0.84755	hcsrcyt12_36_2_6	0.84484	0.00127	0.84738
ncsrcyt11_36_2_8	1.4	36000	36000	7673	5.56	3.0e-01	0.84947	0.00103	0.85153	hcsrcyt12_36_2_8	0.85159	0.00102	0.85364
ncsrcyt11_36_2_15	1.4	36000	36000	7673	5.56	1.0e+00	0.87062	0.00122	0.87305	hcsrcyt12_36_2_15	0.87110	0.00117	0.87344
ncsrcyt11_36_2_15	1.4	36000	36000	7673	5.56	1.0e+00	0.87062	0.00122	0.87305	hcsrcyt12_36_2_15	0.87110	0.00117	0.87344
ncsrcyt11_35_2_15	1.4	35000	35000	7726	5.76	1.0e+00	0.86649	0.00118	0.86886	hcsrcyt12_35_2_15	0.86666	0.00110	0.86886
ncsrcyt11_34_2_15	1.4	34000	34000	7779	5.97	1.0e+00	0.86038	0.00129	0.86296	hcsrcyt12_34_2_15	0.86109	0.00117	0.86343
ncsrcyt11_33_2_15	1.4	33000	33000	7832	6.19	1.0e+00	0.85903	0.00106	0.86115	hcsrcyt12_33_2_15	0.86022	0.00123	0.86267
ncsrcyt11_32_2_15	1.4	32000	32000	7885	6.43	1.0e+00	0.85357	0.00108	0.85573	hcsrcyt12_32_2_15	0.85544	0.00096	0.85736
ncsrcyt11_31_2_15	1.4	31000	31000	7938	6.68	1.0e+00	0.84895	0.00123	0.85142	hcsrcyt12_31_2_15	0.84745	0.00105	0.84956
ncsrcyt11_30_2_15	1.4	30000	30000	7992	6.95	1.0e+00	0.84343	0.00114	0.84572	hcsrcyt12_30_2_15	0.84390	0.00112	0.84615
content in flooded containment vessel, array packaging model for CSI=0.0													
NCT										HAC			
no can spacers (np thickness = 0.0 in.)													
nciacyt11_36_1_1	0.0	36000	36000	8287	6.01	1.0e-20	1.02410	0.00125	1.02660	hciacyt12_36_1_1	1.02427	0.00120	1.02667
nciacyt11_36_1_2	0.0	36000	36000	8287	6.01	1.0e-05	1.02380	0.00124	1.02628	hciacyt12_36_1_2	1.02384	0.00130	1.02644

6-174

Table 6.9.6-3. Results for 3.24 in.-diameter cylinder HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
nciacyt11_36_1_3	0.0	36000	36000	8287	6.01	1.0e-04	1.02208	0.00111	1.02430	hciacyt12_36_1_3	1.02390	0.00135	1.02660
nciacyt11_36_1_4	0.0	36000	36000	8287	6.01	1.0e-03	1.02276	0.00134	1.02545	hciacyt12_36_1_4	1.02441	0.00122	1.02684
nciacyt11_36_1_5	0.0	36000	36000	8287	6.01	1.0e-02	1.01749	0.00124	1.01997	hciacyt12_36_1_5	1.01867	0.00114	1.02094
nciacyt11_36_1_6	0.0	36000	36000	8287	6.01	1.0e-01	0.98560	0.00118	0.98797	hciacyt12_36_1_6	0.98825	0.00112	0.99048
nciacyt11_36_1_8	0.0	36000	36000	8287	6.01	3.0e-01	0.96228	0.00116	0.96461	hciacyt12_36_1_8	0.96519	0.00122	0.96763
nciacyt11_36_1_15	0.0	36000	36000	8287	6.01	1.0e+00	0.96088	0.00119	0.96326	hciacyt12_36_1_15	0.96417	0.00119	0.96655
nciacyt11_36_1_3	0.0	36000	36000	8287	6.01	1.0e-04	1.02208	0.00111	1.02430	hciacyt12_36_1_3	1.02390	0.00135	1.02660
nciacyt11_35_1_3	0.0	35000	35000	8340	6.22	1.0e-04	1.01930	0.00118	1.02166	hciacyt12_35_1_3	1.01912	0.00127	1.02165
nciacyt11_34_1_3	0.0	34000	34000	8393	6.44	1.0e-04	1.01654	0.00130	1.01914	hciacyt12_34_1_3	1.01860	0.00104	1.02068
nciacyt11_33_1_3	0.0	33000	33000	8446	6.68	1.0e-04	1.01121	0.00116	1.01353	hciacyt12_33_1_3	1.01077	0.00142	1.01361
nciacyt11_32_1_3	0.0	32000	32000	8499	6.93	1.0e-04	1.00876	0.00134	1.01144	hciacyt12_32_1_3	1.00943	0.00114	1.01171
nciacyt11_31_1_3	0.0	31000	31000	8552	7.20	1.0e-04	1.00544	0.00116	1.00777	hciacyt12_31_1_3	1.00148	0.00102	1.00353
nciacyt11_30_1_3	0.0	30000	30000	8605	7.49	1.0e-04	0.99921	0.00131	1.00182	hciacyt12_30_1_3	0.99963	0.00138	1.00238
nciacyt11_29_1_3	0.0	29000	29000	8658	7.79	1.0e-04	0.99494	0.00121	0.99736	hciacyt12_29_1_3	0.99453	0.00117	0.99687
nciacyt11_28_1_3	0.0	28000	28000	8711	8.12	1.0e-04	0.98905	0.00124	0.99152	hciacyt12_28_1_3	0.99159	0.00123	0.99405
nciacyt11_27_1_3	0.0	27000	27000	8764	8.47	1.0e-04	0.98520	0.00115	0.98750	hciacyt12_27_1_3	0.98720	0.00122	0.98963
nciacyt11_26_1_3	0.0	26000	26000	8817	8.85	1.0e-04	0.97887	0.00117	0.98120	hciacyt12_26_1_3	0.97870	0.00130	0.98129
nciacyt11_25_1_3	0.0	25000	25000	8870	9.26	1.0e-04	0.97441	0.00118	0.97676	hciacyt12_25_1_3	0.97501	0.00106	0.97713
nciacyt11_24_1_3	0.0	24000	24000	8923	9.70	1.0e-04	0.96997	0.00115	0.97228	hciacyt12_24_1_3	0.96945	0.00122	0.97188
nciacyt11_23_1_3	0.0	23000	23000	8977	10.19	1.0e-04	0.96203	0.00122	0.96447	hciacyt12_23_1_3	0.96228	0.00121	0.96469
nciacyt11_22_1_3	0.0	22000	22000	9030	10.71	1.0e-04	0.95256	0.00110	0.95475	hciacyt12_22_1_3	0.95313	0.00138	0.95589
nciacyt11_21_1_3	0.0	21000	21000	9083	11.29	1.0e-04	0.94755	0.00114	0.94982	hciacyt12_21_1_3	0.94735	0.00121	0.94976
nciacyt11_20_1_3	0.0	20000	20000	9136	11.92	1.0e-04	0.93967	0.00124	0.94215	hciacyt12_20_1_3	0.94131	0.00113	0.94357
nciacyt11_19_1_3	0.0	19000	19000	9189	12.62	1.0e-04	0.93107	0.00113	0.93334	hciacyt12_19_1_3	0.92967	0.00120	0.93207
nciacyt11_18_1_3	0.0	18000	18000	9242	13.40	1.0e-04	0.92165	0.00100	0.92366	hciacyt12_18_1_3	0.92083	0.00110	0.92302
nciacyt11_15_1_3	0.0	15000	15000	9401	16.36	1.0e-04	0.88925	0.00111	0.89146	hciacyt12_15_1_3	0.88802	0.00116	0.89034

Table 6.9.6-3. Results for 3.24 in.-diameter cylinder HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2σ$	case name	k_{eff}	σ	$k_{eff}+2σ$
nciacyt11_12_1_3	0.0	12000	12000	9560	20.79	1.0e-04	0.84430	0.00103	0.84636	hciacyt12_12_1_3	0.84558	0.00110	0.84777
nciacyt11_9_1_3	0.0	9000	9000	9719	28.19	1.0e-04	0.78552	0.00116	0.78784	hciacyt12_9_1_3	0.78464	0.00132	0.78728
nciacyt11_6_1_3	0.0	6000	6000	9879	42.97	1.0e-04	0.69176	0.00119	0.69414	hciacyt12_6_1_3	0.69169	0.00122	0.69413
nciacyt11_3_1_3	0.0	3000	3000	10038	87.33	1.0e-04	0.53217	0.00084	0.53385	hciacyt12_3_1_3	0.53298	0.00091	0.53481
with can spacers (np thickness = 1.4 in.)													
nciacyt11_36_2_1	1.4	36000	36000	7673	5.56	1.0e-20	0.95474	0.00109	0.95693	hciacyt12_36_2_1	0.95429	0.00106	0.95641
nciacyt11_36_2_2	1.4	36000	36000	7673	5.56	1.0e-05	0.95402	0.00119	0.95640	hciacyt12_36_2_2	0.95522	0.00105	0.95732
nciacyt11_36_2_3	1.4	36000	36000	7673	5.56	1.0e-04	0.95362	0.00105	0.95571	hciacyt12_36_2_3	0.95319	0.00139	0.95596
nciacyt11_36_2_4	1.4	36000	36000	7673	5.56	1.0e-03	0.95222	0.00128	0.95478	hciacyt12_36_2_4	0.95333	0.00116	0.95564
nciacyt11_36_2_5	1.4	36000	36000	7673	5.56	1.0e-02	0.94649	0.00110	0.94869	hciacyt12_36_2_5	0.94837	0.00124	0.95084
nciacyt11_36_2_6	1.4	36000	36000	7673	5.56	1.0e-01	0.91268	0.00128	0.91524	hciacyt12_36_2_6	0.91591	0.00121	0.91834
nciacyt11_36_2_8	1.4	36000	36000	7673	5.56	3.0e-01	0.88453	0.00140	0.88733	hciacyt12_36_2_8	0.89062	0.00119	0.89300
nciacyt11_36_2_15	1.4	36000	36000	7673	5.56	1.0e+00	0.87822	0.00106	0.88034	hciacyt12_36_2_15	0.88152	0.00135	0.88423
nciacyt11_36_2_3	1.4	36000	36000	7673	5.56	1.0e-04	0.95362	0.00105	0.95571	hciacyt12_36_2_3	0.95319	0.00139	0.95596
nciacyt11_35_2_3	1.4	35000	35000	7726	5.76	1.0e-04	0.94906	0.00125	0.95156	hciacyt12_35_2_3	0.94788	0.00129	0.95046
nciacyt11_34_2_3	1.4	34000	34000	7779	5.97	1.0e-04	0.94393	0.00136	0.94664	hciacyt12_34_2_3	0.94428	0.00130	0.94687
nciacyt11_33_2_3	1.4	33000	33000	7832	6.19	1.0e-04	0.93703	0.00114	0.93930	hciacyt12_33_2_3	0.93708	0.00122	0.93952
nciacyt11_32_2_3	1.4	32000	32000	7885	6.43	1.0e-04	0.92940	0.00125	0.93191	hciacyt12_32_2_3	0.93065	0.00109	0.93283
nciacyt11_31_2_3	1.4	31000	31000	7938	6.68	1.0e-04	0.92483	0.00119	0.92721	hciacyt12_31_2_3	0.92625	0.00125	0.92874
nciacyt11_30_2_3	1.4	30000	30000	7992	6.95	1.0e-04	0.91737	0.00106	0.91949	hciacyt12_30_2_3	0.91983	0.00107	0.92198
nciacyt11_29_2_3	1.4	29000	29000	8045	7.24	1.0e-04	0.91253	0.00116	0.91484	hciacyt12_29_2_3	0.91204	0.00107	0.91419
nciacyt11_28_2_3	1.4	28000	28000	8098	7.55	1.0e-04	0.90504	0.00117	0.90737	hciacyt12_28_2_3	0.90515	0.00100	0.90716
nciacyt11_27_2_3	1.4	27000	27000	8151	7.88	1.0e-04	0.89967	0.00121	0.90208	hciacyt12_27_2_3	0.89749	0.00097	0.89942
nciacyt11_26_2_3	1.4	26000	26000	8204	8.24	1.0e-04	0.89129	0.00107	0.89343	hciacyt12_26_2_3	0.88997	0.00124	0.89246
nciacyt11_25_2_3	1.4	25000	25000	8257	8.62	1.0e-04	0.88183	0.00104	0.88391	hciacyt12_25_2_3	0.88253	0.00129	0.88511
nciacyt11_24_2_3	1.4	24000	24000	8310	9.04	1.0e-04	0.87406	0.00117	0.87640	hciacyt12_24_2_3	0.87448	0.00117	0.87681

Table 6.9.6-3. Results for 3.24 in.-diameter cylinder HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2\sigma$	case name	k_{eff}	σ	$k_{eff}+2\sigma$
nciacyt11_23_2_3	1.4	23000	23000	8363	9.49	1.0e-04	0.86345	0.00109	0.86564	hciacyt12_23_2_3	0.86388	0.00119	0.86626
nciacyt11_22_2_3	1.4	22000	22000	8416	9.98	1.0e-04	0.85413	0.00107	0.85627	hciacyt12_22_2_3	0.85333	0.00109	0.85551
nciacyt11_21_2_3	1.4	21000	21000	8469	10.53	1.0e-04	0.84424	0.00109	0.84642	hciacyt12_21_2_3	0.84414	0.00111	0.84636
nciacyt11_20_2_3	1.4	20000	20000	8522	11.12	1.0e-04	0.83545	0.00106	0.83756	hciacyt12_20_2_3	0.83388	0.00099	0.83585
nciacyt11_19_2_3	1.4	19000	19000	8575	11.78	1.0e-04	0.82051	0.00130	0.82311	hciacyt12_19_2_3	0.82263	0.00109	0.82480
nciacyt11_18_2_3	1.4	18000	18000	8628	12.51	1.0e-04	0.81105	0.00122	0.81350	hciacyt12_18_2_3	0.81076	0.00113	0.81301
nciacyt11_15_2_3	1.4	15000	15000	8787	15.29	1.0e-04	0.76734	0.00107	0.76948	hciacyt12_15_2_3	0.76757	0.00102	0.76960
nciacyt11_12_2_3	1.4	12000	12000	8947	19.46	1.0e-04	0.71377	0.00097	0.71571	hciacyt12_12_2_3	0.71466	0.00102	0.71669
nciacyt11_9_2_3	1.4	9000	9000	9106	26.41	1.0e-04	0.64515	0.00110	0.64734	hciacyt12_9_2_3	0.64486	0.00103	0.64692
nciacyt11_6_2_3	1.4	6000	6000	9265	40.30	1.0e-04	0.54772	0.00094	0.54960	hciacyt12_6_2_3	0.54697	0.00098	0.54893
nciacyt11_3_2_3	1.4	3000	3000	9424	81.99	1.0e-04	0.39773	0.00080	0.39933	hciacyt12_3_2_3	0.39723	0.00087	0.39896

Table 6.9.6-4. Results for 2.29 in.-square bar HEU metal content in CV calculation model

case name	np (in)	U (g)	^{235}U (g)	H_2O (g)	h/x	mocfr	k_{eff}	σ	$k_{eff}+2\sigma$				
flooded containment vessel, reflected													
no can spacers (np thickness = 0.0 in.)													
cvcrsqt11_36_1	0.0	36000	36000	8287	6.01	1.0e+00	0.87614	0.00128	0.87869				
cvcrsqt11_35_1	0.0	35000	35000	8340	6.22	1.0e+00	0.87560	0.00111	0.87781				
cvcrsqt11_34_1	0.0	34000	34000	8393	6.44	1.0e+00	0.87541	0.00126	0.87794				
cvcrsqt11_33_1	0.0	33000	33000	8446	6.68	1.0e+00	0.87396	0.00108	0.87612				
cvcrsqt11_32_1	0.0	32000	32000	8499	6.93	1.0e+00	0.87319	0.00119	0.87556				
cvcrsqt11_31_1	0.0	31000	31000	8552	7.20	1.0e+00	0.86993	0.00116	0.87225				
cvcrsqt11_30_1	0.0	30000	30000	8605	7.49	1.0e+00	0.87046	0.00120	0.87286				
cvcrsqt11_29_1	0.0	29000	29000	8658	7.79	1.0e+00	0.86852	0.00107	0.87067				
cvcrsqt11_28_1	0.0	28000	28000	8711	8.12	1.0e+00	0.86740	0.00113	0.86966				

Table 6.9.6-4. Results for 2.29 in.-square bar HEU metal content in CV calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	mocfr	k_{eff}	σ	k_{eff}+2σ
cvcrsqt11_27_1	0.0	27000	27000	8764	8.47	1.0e+00	0.86366	0.00116	0.86597
cvcrsqt11_26_1	0.0	26000	26000	8817	8.85	1.0e+00	0.86498	0.00138	0.86773
cvcrsqt11_25_1	0.0	25000	25000	8870	9.26	1.0e+00	0.86077	0.00121	0.86319
cvcrsqt11_24_1	0.0	24000	24000	8923	9.70	1.0e+00	0.85955	0.00138	0.86231
cvcrsqt11_23_1	0.0	23000	23000	8977	10.19	1.0e+00	0.85604	0.00106	0.85816
cvcrsqt11_22_1	0.0	22000	22000	9030	10.71	1.0e+00	0.85211	0.00103	0.85417
cvcrsqt11_21_1	0.0	21000	21000	9083	11.29	1.0e+00	0.84970	0.00118	0.85206
cvcrsqt11_20_1	0.0	20000	20000	9136	11.92	1.0e+00	0.84694	0.00119	0.84931
cvcrsqt11_19_1	0.0	19000	19000	9189	12.62	1.0e+00	0.84285	0.00109	0.84503
cvcrsqt11_18_1	0.0	18000	18000	9242	13.40	1.0e+00	0.83888	0.00115	0.84117
with can spacers (np thickness=1.4 in.)									
cvcrsqt11_36_2	1.4	36000	36000	7673	5.56	1.0e+00	0.82217	0.00098	0.82414
cvcrsqt11_35_2	1.4	35000	35000	7726	5.76	1.0e+00	0.81622	0.00130	0.81881
cvcrsqt11_34_2	1.4	34000	34000	7779	5.97	1.0e+00	0.81548	0.00103	0.81755
cvcrsqt11_33_2	1.4	33000	33000	7832	6.19	1.0e+00	0.81272	0.00118	0.81508
cvcrsqt11_32_2	1.4	32000	32000	7885	6.43	1.0e+00	0.80782	0.00120	0.81022
cvcrsqt11_31_2	1.4	31000	31000	7938	6.68	1.0e+00	0.80495	0.00109	0.80712
cvcrsqt11_30_2	1.4	30000	30000	7992	6.95	1.0e+00	0.80163	0.00117	0.80397

6-178

Table 6.9.6-5. Results for 2.29 in.-square bar HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
content in flooded containment vessel, single package reflected													
						NCT						HAC	
no can spacers (np thickness = 0.0 in.)													
ncsrsqt11_36_1_1	0.0	36000	36000	8287	6.01	1.0e-20	0.82940	0.00124	0.83189	hcsrsqt12_36_1_1	0.83133	0.00125	0.83384
ncsrsqt11_36_1_2	0.0	36000	36000	8287	6.01	1.0e-05	0.83107	0.00107	0.83320	hcsrsqt12_36_1_2	0.83168	0.00121	0.83409
ncsrsqt11_36_1_3	0.0	36000	36000	8287	6.01	1.0e-04	0.83051	0.00120	0.83292	hcsrsqt12_36_1_3	0.83088	0.00103	0.83293
ncsrsqt11_36_1_4	0.0	36000	36000	8287	6.01	1.0e-03	0.82981	0.00116	0.83213	hcsrsqt12_36_1_4	0.83030	0.00122	0.83273
ncsrsqt11_36_1_5	0.0	36000	36000	8287	6.01	1.0e-02	0.82859	0.00123	0.83105	hcsrsqt12_36_1_5	0.83244	0.00126	0.83496
ncsrsqt11_36_1_6	0.0	36000	36000	8287	6.01	1.0e-01	0.83608	0.00123	0.83853	hcsrsqt12_36_1_6	0.83502	0.00119	0.83739
ncsrsqt11_36_1_8	0.0	36000	36000	8287	6.01	3.0e-01	0.84146	0.00118	0.84382	hcsrsqt12_36_1_8	0.84236	0.00115	0.84465
ncsrsqt11_36_1_15	0.0	36000	36000	8287	6.01	1.0e+00	0.86253	0.00131	0.86516	hcsrsqt12_36_1_15	0.86198	0.00112	0.86422
ncsrsqt11_36_1_15	0.0	36000	36000	8287	6.01	1.0e+00	0.86253	0.00131	0.86516	hcsrsqt12_36_1_15	0.86198	0.00112	0.86422
ncsrsqt11_35_1_15	0.0	35000	35000	8340	6.22	1.0e+00	0.86041	0.00112	0.86265	hcsrsqt12_35_1_15	0.86067	0.00121	0.86309
ncsrsqt11_34_1_15	0.0	34000	34000	8393	6.44	1.0e+00	0.85820	0.00129	0.86078	hcsrsqt12_34_1_15	0.85896	0.00102	0.86101
ncsrsqt11_33_1_15	0.0	33000	33000	8446	6.68	1.0e+00	0.85708	0.00106	0.85920	hcsrsqt12_33_1_15	0.86064	0.00110	0.86285
ncsrsqt11_32_1_15	0.0	32000	32000	8499	6.93	1.0e+00	0.85769	0.00107	0.85983	hcsrsqt12_32_1_15	0.85800	0.00110	0.86020
ncsrsqt11_31_1_15	0.0	31000	31000	8552	7.20	1.0e+00	0.85495	0.00127	0.85749	hcsrsqt12_31_1_15	0.85333	0.00123	0.85580
ncsrsqt11_30_1_15	0.0	30000	30000	8605	7.49	1.0e+00	0.85270	0.00120	0.85510	hcsrsqt12_30_1_15	0.85520	0.00132	0.85784
ncsrsqt11_29_1_15	0.0	29000	29000	8658	7.79	1.0e+00	0.85067	0.00119	0.85305	hcsrsqt12_29_1_15	0.85348	0.00114	0.85575
ncsrsqt11_28_1_15	0.0	28000	28000	8711	8.12	1.0e+00	0.85223	0.00111	0.85446	hcsrsqt12_28_1_15	0.85043	0.00101	0.85246
ncsrsqt11_27_1_15	0.0	27000	27000	8764	8.47	1.0e+00	0.84973	0.00121	0.85214	hcsrsqt12_27_1_15	0.85029	0.00111	0.85250
ncsrsqt11_26_1_15	0.0	26000	26000	8817	8.85	1.0e+00	0.84838	0.00127	0.85091	hcsrsqt12_26_1_15	0.84829	0.00115	0.85058
ncsrsqt11_25_1_15	0.0	25000	25000	8870	9.26	1.0e+00	0.84598	0.00113	0.84824	hcsrsqt12_25_1_15	0.84583	0.00105	0.84792
ncsrsqt11_24_1_15	0.0	24000	24000	8923	9.70	1.0e+00	0.84390	0.00111	0.84611	hcsrsqt12_24_1_15	0.84296	0.00112	0.84521
ncsrsqt11_23_1_15	0.0	23000	23000	8977	10.19	1.0e+00	0.84101	0.00108	0.84317	hcsrsqt12_23_1_15	0.84241	0.00129	0.84499
ncsrsqt11_22_1_15	0.0	22000	22000	9030	10.71	1.0e+00	0.83888	0.00112	0.84111	hcsrsqt12_22_1_15	0.83951	0.00107	0.84164

Table 6.9.6-5. Results for 2.29 in.-square bar HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncsrsqt11_21_1_15	0.0	21000	21000	9083	11.29	1.0e+00	0.83473	0.00112	0.83696	hcsrsqt12_21_1_15	0.83577	0.00128	0.83832
ncsrsqt11_20_1_15	0.0	20000	20000	9136	11.92	1.0e+00	0.83029	0.00110	0.83250	hcsrsqt12_20_1_15	0.83094	0.00103	0.83300
ncsrsqt11_19_1_15	0.0	19000	19000	9189	12.62	1.0e+00	0.82676	0.00107	0.82889	hcsrsqt12_19_1_15	0.82652	0.00113	0.82879
ncsrsqt11_18_1_15	0.0	18000	18000	9242	13.40	1.0e+00	0.82247	0.00121	0.82489	hcsrsqt12_18_1_15	0.82440	0.00112	0.82664
with can spacers (np thickness = 1.4 in.)													
ncsrsqt11_36_2_1	1.4	36000	36000	7673	5.56	1.0e-20	0.78167	0.00104	0.78375	hcsrsqt12_36_2_1	0.78308	0.00128	0.78563
ncsrsqt11_36_2_2	1.4	36000	36000	7673	5.56	1.0e-05	0.78210	0.00112	0.78434	hcsrsqt12_36_2_2	0.78549	0.00112	0.78772
ncsrsqt11_36_2_3	1.4	36000	36000	7673	5.56	1.0e-04	0.78209	0.00104	0.78417	hcsrsqt12_36_2_3	0.78508	0.00119	0.78746
ncsrsqt11_36_2_4	1.4	36000	36000	7673	5.56	1.0e-03	0.78414	0.00111	0.78636	hcsrsqt12_36_2_4	0.78484	0.00121	0.78727
ncsrsqt11_36_2_5	1.4	36000	36000	7673	5.56	1.0e-02	0.78141	0.00137	0.78415	hcsrsqt12_36_2_5	0.78362	0.00114	0.78591
ncsrsqt11_36_2_6	1.4	36000	36000	7673	5.56	1.0e-01	0.78591	0.00113	0.78818	hcsrsqt12_36_2_6	0.78757	0.00108	0.78972
ncsrsqt11_36_2_8	1.4	36000	36000	7673	5.56	3.0e-01	0.79206	0.00130	0.79466	hcsrsqt12_36_2_8	0.79070	0.00128	0.79327
ncsrsqt11_36_2_15	1.4	36000	36000	7673	5.56	1.0e+00	0.80894	0.00103	0.81101	hcsrsqt12_36_2_15	0.80856	0.00110	0.81077
ncsrsqt11_36_2_15	1.4	36000	36000	7673	5.56	1.0e+00	0.80894	0.00103	0.81101	hcsrsqt12_36_2_15	0.80856	0.00110	0.81077
ncsrsqt11_35_2_15	1.4	35000	35000	7726	5.76	1.0e+00	0.80583	0.00113	0.80808	hcsrsqt12_35_2_15	0.80522	0.00112	0.80747
ncsrsqt11_34_2_15	1.4	34000	34000	7779	5.97	1.0e+00	0.80341	0.00125	0.80591	hcsrsqt12_34_2_15	0.80255	0.00107	0.80469
ncsrsqt11_33_2_15	1.4	33000	33000	7832	6.19	1.0e+00	0.80213	0.00108	0.80429	hcsrsqt12_33_2_15	0.79972	0.00096	0.80164
ncsrsqt11_32_2_15	1.4	32000	32000	7885	6.43	1.0e+00	0.79784	0.00124	0.80032	hcsrsqt12_32_2_15	0.79750	0.00118	0.79985
ncsrsqt11_31_2_15	1.4	31000	31000	7938	6.68	1.0e+00	0.79226	0.00107	0.79440	hcsrsqt12_31_2_15	0.79447	0.00099	0.79646
ncsrsqt11_30_2_15	1.4	30000	30000	7992	6.95	1.0e+00	0.79192	0.00110	0.79412	hcsrsqt12_30_2_15	0.79053	0.00108	0.79268
content in flooded containment vessel, array packaging model for CSI=0.0													
NCT										HAC			
no can spacers (np thickness = 0.0 in.)													
nciasqt11_36_1_3	0.0	36000	36000	8287	6.01	1.0e-04	0.93786	0.00112	0.94011	hciasqt12_36_1_3	0.93760	0.00119	0.93998
nciasqt11_35_1_3	0.0	35000	35000	8340	6.22	1.0e-04	0.93414	0.00107	0.93629	hciasqt12_35_1_3	0.93524	0.00130	0.93785

Table 6.9.6-5. Results for 2.29 in.-square bar HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
nciasqt11_34_1_3	0.0	34000	34000	8393	6.44	1.0e-04	0.93004	0.00116	0.93235	hciasqt12_34_1_3	0.92962	0.00116	0.93195
nciasqt11_33_1_3	0.0	33000	33000	8446	6.68	1.0e-04	0.92897	0.00121	0.93139	hciasqt12_33_1_3	0.92744	0.00120	0.92984
nciasqt11_32_1_3	0.0	32000	32000	8499	6.93	1.0e-04	0.92703	0.00119	0.92942	hciasqt12_32_1_3	0.92854	0.00110	0.93073
nciasqt11_31_1_3	0.0	31000	31000	8552	7.20	1.0e-04	0.92403	0.00109	0.92621	hciasqt12_31_1_3	0.92290	0.00105	0.92499
nciasqt11_30_1_3	0.0	30000	30000	8605	7.49	1.0e-04	0.91959	0.00114	0.92188	hciasqt12_30_1_3	0.91960	0.00125	0.92211
nciasqt11_29_1_3	0.0	29000	29000	8658	7.79	1.0e-04	0.91544	0.00122	0.91787	hciasqt12_29_1_3	0.91645	0.00138	0.91922
nciasqt11_28_1_3	0.0	28000	28000	8711	8.12	1.0e-04	0.91153	0.00123	0.91399	hciasqt12_28_1_3	0.91477	0.00122	0.91722
nciasqt11_27_1_3	0.0	27000	27000	8764	8.47	1.0e-04	0.90851	0.00099	0.91050	hciasqt12_27_1_3	0.91066	0.00119	0.91305
nciasqt11_26_1_3	0.0	26000	26000	8817	8.85	1.0e-04	0.90835	0.00125	0.91084	hciasqt12_26_1_3	0.90452	0.00124	0.90699
nciasqt11_25_1_3	0.0	25000	25000	8870	9.26	1.0e-04	0.90272	0.00115	0.90501	hciasqt12_25_1_3	0.90142	0.00116	0.90374
nciasqt11_24_1_3	0.0	24000	24000	8923	9.70	1.0e-04	0.89930	0.00123	0.90177	hciasqt12_24_1_3	0.89640	0.00120	0.89881
nciasqt11_23_1_3	0.0	23000	23000	8977	10.19	1.0e-04	0.89380	0.00120	0.89619	hciasqt12_23_1_3	0.89613	0.00135	0.89882
nciasqt11_22_1_3	0.0	22000	22000	9030	10.71	1.0e-04	0.88934	0.00105	0.89144	hciasqt12_22_1_3	0.88839	0.00106	0.89051
nciasqt11_21_1_3	0.0	21000	21000	9083	11.29	1.0e-04	0.88358	0.00109	0.88576	hciasqt12_21_1_3	0.88413	0.00118	0.88649
nciasqt11_20_1_3	0.0	20000	20000	9136	11.92	1.0e-04	0.87812	0.00123	0.88058	hciasqt12_20_1_3	0.87811	0.00124	0.88058
nciasqt11_19_1_3	0.0	19000	19000	9189	12.62	1.0e-04	0.87206	0.00108	0.87423	hciasqt12_19_1_3	0.87171	0.00118	0.87408
nciasqt11_18_1_3	0.0	18000	18000	9242	13.40	1.0e-04	0.86772	0.00140	0.87052	hciasqt12_18_1_3	0.86555	0.00119	0.86794
nciasqt11_15_1_3	0.0	15000	15000	9401	16.36	1.0e-04	0.84518	0.00119	0.84756	hciasqt12_15_1_3	0.84416	0.00102	0.84620
nciasqt11_12_1_3	0.0	12000	12000	9560	20.79	1.0e-04	0.81425	0.00113	0.81651	hciasqt12_12_1_3	0.81332	0.00101	0.81534
nciasqt11_9_1_3	0.0	9000	9000	9719	28.19	1.0e-04	0.76947	0.00115	0.77178	hciasqt12_9_1_3	0.77066	0.00107	0.77280
nciasqt11_6_1_3	0.0	6000	6000	9879	42.97	1.0e-04	0.69668	0.00099	0.69866	hciasqt12_6_1_3	0.69648	0.00101	0.69850
nciasqt11_3_1_3	0.0	3000	3000	10038	87.33	1.0e-04	0.55857	0.00089	0.56036	hciasqt12_3_1_3	0.55806	0.00092	0.55989
with can spacers (np thickness = 1.4 in.)													
nciasqt11_36_2_3	1.4	36000	36000	7673	5.56	1.0e-04	0.89382	0.00114	0.89610	hciasqt12_36_2_3	0.89230	0.00114	0.89458
nciasqt11_35_2_3	1.4	35000	35000	7726	5.76	1.0e-04	0.88604	0.00105	0.88813	hciasqt12_35_2_3	0.88890	0.00130	0.89150
nciasqt11_34_2_3	1.4	34000	34000	7779	5.97	1.0e-04	0.88480	0.00105	0.88690	hciasqt12_34_2_3	0.88544	0.00139	0.88822
nciasqt11_33_2_3	1.4	33000	33000	7832	6.19	1.0e-04	0.87854	0.00118	0.88090	hciasqt12_33_2_3	0.87897	0.00106	0.88110

Table 6.9.6-5. Results for 2.29 in.-square bar HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2\sigma$	case name	k_{eff}	σ	$k_{eff}+2\sigma$
nciasqt11_32_2_3	1.4	32000	32000	7885	6.43	1.0e-04	0.87561	0.00104	0.87768	hciasqt12_32_2_3	0.87638	0.00121	0.87880
nciasqt11_31_2_3	1.4	31000	31000	7938	6.68	1.0e-04	0.86867	0.00123	0.87114	hciasqt12_31_2_3	0.87222	0.00105	0.87432
nciasqt11_30_2_3	1.4	30000	30000	7992	6.95	1.0e-04	0.86347	0.00122	0.86590	hciasqt12_30_2_3	0.86614	0.00121	0.86855
nciasqt11_29_2_3	1.4	29000	29000	8045	7.24	1.0e-04	0.85781	0.00109	0.86000	hciasqt12_29_2_3	0.85842	0.00113	0.86068
nciasqt11_28_2_3	1.4	28000	28000	8098	7.55	1.0e-04	0.85401	0.00119	0.85640	hciasqt12_28_2_3	0.85399	0.00116	0.85630
nciasqt11_27_2_3	1.4	27000	27000	8151	7.88	1.0e-04	0.84755	0.00127	0.85009	hciasqt12_27_2_3	0.84935	0.00125	0.85184
nciasqt11_26_2_3	1.4	26000	26000	8204	8.24	1.0e-04	0.84285	0.00119	0.84522	hciasqt12_26_2_3	0.84287	0.00106	0.84500
nciasqt11_25_2_3	1.4	25000	25000	8257	8.62	1.0e-04	0.83719	0.00124	0.83967	hciasqt12_25_2_3	0.83683	0.00113	0.83910
nciasqt11_24_2_3	1.4	24000	24000	8310	9.04	1.0e-04	0.82927	0.00102	0.83132	hciasqt12_24_2_3	0.83192	0.00111	0.83414
nciasqt11_23_2_3	1.4	23000	23000	8363	9.49	1.0e-04	0.82375	0.00132	0.82638	hciasqt12_23_2_3	0.82315	0.00124	0.82562
nciasqt11_22_2_3	1.4	22000	22000	8416	9.98	1.0e-04	0.81735	0.00107	0.81950	hciasqt12_22_2_3	0.81490	0.00105	0.81700
nciasqt11_21_2_3	1.4	21000	21000	8469	10.53	1.0e-04	0.80580	0.00118	0.80817	hciasqt12_21_2_3	0.81021	0.00121	0.81263
nciasqt11_20_2_3	1.4	20000	20000	8522	11.12	1.0e-04	0.79977	0.00110	0.80197	hciasqt12_20_2_3	0.80091	0.00116	0.80324
nciasqt11_19_2_3	1.4	19000	19000	8575	11.78	1.0e-04	0.79125	0.00109	0.79343	hciasqt12_19_2_3	0.79175	0.00113	0.79400
nciasqt11_18_2_3	1.4	18000	18000	8628	12.51	1.0e-04	0.78165	0.00110	0.78386	hciasqt12_18_2_3	0.78285	0.00110	0.78505
nciasqt11_15_2_3	1.4	15000	15000	8787	15.29	1.0e-04	0.74822	0.00105	0.75032	hciasqt12_15_2_3	0.74548	0.00107	0.74762
nciasqt11_12_2_3	1.4	12000	12000	8947	19.46	1.0e-04	0.70519	0.00106	0.70732	hciasqt12_12_2_3	0.70419	0.00105	0.70628
nciasqt11_9_2_3	1.4	9000	9000	9106	26.41	1.0e-04	0.64473	0.00106	0.64685	hciasqt12_9_2_3	0.64451	0.00101	0.64653
nciasqt11_6_2_3	1.4	6000	6000	9265	40.30	1.0e-04	0.55778	0.00097	0.55972	hciasqt12_6_2_3	0.55888	0.00098	0.56084
nciasqt11_3_2_3	1.4	3000	3000	9424	81.99	1.0e-04	0.41347	0.00085	0.41517	hciasqt12_3_2_3	0.41398	0.00074	0.41545

Table 6.9.6-6. Results for 4.25 in.-diameter cylinder HEU metal content in CV calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	mocfr	k_{eff}	σ	k_{eff}+2σ				
flooded containment vessel, reflected													
no can spacers (np thickness = 0.0 in.)													
cvcrcyct11_36_1	0.0	36000	36000	8287	6.01	1.0e+00	1.06320	0.00115	1.06549				
cvcrcyct11_35_1	0.0	35000	35000	8340	6.22	1.0e+00	1.06114	0.00121	1.06356				
cvcrcyct11_34_1	0.0	34000	34000	8393	6.44	1.0e+00	1.05675	0.00122	1.05919				
cvcrcyct11_33_1	0.0	33000	33000	8446	6.68	1.0e+00	1.04990	0.00112	1.05214				
cvcrcyct11_32_1	0.0	32000	32000	8499	6.93	1.0e+00	1.04469	0.00123	1.04714				
cvcrcyct11_31_1	0.0	31000	31000	8552	7.20	1.0e+00	1.04101	0.00104	1.04310				
cvcrcyct11_30_1	0.0	30000	30000	8605	7.49	1.0e+00	1.03487	0.00117	1.03722				
cvcrcyct11_29_1	0.0	29000	29000	8658	7.79	1.0e+00	1.02817	0.00115	1.03046				
cvcrcyct11_28_1	0.0	28000	28000	8711	8.12	1.0e+00	1.02183	0.00125	1.02433				
cvcrcyct11_27_1	0.0	27000	27000	8764	8.47	1.0e+00	1.01524	0.00109	1.01742				
cvcrcyct11_26_1	0.0	26000	26000	8817	8.85	1.0e+00	1.00971	0.00116	1.01203				
cvcrcyct11_25_1	0.0	25000	25000	8870	9.26	1.0e+00	1.00149	0.00136	1.00420				
cvcrcyct11_24_1	0.0	24000	24000	8923	9.70	1.0e+00	0.99327	0.00137	0.99600				
cvcrcyct11_23_1	0.0	23000	23000	8977	10.19	1.0e+00	0.98432	0.00124	0.98680				
cvcrcyct11_22_1	0.0	22000	22000	9030	10.71	1.0e+00	0.97759	0.00112	0.97984				
cvcrcyct11_21_1	0.0	21000	21000	9083	11.29	1.0e+00	0.96672	0.00116	0.96904				
cvcrcyct11_20_1	0.0	20000	20000	9136	11.92	1.0e+00	0.95743	0.00128	0.95999				
cvcrcyct11_19_1	0.0	19000	19000	9189	12.62	1.0e+00	0.94629	0.00118	0.94866				
cvcrcyct11_18_1	0.0	18000	18000	9242	13.40	1.0e+00	0.93349	0.00114	0.93576				
cvcrcyct11_17_1	0.0	17000	17000	9295	14.27	1.0e+00	0.91942	0.00105	0.92152				
cvcrcyct11_16_1	0.0	16000	16000	9348	15.25	1.0e+00	0.90458	0.00120	0.90699				
cvcrcyct11_15_1	0.0	15000	15000	9401	16.36	1.0e+00	0.88788	0.00107	0.89002				
with can spacers (np thickness=1.4 in.)													
cvcrcyct11_36_2	1.4	36000	36000	7673	5.56	1.0e+00	0.94321	0.00111	0.94543				

Table 6.9.6-6. Results for 4.25 in.-diameter cylinder HEU metal content in CV calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	mocfr	k_{eff}	σ	k_{eff}+2σ				
cvcrcyct11_35_2	1.4	35000	35000	7726	5.76	1.0e+00	0.93828	0.00114	0.94056				
cvcrcyct11_34_2	1.4	34000	34000	7779	5.97	1.0e+00	0.93114	0.00129	0.93372				
cvcrcyct11_33_2	1.4	33000	33000	7832	6.19	1.0e+00	0.92558	0.00124	0.92805				
cvcrcyct11_32_2	1.4	32000	32000	7885	6.43	1.0e+00	0.91799	0.00111	0.92021				
cvcrcyct11_31_2	1.4	31000	31000	7938	6.68	1.0e+00	0.91146	0.00114	0.91375				
cvcrcyct11_30_2	1.4	30000	30000	7992	6.95	1.0e+00	0.90499	0.00117	0.90734				

Table 6.9.6-7. Results for 4.25 in.-diameter cylinder HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
content in flooded containment vessel, single package reflected													
NCT										HAC			
no can spacers (np thickness = 0.0 in.)													
ncsrcyct11_36_1_1	0.0	36000	36000	8286.7	6.01	1.0e-20	0.98628	0.00107	0.98841	hcsrcyct12_36_1_1	0.98723	0.00126	0.98975
ncsrcyct11_36_1_2	0.0	36000	36000	8286.7	6.01	1.0e-05	0.98712	0.00138	0.98988	hcsrcyct12_36_1_2	0.98582	0.00120	0.98823
ncsrcyct11_36_1_3	0.0	36000	36000	8287	6.01	1.0e-04	0.98624	0.00119	0.98861	hcsrcyct12_36_1_3	0.98691	0.00113	0.98917
ncsrcyct11_36_1_4	0.0	36000	36000	8287	6.01	1.0e-03	0.98433	0.00102	0.98637	hcsrcyct12_36_1_4	0.98537	0.00111	0.98759
ncsrcyct11_36_1_5	0.0	36000	36000	8287	6.01	1.0e-02	0.98646	0.00103	0.98852	hcsrcyct12_36_1_5	0.98809	0.00110	0.99028
ncsrcyct11_36_1_6	0.0	36000	36000	8287	6.01	1.0e-01	0.99092	0.00127	0.99346	hcsrcyct12_36_1_6	0.99096	0.00099	0.99295
ncsrcyct11_36_1_8	0.0	36000	36000	8287	6.01	3.0e-01	1.00000	0.00123	1.00246	hcsrcyct12_36_1_8	1.00334	0.00119	1.00572
ncsrcyct11_36_1_15	0.0	36000	36000	8287	6.01	1.0e+00	1.03142	0.00144	1.03430	hcsrcyct12_36_1_15	1.03141	0.00116	1.03374
ncsrcyct11_36_1_15	0.0	36000	36000	8287	6.01	1.0e+00	1.03142	0.00144	1.03430	hcsrcyct12_36_1_15	1.03141	0.00116	1.03374
ncsrcyct11_35_1_15	0.0	35000	35000	8340	6.22	1.0e+00	1.02816	0.00115	1.03045	hcsrcyct12_35_1_15	1.03309	0.00126	1.03561
ncsrcyct11_34_1_15	0.0	34000	34000	8393	6.44	1.0e+00	1.02658	0.00113	1.02884	hcsrcyct12_34_1_15	1.02529	0.00124	1.02776
ncsrcyct11_33_1_15	0.0	33000	33000	8446	6.68	1.0e+00	1.01975	0.00114	1.02203	hcsrcyct12_33_1_15	1.02060	0.00124	1.02308
ncsrcyct11_32_1_15	0.0	32000	32000	8499	6.93	1.0e+00	1.01647	0.00104	1.01854	hcsrcyct12_32_1_15	1.01688	0.00114	1.01916

Table 6.9.6-7. Results for 4.25 in.-diameter cylinder HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k$_{eff}$	σ	k$_{eff}$+2σ	case name	k$_{eff}$	σ	k$_{eff}$+2σ
ncsrcyct11_31_1_15	0.0	31000	31000	8552	7.20	1.0e+00	1.00952	0.00114	1.01179	hcsrcyct12_31_1_15	1.01218	0.00144	1.01505
ncsrcyct11_30_1_15	0.0	30000	30000	8605	7.49	1.0e+00	1.00434	0.00123	1.00679	hcsrcyct12_30_1_15	1.00757	0.00117	1.00992
ncsrcyct11_29_1_15	0.0	29000	29000	8658	7.79	1.0e+00	1.00074	0.00106	1.00287	hcsrcyct12_29_1_15	1.00071	0.00139	1.00348
ncsrcyct11_28_1_15	0.0	28000	28000	8711	8.12	1.0e+00	0.99381	0.00135	0.99652	hcsrcyct12_28_1_15	0.99442	0.00129	0.99700
ncsrcyct11_27_1_15	0.0	27000	27000	8764	8.47	1.0e+00	0.98595	0.00094	0.98782	hcsrcyct12_27_1_15	0.99057	0.00119	0.99296
ncsrcyct11_26_1_15	0.0	26000	26000	8817	8.85	1.0e+00	0.97783	0.00117	0.98017	hcsrcyct12_26_1_15	0.98010	0.00135	0.98281
ncsrcyct11_25_1_15	0.0	25000	25000	8870	9.26	1.0e+00	0.97189	0.00126	0.97440	hcsrcyct12_25_1_15	0.97263	0.00118	0.97499
ncsrcyct11_24_1_15	0.0	24000	24000	8923	9.70	1.0e+00	0.96439	0.00121	0.96681	hcsrcyct12_24_1_15	0.96656	0.00113	0.96881
ncsrcyct11_23_1_15	0.0	23000	23000	8977	10.19	1.0e+00	0.95375	0.00130	0.95635	hcsrcyct12_23_1_15	0.95783	0.00118	0.96018
ncsrcyct11_22_1_15	0.0	22000	22000	9030	10.71	1.0e+00	0.94744	0.00132	0.95008	hcsrcyct12_22_1_15	0.94901	0.00143	0.95187
ncsrcyct11_21_1_15	0.0	21000	21000	9083	11.29	1.0e+00	0.93842	0.00127	0.94095	hcsrcyct12_21_1_15	0.93880	0.00126	0.94132
ncsrcyct11_20_1_15	0.0	20000	20000	9136	11.92	1.0e+00	0.92684	0.00118	0.92920	hcsrcyct12_20_1_15	0.92929	0.00124	0.93176
ncsrcyct11_19_1_15	0.0	19000	19000	9189	12.62	1.0e+00	0.91527	0.00109	0.91745	hcsrcyct12_19_1_15	0.91879	0.00101	0.92081
ncsrcyct11_18_1_15	0.0	18000	18000	9242	13.40	1.0e+00	0.90374	0.00111	0.90597	hcsrcyct12_18_1_15	0.90716	0.00105	0.90927
ncsrcyct11_17_1_15	0.0	17000	17000	9295	14.27	1.0e+00	0.89147	0.00133	0.89412	hcsrcyct12_17_1_15	0.89585	0.00104	0.89794
ncsrcyct11_16_1_15	0.0	16000	16000	9348	15.25	1.0e+00	0.87788	0.00101	0.87990	hcsrcyct12_16_1_15	0.87933	0.00118	0.88168
ncsrcyct11_15_1_15	0.0	15000	15000	9401	16.36	1.0e+00	0.86209	0.00110	0.86429	hcsrcyct12_15_1_15	0.86488	0.00110	0.86708
with can spacers (np thickness = 1.4 in.)													
ncsrcyct11_36_2_1	1.4	36000	36000	7673	5.56	1.0e-20	0.87502	0.00112	0.87725	hcsrcyct12_36_2_1	0.87543	0.00107	0.87757
ncsrcyct11_36_2_2	1.4	36000	36000	7673	5.56	1.0e-05	0.87474	0.00108	0.87691	hcsrcyct12_36_2_2	0.87795	0.00117	0.88029
ncsrcyct11_36_2_3	1.4	36000	36000	7673	5.56	1.0e-04	0.87595	0.00126	0.87846	hcsrcyct12_36_2_3	0.87675	0.00112	0.87899
ncsrcyct11_36_2_4	1.4	36000	36000	7673	5.56	1.0e-03	0.87655	0.00100	0.87856	hcsrcyct12_36_2_4	0.87798	0.00106	0.88011
ncsrcyct11_36_2_5	1.4	36000	36000	7673	5.56	1.0e-02	0.87634	0.00104	0.87843	hcsrcyct12_36_2_5	0.87876	0.00109	0.88094
ncsrcyct11_36_2_6	1.4	36000	36000	7673	5.56	1.0e-01	0.87971	0.00102	0.88174	hcsrcyct12_36_2_6	0.88317	0.00111	0.88539
ncsrcyct11_36_2_8	1.4	36000	36000	7673	5.56	3.0e-01	0.88865	0.00115	0.89094	hcsrcyct12_36_2_8	0.89169	0.00103	0.89375
ncsrcyct11_36_2_15	1.4	36000	36000	7673	5.56	1.0e+00	0.91608	0.00120	0.91847	hcsrcyct12_36_2_15	0.91815	0.00118	0.92050

Table 6.9.6-7. Results for 4.25 in.-diameter cylinder HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncsrcyct11_36_2_15	1.4	36000	36000	7673	5.56	1.0e+00	0.91608	0.00120	0.91847	hcsrcyct12_36_2_15	0.91815	0.00118	0.92050
ncsrcyct11_35_2_15	1.4	35000	35000	7726	5.76	1.0e+00	0.91190	0.00116	0.91422	hcsrcyct12_35_2_15	0.91300	0.00117	0.91534
ncsrcyct11_34_2_15	1.4	34000	34000	7779	5.97	1.0e+00	0.90497	0.00112	0.90721	hcsrcyct12_34_2_15	0.90616	0.00116	0.90848
ncsrcyct11_33_2_15	1.4	33000	33000	7832	6.19	1.0e+00	0.90032	0.00120	0.90272	hcsrcyct12_33_2_15	0.90269	0.00118	0.90506
ncsrcyct11_32_2_15	1.4	32000	32000	7885	6.43	1.0e+00	0.89251	0.00102	0.89455	hcsrcyct12_32_2_15	0.89526	0.00120	0.89766
ncsrcyct11_31_2_15	1.4	31000	31000	7938	6.68	1.0e+00	0.88531	0.00136	0.88803	hcsrcyct12_31_2_15	0.88765	0.00108	0.88981
ncsrcyct11_30_2_15	1.4	30000	30000	7992	6.95	1.0e+00	0.88012	0.00120	0.88252	hcsrcyct12_30_2_15	0.88005	0.00120	0.88246
content in flooded containment vessel, array packaging model for CSI=0.0													
NCT										**HAC**			
no can spacers (np thickness = 0.0 in.)													
nciacyct11_36_1_3	0.0	36000	36000	8287	6.01	1.0e-04	1.10334	0.00135	1.10604	hciacyct12_36_1_3	1.10722	0.00119	1.10961
nciacyct11_35_1_3	0.0	35000	35000	8340	6.22	1.0e-04	1.10128	0.00116	1.10360	hciacyct12_35_1_3	1.10067	0.00114	1.10295
nciacyct11_34_1_3	0.0	34000	34000	8393	6.44	1.0e-04	1.09399	0.00125	1.09648	hciacyct12_34_1_3	1.09477	0.00124	1.09726
nciacyct11_33_1_3	0.0	33000	33000	8446	6.68	1.0e-04	1.08794	0.00127	1.09048	hciacyct12_33_1_3	1.08942	0.00134	1.09210
nciacyct11_32_1_3	0.0	32000	32000	8499	6.93	1.0e-04	1.08183	0.00131	1.08444	hciacyct12_32_1_3	1.08089	0.00128	1.08346
nciacyct11_31_1_3	0.0	31000	31000	8552	7.20	1.0e-04	1.07391	0.00114	1.07619	hciacyct12_31_1_3	1.07627	0.00101	1.07829
nciacyct11_30_1_3	0.0	30000	30000	8605	7.49	1.0e-04	1.06840	0.00131	1.07102	hciacyct12_30_1_3	1.06781	0.00107	1.06994
nciacyct11_29_1_3	0.0	29000	29000	8658	7.79	1.0e-04	1.06070	0.00108	1.06286	hciacyct12_29_1_3	1.05946	0.00121	1.06188
nciacyct11_28_1_3	0.0	28000	28000	8711	8.12	1.0e-04	1.05398	0.00116	1.05630	hciacyct12_28_1_3	1.05253	0.00102	1.05457
nciacyct11_27_1_3	0.0	27000	27000	8764	8.47	1.0e-04	1.04385	0.00142	1.04670	hciacyct12_27_1_3	1.04481	0.00121	1.04723
nciacyct11_26_1_3	0.0	26000	26000	8817	8.85	1.0e-04	1.03489	0.00124	1.03736	hciacyct12_26_1_3	1.03688	0.00118	1.03923
nciacyct11_25_1_3	0.0	25000	25000	8870	9.26	1.0e-04	1.02495	0.00128	1.02751	hciacyct12_25_1_3	1.02706	0.00120	1.02946
nciacyct11_24_1_3	0.0	24000	24000	8923	9.70	1.0e-04	1.01610	0.00120	1.01850	hciacyct12_24_1_3	1.01634	0.00118	1.01870
nciacyct11_23_1_3	0.0	23000	23000	8977	10.19	1.0e-04	1.00723	0.00108	1.00938	hciacyct12_23_1_3	1.00427	0.00110	1.00648
nciacyct11_22_1_3	0.0	22000	22000	9030	10.71	1.0e-04	0.99573	0.00122	0.99817	hciacyct12_22_1_3	0.99481	0.00112	0.99705
nciacyct11_21_1_3	0.0	21000	21000	9083	11.29	1.0e-04	0.98149	0.00122	0.98393	hciacyct12_21_1_3	0.98514	0.00127	0.98768
nciacyct11_20_1_3	0.0	20000	20000	9136	11.92	1.0e-04	0.97377	0.00104	0.97585	hciacyct12_20_1_3	0.97210	0.00120	0.97450

Table 6.9.6-7. Results for 4.25 in.-diameter cylinder HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2\sigma$	case name	k_{eff}	σ	$k_{eff}+2\sigma$
nciacyct11_19_1_3	0.0	19000	19000	9189	12.62	1.0e-04	0.95985	0.00127	0.96240	hciacyct12_19_1_3	0.95807	0.00143	0.96092
nciacyct11_18_1_3	0.0	18000	18000	9242	13.40	1.0e-04	0.94375	0.00137	0.94649	hciacyct12_18_1_3	0.94639	0.00124	0.94887
nciacyct11_15_1_3	0.0	15000	15000	9401	16.36	1.0e-04	0.89699	0.00109	0.89917	hciacyct12_15_1_3	0.89646	0.00108	0.89862
nciacyct11_12_1_3	0.0	12000	12000	9560	20.79	1.0e-04	0.83537	0.00118	0.83772	hciacyct12_12_1_3	0.83858	0.00118	0.84093
nciacyct11_9_1_3	0.0	9000	9000	9719	28.19	1.0e-04	0.76061	0.00121	0.76303	hciacyct12_9_1_3	0.75657	0.00112	0.75882
nciacyct11_6_1_3	0.0	6000	6000	9879	42.97	1.0e-04	0.64959	0.00106	0.65172	hciacyct12_6_1_3	0.64940	0.00109	0.65157
nciacyct11_3_1_3	0.0	3000	3000	10038	87.33	1.0e-04	0.48405	0.00103	0.48611	hciacyct12_3_1_3	0.48552	0.00096	0.48745
with can spacers (np thickness = 1.4 in.)													
nciacyct11_36_2_3	1.4	36000	36000	7673	5.56	1.0e-04	1.01018	0.00139	1.01297	hciacyct12_36_2_3	1.01024	0.00120	1.01263
nciacyct11_35_2_3	1.4	35000	35000	7726	5.76	1.0e-04	1.00029	0.00110	1.00249	hciacyct12_35_2_3	1.00083	0.00105	1.00293
nciacyct11_34_2_3	1.4	34000	34000	7779	5.97	1.0e-04	0.99523	0.00100	0.99723	hciacyct12_34_2_3	0.99499	0.00116	0.99731
nciacyct11_33_2_3	1.4	33000	33000	7832	6.19	1.0e-04	0.98713	0.00110	0.98932	hciacyct12_33_2_3	0.98922	0.00108	0.99139
nciacyct11_32_2_3	1.4	32000	32000	7885	6.43	1.0e-04	0.97809	0.00109	0.98028	hciacyct12_32_2_3	0.98046	0.00098	0.98242
nciacyct11_31_2_3	1.4	31000	31000	7938	6.68	1.0e-04	0.96968	0.00130	0.97227	hciacyct12_31_2_3	0.96951	0.00147	0.97246
nciacyct11_30_2_3	1.4	30000	30000	7992	6.95	1.0e-04	0.96031	0.00132	0.96295	hciacyct12_30_2_3	0.96156	0.00107	0.96370
nciacyct11_29_2_3	1.4	29000	29000	8045	7.24	1.0e-04	0.95128	0.00117	0.95362	hciacyct12_29_2_3	0.95414	0.00120	0.95654
nciacyct11_28_2_3	1.4	28000	28000	8098	7.55	1.0e-04	0.94378	0.00138	0.94654	hciacyct12_28_2_3	0.94376	0.00138	0.94652
nciacyct11_27_2_3	1.4	27000	27000	8151	7.88	1.0e-04	0.93234	0.00111	0.93456	hciacyct12_27_2_3	0.93273	0.00132	0.93536
nciacyct11_26_2_3	1.4	26000	26000	8204	8.24	1.0e-04	0.92078	0.00104	0.92287	hciacyct12_26_2_3	0.92390	0.00128	0.92646
nciacyct11_25_2_3	1.4	25000	25000	8257	8.62	1.0e-04	0.91264	0.00100	0.91465	hciacyct12_25_2_3	0.91352	0.00105	0.91562
nciacyct11_24_2_3	1.4	24000	24000	8310	9.04	1.0e-04	0.89955	0.00124	0.90203	hciacyct12_24_2_3	0.90170	0.00109	0.90388
nciacyct11_23_2_3	1.4	23000	23000	8363	9.49	1.0e-04	0.89118	0.00128	0.89374	hciacyct12_23_2_3	0.89159	0.00128	0.89414
nciacyct11_22_2_3	1.4	22000	22000	8416	9.98	1.0e-04	0.87715	0.00098	0.87910	hciacyct12_22_2_3	0.87791	0.00103	0.87997
nciacyct11_21_2_3	1.4	21000	21000	8469	10.53	1.0e-04	0.86679	0.00109	0.86898	hciacyct12_21_2_3	0.86482	0.00106	0.86693
nciacyct11_20_2_3	1.4	20000	20000	8522	11.12	1.0e-04	0.85029	0.00131	0.85292	hciacyct12_20_2_3	0.85207	0.00119	0.85445
nciacyct11_19_2_3	1.4	19000	19000	8575	11.78	1.0e-04	0.83585	0.00110	0.83805	hciacyct12_19_2_3	0.83631	0.00101	0.83833
nciacyct11_18_2_3	1.4	18000	18000	8628	12.51	1.0e-04	0.82112	0.00105	0.82323	hciacyct12_18_2_3	0.82020	0.00108	0.82236

Table 6.9.6-7. Results for 4.25 in.-diameter cylinder HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2\sigma$	case name	k_{eff}	σ	$k_{eff}+2\sigma$
nciacyct11_15_2_3	1.4	15000	15000	8787	15.29	1.0e-04	0.77012	0.00102	0.77216	hciacyct12_15_2_3	0.77067	0.00099	0.77265
nciacyct11_12_2_3	1.4	12000	12000	8947	19.46	1.0e-04	0.70996	0.00113	0.71222	hciacyct12_12_2_3	0.70716	0.00100	0.70915
nciacyct11_9_2_3	1.4	9000	9000	9106	26.41	1.0e-04	0.38338	0.00093	0.38524	hciacyct12_9_2_3	0.62982	0.00097	0.63175
nciacyct11_6_2_3	1.4	6000	6000	9265	40.30	1.0e-04	0.63066	0.00100	0.63267	hciacyct12_6_2_3	0.52901	0.00100	0.53101
nciacyct11_3_2_3	1.4	3000	3000	9424	81.99	1.0e-04	0.52971	0.00101	0.53173	hciacyct12_3_2_3	0.38124	0.00075	0.38274

Table 6.9.6-8. Results for 1.5in.-diameter x 2.0 in.-tall slug HEU metal content in CV calculation model

case name	np (in)	U (g)	^{235}U (g)	H_2O (g)	h/x	mocfr	k_{eff}	σ	$k_{eff}+2\sigma$	content description
flooded containment vessel, reflected										
no can spacers (np thickness = 0.0 in.)										
cvcr5st11_1_1	0.0	18287	18287	9227	13.17	1.0e+00	0.90605	0.00106	0.90816	5 slugs in a pentagonal ring
cvcr5est11_1_1	0.0	18287	18287	9227	13.17	1.0e+00	0.90653	0.00119	0.90890	5 slugs in a pentagonal ring, extended spacing
cvcr6st11_1_1	0.0	21944	21944	9033	10.74	1.0e+00	0.95048	0.00129	0.95306	6 slug in hexagonal ring
cvcr6e0st11_1	0.0	21944	21944	9033	10.74	1.0e+00	0.95562	0.00117	0.95796	6 slug in hexagonal ring, extended spacing
cvcr70st11_1	0.0	25601	25601	8839	9.01	1.0e+00	0.99875	0.00114	1.00102	7 slugs, hex ring with slug in center
cvcr5st11_1_2	0.0	36573	36573	8256	5.89	1.0e+00	0.99891	0.00124	1.00139	10 slugs, stacked pentagonal rings
cvcr5est11_1_2	0.0	36573	36573	8256	5.89	1.0e+00	1.00532	0.00114	1.00760	10slugs in stacked pentagonal rings, extended spacing
cvcr6e4st11_1	0.0	36573	36573	8256	5.89	1.0e+00	1.00344	0.00143	1.00631	10 slugs, lower 6 slugs in hex ring, upper 4 in square
cvcr73st11_1	0.0	36573	36573	8256	5.89	1.0e+00	1.00424	0.00141	1.00706	10 slugs, lower 7 slugs in hex ring, upper 3 in triangle
cvcr6st11_1_2	0.0	43888	43888	7868	4.68	1.0e+00	1.04985	0.00114	1.05213	12 slugs in stacked hexagonal rings
with can spacers (np thickness=1.4 in.)										
cvcr5st11_2_1	1.4	18287	18287	8613	12.29	1.0e+00	0.76713	0.00107	0.76927	5 slugs in a pentagonal ring
cvcr5est11_2_1	1.4	18287	18287	8613	12.29	1.0e+00	0.76646	0.00110	0.76865	5 slugs in a pentagonal ring, extended spacing
cvcr6st11_2_1	1.4	21944	21944	8419	10.01	1.0e+00	0.81277	0.00125	0.81526	6 slug in hexagonal ring
cvcr6e0st11_2	1.4	21944	21944	8419	10.01	1.0e+00	0.82013	0.00116	0.82245	6 slug in hexagonal ring, extended spacing

Table 6.9.6-8. Results for 1.5in.-diameter x 2.0 in.-tall slug HEU metal content in CV calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	mocfr	k$_{eff}$	σ	k$_{eff}$+2σ	content description
cvcr70st11_2	1.4	25601	25601	8225	8.39	1.0e+00	0.86288	0.00104	0.86496	7 slugs, hex ring with slug in center
cvcr5st11_2_2	1.4	36573	36573	7643	5.45	1.0e+00	0.89955	0.00121	0.90196	10 slugs, stacked pentagonal rings
cvcr5est11_2_2	1.4	36573	36573	7643	5.45	1.0e+00	0.90082	0.00120	0.90323	10slugs in stacked pentagonal rings, extended spacing
cvcr6e4st11_2	1.4	36573	36573	7643	5.45	1.0e+00	0.90179	0.00117	0.90412	10 slugs, lower 6 slugs in hex ring, upper 4 in square
cvcr73st11_2	1.4	36573	36573	7643	5.45	1.0e+00	0.90104	0.00103	0.90311	10 slugs, lower 7 slugs in hex ring, upper 3 in triangle
cvcr6st11_2_2	1.4	43888	43888	7255	4.31	1.0e+00	0.95305	0.00110	0.95526	12 slugs in stacked hexagonal rings
cvcr6e0st11_1	0.0	21944	21944	9033	10.74	1.0e+00	0.95562	0.00117	0.95796	6 slug in hexagonal ring, extended spacing
cv0r6e0s_1	NA	21944	21944	9033	10.74	1.0e+00	0.95700	0.00121	0.95941	different input specification for above configuration
cvcr70st11_1	0.0	25601	25601	8839	9.01	1.0e+00	0.99875	0.00114	1.00102	7 slugs, hex ring with slug in center
cv0r70s_1	NA	25601	25601	8839	9.01	1.0e+00	0.99604	0.00117	0.99837	different input specification for above configuration
cvcr6e0st11_2	1.4	21944	21944	8419	10.01	1.0e+00	0.82013	0.00116	0.82245	6 slug in hexagonal ring, extended spacing
cv0r6e0s_2	NA	21944	21944	8419	10.01	1.0e+00	0.84713	0.00105	0.84923	above except void replaces spacer material
cvcr70st11_2	1.4	25601	25601	8225	8.39	1.0e+00	0.86288	0.00104	0.86496	7 slugs, hex ring with slug in center
cv0r70s_2	NA	25601	25601	8225	8.39	1.0e+00	0.88438	0.00123	0.88684	above except void replaces spacer material

Table 6.9.6-9. Results for 1.5in.-diameter x 2.0 in.-tall slug HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2σ$	case name	k_{eff}	σ	$k_{eff}+2σ$
content in flooded containment vessel, single package reflected													
NCT										HAC			
no can spacers (np thickness = 0.0 in.)													
ncsr5est11_1_1_15	0.0	18287	18287	9227	13.17	1.0e+00	0.86818	0.00112	0.87041	hcsr5est12_1_1_15	0.87053	0.00110	0.87274
ncsr5st11_1_1_15	0.0	18287	18287	9227	13.17	1.0e+00	0.87972	0.00126	0.88225				
ncsr6st11_1_1_15	0.0	21944	21944	9033	10.74	1.0e+00	0.91449	0.00124	0.91698				
ncsr5est11_1_2_15	0.0	36573	36573	8256	5.89	1.0e+00	0.96313	0.00136	0.96585	hcsr5est12_1_2_15	0.96486	0.00118	0.96723
ncsr5st11_1_2_15	0.0	36573	36573	8256	5.89	1.0e+00	0.96977	0.00133	0.97243				
ncsr6e4st11_1_1	0.0	36573	36573	8256	5.89	1.0e-20	0.92271	0.00111	0.92493				
ncsr6e4st11_1_2	0.0	36573	36573	8256	5.89	1.0e-05	0.92135	0.00122	0.92379				
ncsr6e4st11_1_3	0.0	36573	36573	8256	5.89	1.0e-04	0.92043	0.00131	0.92305				
ncsr6e4st11_1_4	0.0	36573	36573	8256	5.89	1.0e-03	0.92104	0.00114	0.92332				
ncsr6e4st11_1_5	0.0	36573	36573	8256	5.89	1.0e-02	0.92165	0.00116	0.92396				
ncsr6e4st11_1_6	0.0	36573	36573	8256	5.89	1.0e-01	0.92715	0.00124	0.92963				
ncsr6e4st11_1_8	0.0	36573	36573	8256	5.89	3.0e-01	0.93862	0.00125	0.94112				
ncsr6e4st11_1_15	0.0	36573	36573	8256	5.89	1.0e+00	0.97156	0.00115	0.97385				
ncsr73st11_1_1	0.0	36573	36573	8256	5.89	1.0e-20	0.92423	0.00129	0.92681				
ncsr73st11_1_2	0.0	36573	36573	8256	5.89	1.0e-05	0.92276	0.00120	0.92516				
ncsr73st11_1_3	0.0	36573	36573	8256	5.89	1.0e-04	0.92512	0.00107	0.92726				
ncsr73st11_1_4	0.0	36573	36573	8256	5.89	1.0e-03	0.92368	0.00132	0.92632				
ncsr73st11_1_5	0.0	36573	36573	8256	5.89	1.0e-02	0.92471	0.00118	0.92707				
ncsr73st11_1_6	0.0	36573	36573	8256	5.89	1.0e-01	0.92871	0.00112	0.93096				
ncsr73st11_1_8	0.0	36573	36573	8256	5.89	3.0e-01	0.93905	0.00115	0.94136				
ncsr73st11_1_15	0.0	36573	36573	8256	5.89	1.0e+00	0.97247	0.00133	0.97513				

Table 6.9.6-9. Results for 1.5in.-diameter x 2.0 in.-tall slug HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncsr6st11_1_2_15	0.0	43888	43888	7868	4.68	1.0e+00	1.00987	0.00124	1.01234				
with can spacers (np thickness = 1.4 in.)													
ncsr5est11_2_1_1	1.4	18287	18287	8613	12.29	1.0e-20	0.68493	0.00106	0.68705	hcsr5est12_2_1_1	0.68749	0.00105	0.68959
ncsr5est11_2_1_2	1.4	18287	18287	8613	12.29	1.0e-05	0.68672	0.00095	0.68861	hcsr5est12_2_1_2	0.68812	0.00122	0.69056
ncsr5est11_2_1_3	1.4	18287	18287	8613	12.29	1.0e-04	0.68729	0.00110	0.68949	hcsr5est12_2_1_3	0.68877	0.00115	0.69108
ncsr5est11_2_1_4	1.4	18287	18287	8613	12.29	1.0e-03	0.68754	0.00111	0.68976	hcsr5est12_2_1_4	0.68817	0.00118	0.69052
ncsr5est11_2_1_5	1.4	18287	18287	8613	12.29	1.0e-02	0.68517	0.00107	0.68732	hcsr5est12_2_1_5	0.68797	0.00098	0.68994
ncsr5est11_2_1_6	1.4	18287	18287	8613	12.29	1.0e-01	0.68983	0.00102	0.69186	hcsr5est12_2_1_6	0.69385	0.00095	0.69576
ncsr5est11_2_1_8	1.4	18287	18287	8613	12.29	3.0e-01	0.70236	0.00104	0.70444	hcsr5est12_2_1_8	0.70523	0.00099	0.70721
ncsr5est11_2_1_15	1.4	18287	18287	8613	12.29	1.0e+00	0.73502	0.00110	0.73723	hcsr5est12_2_1_15	0.73681	0.00107	0.73895
ncsr5st11_2_1_1	1.4	18287	18287	8613	12.29	1.0e-20	0.70982	0.00104	0.71190				
ncsr5st11_2_1_2	1.4	18287	18287	8613	12.29	1.0e-05	0.71076	0.00112	0.71299				
ncsr5st11_2_1_3	1.4	18287	18287	8613	12.29	1.0e-04	0.70905	0.00107	0.71120				
ncsr5st11_2_1_4	1.4	18287	18287	8613	12.29	1.0e-03	0.71077	0.00103	0.71283				
ncsr5st11_2_1_5	1.4	18287	18287	8613	12.29	1.0e-02	0.71197	0.00122	0.71442				
ncsr5st11_2_1_6	1.4	18287	18287	8613	12.29	1.0e-01	0.71495	0.00113	0.71722				
ncsr5st11_2_1_8	1.4	18287	18287	8613	12.29	3.0e-01	0.72454	0.00101	0.72655				
ncsr5st11_2_1_15	1.4	18287	18287	8613	12.29	1.0e+00	0.74767	0.00107	0.74981				
ncsr6st11_2_1_1	1.4	21944	21944	8419	10.01	1.0e-20	0.73305	0.00104	0.73513				
ncsr6st11_2_1_2	1.4	21944	21944	8419	10.01	1.0e-05	0.73484	0.00106	0.73696				
ncsr6st11_2_1_3	1.4	21944	21944	8419	10.01	1.0e-04	0.73488	0.00136	0.73761				
ncsr6st11_2_1_4	1.4	21944	21944	8419	10.01	1.0e-03	0.73444	0.00134	0.73711				
ncsr6st11_2_1_5	1.4	21944	21944	8419	10.01	1.0e-02	0.73455	0.00112	0.73680				
ncsr6st11_2_1_6	1.4	21944	21944	8419	10.01	1.0e-01	0.73988	0.00117	0.74223				

Table 6.9.6-9. Results for 1.5in.-diameter x 2.0 in.-tall slug HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncsr6st11_2_1_8	1.4	21944	21944	8419	10.01	3.0e-01	0.75075	0.00106	0.75287				
ncsr6st11_2_1_15	1.4	21944	21944	8419	10.01	1.0e+00	0.78228	0.00114	0.78456				
ncsr5est11_2_2_1	1.4	36573	36573	7643	5.45	1.0e-20	0.81624	0.00115	0.81854	hcsr5est12_2_2_1	0.81763	0.00141	0.82044
ncsr5est11_2_2_2	1.4	36573	36573	7643	5.45	1.0e-05	0.81744	0.00130	0.82005	hcsr5est12_2_2_2	0.82087	0.00121	0.82328
ncsr5est11_2_2_3	1.4	36573	36573	7643	5.45	1.0e-04	0.81510	0.00105	0.81719	hcsr5est12_2_2_3	0.81634	0.00116	0.81866
ncsr5est11_2_2_4	1.4	36573	36573	7643	5.45	1.0e-03	0.81594	0.00124	0.81842	hcsr5est12_2_2_4	0.81710	0.00131	0.81971
ncsr5est11_2_2_5	1.4	36573	36573	7643	5.45	1.0e-02	0.81554	0.00111	0.81776	hcsr5est12_2_2_5	0.81878	0.00126	0.82130
ncsr5est11_2_2_6	1.4	36573	36573	7643	5.45	1.0e-01	0.82107	0.00117	0.82341	hcsr5est12_2_2_6	0.82374	0.00106	0.82586
ncsr5est11_2_2_8	1.4	36573	36573	7643	5.45	3.0e-01	0.83390	0.00112	0.83614	hcsr5est12_2_2_8	0.83397	0.00110	0.83617
ncsr5est11_2_2_15	1.4	36573	36573	7643	5.45	1.0e+00	0.86624	0.00099	0.86822	hcsr5est12_2_2_15	0.86855	0.00139	0.87133
ncsr5st11_2_2_1	1.4	36573	36573	7643	5.45	1.0e-20	0.83577	0.00102	0.83781				
ncsr5st11_2_2_2	1.4	36573	36573	7643	5.45	1.0e-05	0.83668	0.00104	0.83877				
ncsr5st11_2_2_3	1.4	36573	36573	7643	5.45	1.0e-04	0.83426	0.00105	0.83635				
ncsr5st11_2_2_4	1.4	36573	36573	7643	5.45	1.0e-03	0.83520	0.00109	0.83738				
ncsr5st11_2_2_5	1.4	36573	36573	7643	5.45	1.0e-02	0.83744	0.00119	0.83983				
ncsr5st11_2_2_6	1.4	36573	36573	7643	5.45	1.0e-01	0.83901	0.00116	0.84133				
ncsr5st11_2_2_8	1.4	36573	36573	7643	5.45	3.0e-01	0.85069	0.00108	0.85284				
ncsr5st11_2_2_15	1.4	36573	36573	7643	5.45	1.0e+00	0.87592	0.00116	0.87824				
ncsr6e4st11_2_1	1.4	36573	36573	7643	5.45	1.0e-20	0.83684	0.00119	0.83923				
ncsr6e4st11_2_2	1.4	36573	36573	7643	5.45	1.0e-05	0.83670	0.00125	0.83919				
ncsr6e4st11_2_3	1.4	36573	36573	7643	5.45	1.0e-04	0.83723	0.00096	0.83916				
ncsr6e4st11_2_4	1.4	36573	36573	7643	5.45	1.0e-03	0.83709	0.00118	0.83945				
ncsr6e4st11_2_5	1.4	36573	36573	7643	5.45	1.0e-02	0.84022	0.00114	0.84250				
ncsr6e4st11_2_6	1.4	36573	36573	7643	5.45	1.0e-01	0.84131	0.00116	0.84363				

Table 6.9.6-9. Results for 1.5in.-diameter x 2.0 in.-tall slug HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncsr6e4st11_2_8	1.4	36573	36573	7643	5.45	3.0e-01	0.85064	0.00129	0.85322				
ncsr6e4st11_2_15	1.4	36573	36573	7643	5.45	1.0e+00	0.87588	0.00116	0.87821				
ncsr73st11_2_1	1.4	36573	36573	7643	5.45	1.0e-20	0.83840	0.00120	0.84080				
ncsr73st11_2_2	1.4	36573	36573	7643	5.45	1.0e-05	0.83633	0.00123	0.83880				
ncsr73st11_2_3	1.4	36573	36573	7643	5.45	1.0e-04	0.83744	0.00111	0.83966				
ncsr73st11_2_4	1.4	36573	36573	7643	5.45	1.0e-03	0.83588	0.00122	0.83832				
ncsr73st11_2_5	1.4	36573	36573	7643	5.45	1.0e-02	0.83897	0.00126	0.84148				
ncsr73st11_2_6	1.4	36573	36573	7643	5.45	1.0e-01	0.84169	0.00110	0.84390				
ncsr73st11_2_8	1.4	36573	36573	7643	5.45	3.0e-01	0.85195	0.00113	0.85420				
ncsr73st11_2_15	1.4	36573	36573	7643	5.45	1.0e+00	0.87500	0.00112	0.87725				
ncsr6st11_2_2_1	1.4	43888	43888	7255	4.31	1.0e-20	0.86637	0.00103	0.86844				
ncsr6st11_2_2_2	1.4	43888	43888	7255	4.31	1.0e-05	0.86774	0.00112	0.86998				
ncsr6st11_2_2_3	1.4	43888	43888	7255	4.31	1.0e-04	0.86478	0.00115	0.86709				
ncsr6st11_2_2_4	1.4	43888	43888	7255	4.31	1.0e-03	0.86434	0.00130	0.86694				
ncsr6st11_2_2_5	1.4	43888	43888	7255	4.31	1.0e-02	0.86693	0.00119	0.86931				
ncsr6st11_2_2_6	1.4	43888	43888	7255	4.31	1.0e-01	0.87240	0.00118	0.87475				
ncsr6st11_2_2_8	1.4	43888	43888	7255	4.31	3.0e-01	0.88271	0.00130	0.88531				
ncsr6st11_2_2_15	1.4	43888	43888	7255	4.31	1.0e+00	0.91503	0.00132	0.91768				
content in flooded containment vessel, array packaging model for CSI=0.0													
NCT										**HAC**			
no can spacers (np thickness = 0.0 in.)													
ncia5est11_1_1_8_3	0.0	18287	18287	9227	13.17	1.0e-04	0.92009	0.00123	0.92254	hcia5est12_1_1_8_3	0.92148	0.00117	0.92382
ncia5est11_1_1_7_3	0.0	18298	17383	9227	13.85	1.0e-04	0.90383	0.00124	0.90632	hcia5est12_1_1_7_3	0.90251	0.00117	0.90485
ncia5est11_1_1_6_3	0.0	18310	16479	9227	14.61	1.0e-04	0.88747	0.00131	0.89008	hcia5est12_1_1_6_3	0.88612	0.00124	0.88860
ncia5est11_1_1_5_3	0.0	18333	14666	9227	16.42	1.0e-04	0.85030	0.00107	0.85243	hcia5est12_1_1_5_3	0.85208	0.00102	0.85412

6-193

Table 6.9.6-9. Results for 1.5in.-diameter x 2.0 in.-tall slug HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k$_{eff}$	σ	k$_{eff}$+2σ	case name	k$_{eff}$	σ	k$_{eff}$+2σ
ncia5est11_1_1_4_3	0.0	18356	12849	9227	18.74	1.0e-04	0.81064	0.00099	0.81262	hcia5est12_1_1_4_3	0.81060	0.00109	0.81279
ncia5est11_1_1_3_3	0.0	18379	11028	9227	21.84	1.0e-04	0.77025	0.00109	0.77243	hcia5est12_1_1_3_3	0.77256	0.00102	0.77459
ncia5est11_1_1_2_3	0.0	18426	7371	9227	32.67	1.0e-04	0.67928	0.00102	0.68133	hcia5est12_1_1_2_3	0.67602	0.00099	0.67799
ncia5est11_1_1_1_3	0.0	18476	3510	9227	68.60	1.0e-04	0.54799	0.00092	0.54984	hcia5est12_1_1_1_3	0.54770	0.00088	0.54946
ncia5est11_1_2_8_3	0.0	36573	36573	8256	5.89	1.0e-04	1.06332	0.00111	1.06554	hcia5est12_1_2_8_3	1.06219	0.00138	1.06495
ncia5est11_1_2_7_3	0.0	36596	34766	8256	6.20	1.0e-04	1.04371	0.00123	1.04617	hcia5est12_1_2_7_3	1.04154	0.00112	1.04378
ncia5est11_1_2_6_3	0.0	36619	32957	8256	6.54	1.0e-04	1.02057	0.00122	1.02301	hcia5est12_1_2_6_3	1.02358	0.00110	1.02579
ncia5est11_1_2_5_3	0.0	36666	29333	8256	7.35	1.0e-04	0.98515	0.00117	0.98749	hcia5est12_1_2_5_3	0.98719	0.00130	0.98978
ncia5est11_1_2_4_3	0.0	36712	25699	8256	8.39	1.0e-04	0.94533	0.00120	0.94773	hcia5est12_1_2_4_3	0.94576	0.00115	0.94805
ncia5est11_1_2_3_3	0.0	36759	22055	8256	9.77	1.0e-04	0.90285	0.00112	0.90508	hcia5est12_1_2_3_3	0.90236	0.00113	0.90462
ncia5est11_1_2_2_3	0.0	36852	14741	8256	14.62	1.0e-04	0.79971	0.00114	0.80200	hcia5est12_1_2_2_3	0.79951	0.00098	0.80147
ncia5est11_1_2_1_3	0.0	36951	7021	8256	30.69	1.0e-04	0.65484	0.00103	0.65690	hcia5est12_1_2_1_3	0.65339	0.00100	0.65539
ncia70st11_1_8_3	0.0	25601	25601	8839	9.01	1.0e-04	1.02262	0.00128	1.02517	hcia70st12_1_8_3	1.01826	0.00112	1.02050
ncia70st11_1_7_3	0.0	25617	24336	8839	9.48	1.0e-04	0.99918	0.00132	1.00181	hcia70st12_1_7_3	0.99864	0.00107	1.00078
ncia70st11_1_6_3	0.0	25634	23070	8839	10.00	1.0e-04	0.97717	0.00122	0.97961	hcia70st12_1_6_3	0.97931	0.00111	0.98153
ncia70st11_1_5_3	0.0	25666	20533	8839	11.24	1.0e-04	0.93096	0.00104	0.93305	hcia70st12_1_5_3	0.93260	0.00102	0.93463
ncia70st11_1_4_3	0.0	25699	17989	8839	12.82	1.0e-04	0.88232	0.00108	0.88448	hcia70st12_1_4_3	0.88438	0.00117	0.88672
ncia70st11_1_3_3	0.0	25731	15439	8839	14.94	1.0e-04	0.82758	0.00114	0.82987	hcia70st12_1_3_3	0.82823	0.00118	0.83059
ncia70st11_1_2_3	0.0	25797	10319	8839	22.36	1.0e-04	0.70072	0.00092	0.70256	hcia70st12_1_2_3	0.70252	0.00106	0.70463
ncia70st11_1_1_3	0.0	25866	4915	8839	46.94	1.0e-04	0.52855	0.00085	0.53025	hcia70st12_1_1_3	0.52757	0.00076	0.52908
with can spacers (np thickness = 1.4 in.)													
ncia5est11_2_1_8_3	1.4	18287	18287	8613	12.29	1.0e-04	0.80338	0.00109	0.80555	hcia5est12_2_1_8_3	0.80435	0.00120	0.80675
ncia5est11_2_1_7_3	1.4	18298	17383	8613	12.93	1.0e-04	0.78874	0.00132	0.79137	hcia5est12_2_1_7_3	0.78740	0.00117	0.78975
ncia5est11_2_1_6_3	1.4	18310	16479	8613	13.64	1.0e-04	0.77177	0.00102	0.77380	hcia5est12_2_1_6_3	0.77286	0.00104	0.77494
ncia5est11_2_1_5_3	1.4	18333	14666	8613	15.33	1.0e-04	0.73829	0.00099	0.74028	hcia5est12_2_1_5_3	0.73720	0.00102	0.73923

6-194

Table 6.9.6-9. Results for 1.5in.-diameter x 2.0 in.-tall slug HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncia5est11_2_1_4_3	1.4	18356	12849	8613	17.50	1.0e-04	0.70294	0.00120	0.70533	hcia5est12_2_1_4_3	0.70160	0.00094	0.70348
ncia5est11_2_1_3_3	1.4	18379	11028	8613	20.39	1.0e-04	0.66394	0.00091	0.66576	hcia5est12_2_1_3_3	0.66309	0.00121	0.66552
ncia5est11_2_1_2_3	1.4	18426	7371	8613	30.50	1.0e-04	0.57400	0.00094	0.57588	hcia5est12_2_1_2_3	0.57357	0.00100	0.57556
ncia5est11_2_1_1_3	1.4	18476	3510	8613	64.04	1.0e-04	0.45075	0.00083	0.45242	hcia5est12_2_1_1_3	0.44980	0.00084	0.45149
ncia5est11_2_2_8_3	1.4	36573	36573	7643	5.45	1.0e-04	0.98112	0.00117	0.98347	hcia5est12_2_2_8_3	0.98299	0.00113	0.98525
ncia5est11_2_2_7_3	1.4	36596	34766	7643	5.74	1.0e-04	0.96102	0.00115	0.96332	hcia5est12_2_2_7_3	0.96324	0.00109	0.96543
ncia5est11_2_2_6_3	1.4	36619	32957	7643	6.05	1.0e-04	0.94308	0.00113	0.94534	hcia5est12_2_2_6_3	0.94385	0.00107	0.94599
ncia5est11_2_2_5_3	1.4	36666	29333	7643	6.80	1.0e-04	0.90696	0.00118	0.90932	hcia5est12_2_2_5_3	0.90531	0.00115	0.90760
ncia5est11_2_2_4_3	1.4	36712	25699	7643	7.76	1.0e-04	0.86647	0.00109	0.86866	hcia5est12_2_2_4_3	0.86689	0.00108	0.86904
ncia5est11_2_2_3_3	1.4	36759	22055	7643	9.04	1.0e-04	0.82583	0.00111	0.82804	hcia5est12_2_2_3_3	0.82583	0.00108	0.82798
ncia5est11_2_2_2_3	1.4	36852	14741	7643	13.53	1.0e-04	0.72513	0.00106	0.72726	hcia5est12_2_2_2_3	0.72450	0.00093	0.72637
ncia5est11_2_2_1_3	1.4	36951	7021	7643	28.41	1.0e-04	0.58029	0.00096	0.58220	hcia5est12_2_2_1_3	0.58063	0.00087	0.58237
ncia70st11_2_8_3	1.4	25601	25601	8225	8.39	1.0e-04	0.91205	0.00120	0.91445	hcia70st12_2_8_3	0.91095	0.00117	0.91329
ncia70st11_2_7_3	1.4	25617	24336	8225	8.82	1.0e-04	0.89226	0.00114	0.89453	hcia70st12_2_7_3	0.89280	0.00111	0.89502
ncia70st11_2_6_3	1.4	25634	23070	8225	9.31	1.0e-04	0.87368	0.00120	0.87608	hcia70st12_2_6_3	0.87134	0.00114	0.87362
ncia70st11_2_5_3	1.4	25666	20533	8225	10.46	1.0e-04	0.83140	0.00115	0.83370	hcia70st12_2_5_3	0.83212	0.00108	0.83429
ncia70st11_2_4_3	1.4	25699	17989	8225	11.93	1.0e-04	0.78721	0.00104	0.78928	hcia70st12_2_4_3	0.78630	0.00099	0.78829
ncia70st11_2_3_3	1.4	25731	15439	8225	13.91	1.0e-04	0.73809	0.00099	0.74007	hcia70st12_2_3_3	0.73814	0.00093	0.74000
ncia70st11_2_2_3	1.4	25797	10319	8225	20.80	1.0e-04	0.62635	0.00094	0.62823	hcia70st12_2_2_3	0.62476	0.00086	0.62648
ncia70st11_2_1_3	1.4	25866	4915	8225	43.68	1.0e-04	0.47155	0.00081	0.47317	hcia70st12_2_1_3	0.47189	0.00075	0.47339
content in flooded containment vessel, array packaging model for CSI=0.4													
NCT										HAC			
no can spacers (np thickness = 0.0 in.)													
ncf15est11_1_1_8_3	0.0	18287	18287	9227	13.17	1.0e-04	0.87792	0.00110	0.88012	hcf25est12_1_1_8_3	0.86990	0.00114	0.87218
ncf15est11_1_1_7_3	0.0	18298	17383	9227	13.85	1.0e-04	0.86360	0.00130	0.86621	hcf25est12_1_1_7_3	0.85421	0.00113	0.85647

Y/LF-717/Rev 2/ES-3100 HEU SAR/Ch-6/rlw/3-06-08

Table 6.9.6-9. Results for 1.5in.-diameter x 2.0 in.-tall slug HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncf15est11_1_1_6_3	0.0	18310	16479	9227	14.61	1.0e-04	0.84463	0.00123	0.84709	hcf25est12_1_1_6_3	0.83502	0.00119	0.83740
ncf15est11_1_1_5_3	0.0	18333	14666	9227	16.42	1.0e-04	0.80982	0.00107	0.81196	hcf25est12_1_1_5_3	0.79964	0.00116	0.80195
ncf15est11_1_1_4_3	0.0	18356	12849	9227	18.74	1.0e-04	0.77287	0.00116	0.77519	hcf25est12_1_1_4_3	0.76516	0.00099	0.76714
ncf15est11_1_1_3_3	0.0	18379	11028	9227	21.84	1.0e-04	0.73191	0.00096	0.73382	hcf25est12_1_1_3_3	0.72538	0.00113	0.72765
ncf15est11_1_1_2_3	0.0	18426	7371	9227	32.67	1.0e-04	0.64188	0.00107	0.64402	hcf25est12_1_1_2_3	0.63377	0.00103	0.63583
ncf15est11_1_1_1_3	0.0	18476	3510	9227	68.60	1.0e-04	0.51528	0.00081	0.51691	hcf25est12_1_1_1_3	0.50857	0.00082	0.51021
ncf15est11_1_2_8_3	0.0	36573	36573	8256	5.89	1.0e-04	1.01644	0.00136	1.01916	hcf25est12_1_2_8_3	1.00519	0.00115	1.00749
ncf15est11_1_2_7_3	0.0	36596	34766	8256	6.20	1.0e-04	0.99630	0.00110	0.99851	hcf25est12_1_2_7_3	0.98445	0.00132	0.98709
ncf15est11_1_2_6_3	0.0	36619	32957	8256	6.54	1.0e-04	0.97860	0.00127	0.98113	hcf25est12_1_2_6_3	0.96447	0.00138	0.96723
ncf15est11_1_2_5_3	0.0	36666	29333	8256	7.35	1.0e-04	0.94048	0.00104	0.94256	hcf25est12_1_2_5_3	0.93061	0.00123	0.93306
ncf15est11_1_2_4_3	0.0	36712	25699	8256	8.39	1.0e-04	0.90142	0.00116	0.90374	hcf25est12_1_2_4_3	0.89027	0.00123	0.89272
ncf15est11_1_2_3_3	0.0	36759	22055	8256	9.77	1.0e-04	0.85944	0.00115	0.86174	hcf25est12_1_2_3_3	0.84820	0.00112	0.85044
ncf15est11_1_2_2_3	0.0	36852	14741	8256	14.62	1.0e-04	0.75550	0.00113	0.75775	hcf25est12_1_2_2_3	0.74693	0.00116	0.74925
ncf15est11_1_2_1_3	0.0	36951	7021	8256	30.69	1.0e-04	0.61901	0.00110	0.62121	hcf25est12_1_2_1_3	0.60718	0.00094	0.60906
with can spacers (np thickness = 1.4 in.)													
ncf15est11_2_1_8_3	1.4	18287	18287	8613	12.29	1.0e-04	0.76314	0.00111	0.76535	hcf25est12_2_1_8_3	0.75361	0.00115	0.75591
ncf15est11_2_1_7_3	1.4	18298	17383	8613	12.93	1.0e-04	0.74529	0.00136	0.74802	hcf25est12_2_1_7_3	0.73717	0.00114	0.73945
ncf15est11_2_1_6_3	1.4	18310	16479	8613	13.64	1.0e-04	0.73161	0.00115	0.73391	hcf25est12_2_1_6_3	0.72222	0.00098	0.72418
ncf15est11_2_1_5_3	1.4	18333	14666	8613	15.33	1.0e-04	0.69942	0.00117	0.70177	hcf25est12_2_1_5_3	0.69058	0.00116	0.69290
ncf15est11_2_1_4_3	1.4	18356	12849	8613	17.50	1.0e-04	0.66340	0.00104	0.66548	hcf25est12_2_1_4_3	0.65719	0.00095	0.65909
ncf15est11_2_1_3_3	1.4	18379	11028	8613	20.39	1.0e-04	0.62495	0.00111	0.62717	hcf25est12_2_1_3_3	0.61987	0.00103	0.62192
ncf15est11_2_1_2_3	1.4	18426	7371	8613	30.50	1.0e-04	0.54091	0.00083	0.54257	hcf25est12_2_1_2_3	0.53296	0.00101	0.53498
ncf15est11_2_1_1_3	1.4	18476	3510	8613	64.04	1.0e-04	0.42392	0.00100	0.42592	hcf25est12_2_1_1_3	0.41620	0.00088	0.41795
ncf15est11_2_2_8_3	1.4	36573	36573	7643	5.45	1.0e-04	0.93807	0.00142	0.94091	hcf25est12_2_2_8_3	0.92104	0.00122	0.92348
ncf15est11_2_2_7_3	1.4	36596	34766	7643	5.74	1.0e-04	0.91830	0.00125	0.92081	hcf25est12_2_2_7_3	0.90294	0.00120	0.90533

Table 6.9.6-9. Results for 1.5in.-diameter x 2.0 in.-tall slug HEU metal content in packaging calculation model

case name	np (in)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncf15est11_2_2_6_3	1.4	36619	32957	7643	6.05	1.0e-04	0.90031	0.00108	0.90247	hcf25est12_2_2_6_3	0.88756	0.00135	0.89026
ncf15est11_2_2_5_3	1.4	36666	29333	7643	6.80	1.0e-04	0.86582	0.00114	0.86810	hcf25est12_2_2_5_3	0.85128	0.00120	0.85369
ncf15est11_2_2_4_3	1.4	36712	25699	7643	7.76	1.0e-04	0.82433	0.00139	0.82712	hcf25est12_2_2_4_3	0.81192	0.00114	0.81420
ncf15est11_2_2_3_3	1.4	36759	22055	7643	9.04	1.0e-04	0.78109	0.00119	0.78346	hcf25est12_2_2_3_3	0.77192	0.00110	0.77412
ncf15est11_2_2_2_3	1.4	36852	14741	7643	13.53	1.0e-04	0.68647	0.00106	0.68859	hcf25est12_2_2_2_3	0.67521	0.00102	0.67726
ncf15est11_2_2_1_3	1.4	36951	7021	7643	28.41	1.0e-04	0.54795	0.00091	0.54977	hcf25est12_2_2_1_3	0.54124	0.00090	0.54303

Table 6.9.6-10. Results for HEU broken metal content in CV calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	mocfr	k_{eff}	σ	k_{eff}+2σ				
broken metal as 1-in. cubes, flooded containment vessel, reflected														
no can spacers (np thickness = 0.0 in.)														
cvr3sqa_36_1_8_15	0.0	100	35142	35142	8332	6.19	1.0e+00	0.93455	0.00107	0.93668				
cvr3sqa_36_1_7_15	0.0	95	35164	33406	8332	6.51	1.0e+00	0.91663	0.00128	0.91920				
cvr3sqa_36_1_6_15	0.0	90	35186	31667	8332	6.87	1.0e+00	0.90133	0.00123	0.90379				
cvr3sqa_36_1_5_15	0.0	80	35230	28184	8332	7.72	1.0e+00	0.87330	0.00119	0.87567				
cvr3sqa_36_1_4_15	0.0	70	35275	24693	8332	8.81	1.0e+00	0.84424	0.00113	0.84650				
cvr3sqa_36_1_3_15	0.0	60	35320	21192	8332	10.26	1.0e+00	0.81162	0.00124	0.81410				
cvr3sqa_36_1_2_15	0.0	40	35410	14164	8332	15.35	1.0e+00	0.73700	0.00098	0.73896				
cvr3sqa_36_1_1_15	0.0	19	35505	6746	8332	32.24	1.0e+00	0.63755	0.00119	0.63992				
cvr3sqa_36_1_8_1	0.0	100	35142	35142	0	0.00	1.0e-20	0.78442	0.00112	0.78667				
cvr3sqa_36_1_8_6	0.0	100	35142	35142	833	0.62	1.0e-01	0.79134	0.00116	0.79366				
cvr3sqa_36_1_8_7	0.0	100	35142	35142	1666	1.24	2.0e-01	0.80350	0.00113	0.80577				
cvr3sqa_36_1_8_8	0.0	100	35142	35142	2500	1.86	3.0e-01	0.81548	0.00107	0.81761				
cvr3sqa_36_1_8_9	0.0	100	35142	35142	3333	2.48	4.0e-01	0.83048	0.00122	0.83293				

6-197

Table 6.9.6-10. Results for HEU broken metal content in CV calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	mocfr	k_{eff}	σ	k_{eff}+2σ
cvr3sqa_36_1_8_10	0.0	100	35142	35142	4166	3.09	5.0e-01	0.84727	0.00122	0.84971
cvr3sqa_36_1_8_11	0.0	100	35142	35142	4999	3.71	6.0e-01	0.86174	0.00123	0.86420
cvr3sqa_36_1_8_12	0.0	100	35142	35142	5832	4.33	7.0e-01	0.87977	0.00118	0.88213
cvr3sqa_36_1_8_13	0.0	100	35142	35142	6666	4.95	8.0e-01	0.89818	0.00110	0.90037
cvr3sqa_36_1_8_14	0.0	100	35142	35142	7499	5.57	9.0e-01	0.91611	0.00118	0.91846
cvr3sqa_36_1_8_15	0.0	100	35142	35142	8332	6.19	1.0e+00	0.93455	0.00107	0.93668
with can spacers (np thickness = 1.4 in.)										
cvr3sqa_36_2_8_15	1.4	100	35142	35142	7719	5.73	1.0e+00	0.85151	0.00123	0.85397
cvr3sqa_36_2_7_15	1.4	95	35164	33406	7719	6.03	1.0e+00	0.83521	0.00123	0.83766
cvr3sqa_36_2_6_15	1.4	90	35186	31667	7719	6.36	1.0e+00	0.82166	0.00125	0.82415
cvr3sqa_36_2_5_15	1.4	80	35230	28184	7719	7.15	1.0e+00	0.78928	0.00112	0.79152
cvr3sqa_36_2_4_15	1.4	70	35275	24693	7719	8.16	1.0e+00	0.75994	0.00113	0.76220
cvr3sqa_36_2_3_15	1.4	60	35320	21192	7719	9.51	1.0e+00	0.72673	0.00112	0.72898
cvr3sqa_36_2_2_15	1.4	40	35410	14164	7719	14.22	1.0e+00	0.65008	0.00102	0.65213
cvr3sqa_36_2_1_15	1.4	19	35505	6746	7719	29.86	1.0e+00	0.54677	0.00102	0.54881
broken metal as lattice homogenized 1-in. cubes, flooded containment vessel, reflected										
no can spacers (np thickness = 0.0 in.)										
cvr3lha_36_1_8_1	0.0	100	35142	35142	0	0.00	1.0e-20	0.74814	0.00123	0.75060
cvr3lha_36_1_8_6	0.0	100	35142	35142	833	0.62	1.0e-01	0.76415	0.00125	0.76665
cvr3lha_36_1_8_7	0.0	100	35142	35142	1666	1.24	2.0e-01	0.77899	0.00102	0.78103
cvr3lha_36_1_8_8	0.0	100	35142	35142	2500	1.86	3.0e-01	0.79660	0.00143	0.79946
cvr3lha_36_1_8_9	0.0	100	35142	35142	3333	2.48	4.0e-01	0.81635	0.00113	0.81861
cvr3lha_36_1_8_10	0.0	100	35142	35142	4166	3.09	5.0e-01	0.83767	0.00109	0.83986
cvr3lha_36_1_8_11	0.0	100	35142	35142	4999	3.71	6.0e-01	0.85716	0.00116	0.85949
cvr3lha_36_1_8_12	0.0	100	35142	35142	5832	4.33	7.0e-01	0.88187	0.00114	0.88415
cvr3lha_36_1_8_13	0.0	100	35142	35142	6666	4.95	8.0e-01	0.90182	0.00109	0.90399
cvr3lha_36_1_8_14	0.0	100	35142	35142	7499	5.57	9.0e-01	0.92553	0.00148	0.92849

Table 6.9.6-10. Results for HEU broken metal content in CV calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	mocfr	k_{eff}	σ	k_{eff}+2σ				
cvr3lha_36_1_8_15	0.0	100	35142	35142	8332	6.19	1.0e+00	0.94654	0.00126	0.94906				
cvr3lha_36_1_8_15	0.0	100	35142	35142	8332	6.19	1.0e+00	0.94654	0.00126	0.94906				
cvr3lha_36_1_7_15	0.0	95	35164	33406	8332	6.51	1.0e+00	0.93172	0.00115	0.93403				
cvr3lha_36_1_6_15	0.0	90	35186	31667	8332	6.87	1.0e+00	0.91744	0.00126	0.91995				
cvr3lha_36_1_5_15	0.0	80	35230	28184	8332	7.72	1.0e+00	0.89049	0.00113	0.89274				
cvr3lha_36_1_4_15	0.0	70	35275	24693	8332	8.81	1.0e+00	0.85930	0.00133	0.86196				
cvr3lha_36_1_3_15	0.0	60	35320	21192	8332	10.26	1.0e+00	0.82623	0.00131	0.82886				
cvr3lha_36_1_2_15	0.0	40	35410	14164	8332	15.35	1.0e+00	0.75317	0.00110	0.75536				
cvr3lha_36_1_1_15	0.0	19	35505	6746	8332	32.24	1.0e+00	0.65522	0.00102	0.65726				
cvr3lha_36_1_8_15	0.0	100	35142	35142	8332	6.19	1.0e+00	0.94654	0.00126	0.94906				
cvr3lha_35_1_8_15	0.0	100	34217	34217	8381	6.39	1.0e+00	0.94183	0.00106	0.94396				
cvr3lha_34_1_8_15	0.0	100	33292	33292	8430	6.61	1.0e+00	0.93673	0.00125	0.93922				
cvr3lha_33_1_8_15	0.0	100	32367	32367	8479	6.84	1.0e+00	0.95706	0.00123	0.95952				
cvr3lha_32_1_8_15	0.0	100	31442	31442	8528	7.08	1.0e+00	0.94986	0.00142	0.95271				
cvr3lha_31_1_8_15	0.0	100	30518	30518	8578	7.34	1.0e+00	0.94716	0.00118	0.94953				
cvr3lha_30_1_8_15	0.0	100	29593	29593	8627	7.61	1.0e+00	0.93908	0.00127	0.94162				
cvr3lha_29_1_8_15	0.0	100	28668	28668	8676	7.90	1.0e+00	0.93306	0.00126	0.93557				
cvr3lha_28_1_8_15	0.0	100	27743	27743	8725	8.21	1.0e+00	0.93059	0.00137	0.93333				
cvr3lha_27_1_8_15	0.0	100	26818	26818	8774	8.54	1.0e+00	0.92502	0.00139	0.92780				
cvr3lha_26_1_8_15	0.0	100	25894	25894	8823	8.89	1.0e+00	0.91519	0.00145	0.91810				
cvr3lha_25_1_8_15	0.0	100	24969	24969	8872	9.27	1.0e+00	0.91200	0.00125	0.91451				
cvr3lha_24_1_8_15	0.0	100	23119	23119	8970	10.13	1.0e+00	0.92028	0.00106	0.92241				
cvr3lha_23_1_8_15	0.0	100	22195	22195	9019	10.61	1.0e+00	0.91201	0.00115	0.91430				
cvr3lha_22_1_8_15	0.0	100	21270	21270	9068	11.13	1.0e+00	0.90500	0.00138	0.90777				
cvr3lha_21_1_8_15	0.0	100	20345	20345	9117	11.70	1.0e+00	0.89763	0.00133	0.90030				

Table 6.9.6-10. Results for HEU broken metal content in CV calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	mocfr	k_{eff}	σ	k_{eff}+2σ					
cvr3lha_31_1_7_15	0.0	95	30537	29010	8578	7.72	1.0e+00	0.92875	0.00129	0.93134					
cvr3lha_30_1_7_15	0.0	95	29612	28131	8627	8.00	1.0e+00	0.92618	0.00111	0.92840					
cvr3lha_29_1_7_15	0.0	95	28686	27252	8676	8.31	1.0e+00	0.91841	0.00107	0.92055					
cvr3lha_28_1_7_15	0.0	95	27761	26373	8725	8.63	1.0e+00	0.91075	0.00124	0.91322					
cvr3lha_27_1_7_15	0.0	95	26835	25494	8774	8.98	1.0e+00	0.90920	0.00117	0.91153					
cvr3lha_33_1_6_15	0.0	90	32408	29167	8479	7.59	1.0e+00	0.92553	0.00126	0.92804					
cvr3lha_32_1_6_15	0.0	90	31482	28334	8528	7.86	1.0e+00	0.92000	0.00119	0.92238					
cvr3lha_31_1_6_15	0.0	90	30556	27501	8578	8.14	1.0e+00	0.91758	0.00132	0.92021					
cvr3lha_36_1_5_15	0.0	80	35230	28184	8332	7.72	1.0e+00	0.89049	0.00113	0.89274					
cvr3lha_35_1_5_15	0.0	80	34303	27443	8381	7.97	1.0e+00	0.88496	0.00111	0.88719					
cvr3lha_34_1_5_15	0.0	80	33376	26701	8430	8.24	1.0e+00	0.88044	0.00106	0.88256					
cvr3lha_33_1_5_15	0.0	80	32449	25959	8479	8.53	1.0e+00	0.89355	0.00112	0.89579					
cvr3lha_32_1_5_15	0.0	80	31522	25218	8528	8.83	1.0e+00	0.88961	0.00146	0.89253					
cvr3lha_31_1_5_15	0.0	80	30595	24476	8578	9.15	1.0e+00	0.88752	0.00141	0.89034					
cvr3lha_36_1_4_15	0.0	70	35275	24693	8332	8.81	1.0e+00	0.85930	0.00133	0.86196					
cvr3lha_35_1_4_15	0.0	70	34347	24043	8381	9.10	1.0e+00	0.85473	0.00113	0.85698					
cvr3lha_34_1_4_15	0.0	70	33419	23393	8430	9.41	1.0e+00	0.85237	0.00129	0.85496					
cvr3lha_33_1_4_15	0.0	70	32490	22743	8479	9.73	1.0e+00	0.86299	0.00121	0.86542					
cvr3lha_32_1_4_15	0.0	70	31562	22093	8528	10.08	1.0e+00	0.85876	0.00132	0.86140					
cvr3lha_31_1_4_15	0.0	70	30634	21444	8578	10.44	1.0e+00	0.85471	0.00125	0.85720					
cvr3lha_36_1_3_15	0.0	60	35320	21192	8332	10.26	1.0e+00	0.82623	0.00131	0.82886					

Table 6.9.6-10. Results for HEU broken metal content in CV calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	mocfr	k_{eff}	σ	k_{eff}+2σ				
cvr3lha_36_1_2_15	0.0	40	35410	14164	8332	15.35	1.0e+00	0.75317	0.00110	0.75536				
cvr3lha_36_1_1_15	0.0	19	35505	6746	8332	32.24	1.0e+00	0.65522	0.00102	0.65726				
cvr3lha_36_2_8_15	1.4	100	35142	35142	7719	5.73	1.0e+00	0.87286	0.00134	0.87554				
cvr3lha_36_2_7_15	1.4	95	35164	33406	7719	6.03	1.0e+00	0.85858	0.00109	0.86077				
cvr3lha_36_2_6_15	1.4	90	35186	31667	7719	6.36	1.0e+00	0.84459	0.00107	0.84672				
cvr3lha_36_2_5_15	1.4	80	35230	28184	7719	7.15	1.0e+00	0.81698	0.00127	0.81952				
cvr3lha_36_2_4_15	1.4	70	35275	24693	7719	8.16	1.0e+00	0.78484	0.00122	0.78727				
cvr3lha_36_2_3_15	1.4	60	35320	21192	7719	9.51	1.0e+00	0.75584	0.00105	0.75795				
cvr3lha_36_2_2_15	1.4	40	35410	14164	7719	14.22	1.0e+00	0.68360	0.00131	0.68623				
cvr3lha_36_2_1_15	1.4	19	35505	6746	7719	29.86	1.0e+00	0.58144	0.00104	0.58352				
broken metal as 1-in. cubes fully homogenized with water for flooded containment vessel, reflected														
no can spacers (np thickness = 0.0 in.)														
cvr3cha_36_1_8_1	0.0	100	35142	35142	0	0.00	1.0e+00	0.61068	0.00099	0.61266				
cvr3cha_36_1_8_6	0.0	100	35142	35142	833	0.62	1.0e+00	0.64671	0.00117	0.64905				
cvr3cha_36_1_8_7	0.0	100	35142	35142	1666	1.24	1.0e+00	0.68117	0.00106	0.68329				
cvr3cha_36_1_8_8	0.0	100	35142	35142	2500	1.86	1.0e+00	0.71931	0.00121	0.72174				
cvr3cha_36_1_8_9	0.0	100	35142	35142	3333	2.48	1.0e+00	0.75910	0.00125	0.76160				
cvr3cha_36_1_8_10	0.0	100	35142	35142	4166	3.09	1.0e+00	0.79344	0.00123	0.79589				
cvr3cha_36_1_8_11	0.0	100	35142	35142	4999	3.71	1.0e+00	0.83513	0.00132	0.83777				
cvr3cha_36_1_8_12	0.0	100	35142	35142	5832	4.33	1.0e+00	0.87270	0.00117	0.87504				
cvr3cha_36_1_8_13	0.0	100	35142	35142	6666	4.95	1.0e+00	0.90988	0.00115	0.91219				
cvr3cha_36_1_8_14	0.0	100	35142	35142	7499	5.57	1.0e+00	0.94696	0.00136	0.94968				
cvr3cha_36_1_8_15	0.0	100	35142	35142	8332	6.19	1.0e+00	0.98062	0.00128	0.98318				

Table 6.9.6-10. Results for HEU broken metal content in CV calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H_2O (g)	h/x	mocfr	k_{eff}	σ	$k_{eff}+2\sigma$					
cvr3cha_36_1_8_15	0.0	100	35142	35142	8332	6.19	1.0e+00	0.98062	0.00128	0.98318					
cvr3cha_36_1_7_15	0.0	95	35164	33406	8332	6.51	1.0e+00	0.96729	0.00134	0.96997					
cvr3cha_36_1_6_15	0.0	90	35186	31667	8332	6.87	1.0e+00	0.95443	0.00144	0.95731					
cvr3cha_36_1_5_15	0.0	80	35230	28184	8332	7.72	1.0e+00	0.93639	0.00114	0.93867					
cvr3cha_36_1_4_15	0.0	70	35275	24693	8332	8.81	1.0e+00	0.91729	0.00125	0.91978					
cvr3cha_36_1_3_15	0.0	60	35320	21192	8332	10.26	1.0e+00	0.89768	0.00137	0.90042					
cvr3cha_36_1_2_15	0.0	40	35410	14164	8332	15.35	1.0e+00	0.85347	0.00132	0.85612					
cvr3cha_36_1_1_15	0.0	19	35505	6746	8332	32.24	1.0e+00	0.78799	0.00132	0.79064					
with can spacers (np thickness = 1.4 in.)															
cvr3cha_36_2_8_15	1.4	100	35142	35142	7719	5.73	1.0e+00	0.96066	0.00128	0.96321					
cvr3cha_36_2_7_15	1.4	95	35164	33406	7719	6.03	1.0e+00	0.94267	0.00127	0.94521					
cvr3cha_36_2_6_15	1.4	90	35186	31667	7719	6.36	1.0e+00	0.93250	0.00117	0.93484					
cvr3cha_36_2_5_15	1.4	80	35230	28184	7719	7.15	1.0e+00	0.91364	0.00126	0.91615					
cvr3cha_36_2_4_15	1.4	70	35275	24693	7719	8.16	1.0e+00	0.89707	0.00125	0.89957					
cvr3cha_36_2_3_15	1.4	60	35320	21192	7719	9.51	1.0e+00	0.87509	0.00121	0.87751					
cvr3cha_36_2_2_15	1.4	40	35410	14164	7719	14.22	1.0e+00	0.82672	0.00135	0.82943					
cvr3cha_36_2_1_15	1.4	19	35505	6746	7719	29.86	1.0e+00	0.76024	0.00148	0.76320					

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2σ$	case name	k_{eff}	σ	$k_{eff}+2σ$
content in flooded containment vessel, single package reflected														
NCT											HAC			
no can spacers (np thickness = 0.0 in.)														
ncsrbmt11_36_1_1	0.0	100	35142	35142	8332	6.19	1.0e-20	0.81144	0.00127	0.81397	hcsrbmt12_36_1_1	0.81597	0.00140	0.81877
ncsrbmt11_36_1_2	0.0	100	35142	35142	8332	6.19	1.0e-05	0.81278	0.00143	0.81563	hcsrbmt12_36_1_2	0.81496	0.00123	0.81741
ncsrbmt11_36_1_3	0.0	100	35142	35142	8332	6.19	1.0e-04	0.81066	0.00124	0.81314	hcsrbmt12_36_1_3	0.81490	0.00149	0.81787
ncsrbmt11_36_1_4	0.0	100	35142	35142	8332	6.19	1.0e-03	0.81064	0.00142	0.81347	hcsrbmt12_36_1_4	0.81512	0.00157	0.81826
ncsrbmt11_36_1_5	0.0	100	35142	35142	8332	6.19	1.0e-02	0.81069	0.00138	0.81346	hcsrbmt12_36_1_5	0.81594	0.00126	0.81846
ncsrbmt11_36_1_6	0.0	100	35142	35142	8332	6.19	1.0e-01	0.81880	0.00126	0.82132	hcsrbmt12_36_1_6	0.82255	0.00126	0.82507
ncsrbmt11_36_1_8	0.0	100	35142	35142	8332	6.19	3.0e-01	0.83502	0.00115	0.83732	hcsrbmt12_36_1_8	0.83846	0.00125	0.84095
ncsrbmt11_36_1_15	0.0	100	35142	35142	8332	6.19	1.0e+00	0.88830	0.00122	0.89075	hcsrbmt12_36_1_15	0.88841	0.00140	0.89122
ncsrbmt11_36_1_15	0.0	100	35142	35142	8332	6.19	1.0e+00	0.88830	0.00122	0.89075				
ncsrbmt11_35_1_15	0.0	100	34217	34217	8381	6.39	1.0e+00	0.88662	0.00129	0.88921				
ncsrbmt11_34_1_15	0.0	100	33292	33292	8430	6.61	1.0e+00	0.88622	0.00119	0.88860				
ncsrbmt11_33_1_15	0.0	100	32367	32367	8479	6.84	1.0e+00	0.88175	0.00127	0.88429				
ncsrbmt11_32_1_15	0.0	100	31442	31442	8529	7.08	1.0e+00	0.88109	0.00124	0.88357				
ncsrbmt11_31_1_15	0.0	100	30518	30518	8578	7.34	1.0e+00	0.87995	0.00126	0.88247				
ncsrbmt11_30_1_15	0.0	100	29593	29593	8627	7.61	1.0e+00	0.87410	0.00144	0.87697				
ncsrbmt11_29_1_15	0.0	100	28668	28668	8676	7.90	1.0e+00	0.87385	0.00118	0.87621				
ncsrbmt11_28_1_15	0.0	100	27743	27743	8725	8.21	1.0e+00	0.87237	0.00119	0.87474				
ncsrbmt11_27_1_15	0.0	100	26819	26819	8774	8.54	1.0e+00	0.86800	0.00126	0.87053				
ncsrbmt11_26_1_15	0.0	100	25894	25894	8823	8.89	1.0e+00	0.86869	0.00123	0.87115				
ncsrbmt11_25_1_15	0.0	100	24969	24969	8872	9.27	1.0e+00	0.86558	0.00152	0.86862				
ncsrbmt11_24_1_15	0.0	100	23119	23119	8970	10.13	1.0e+00	0.85827	0.00123	0.86074				
ncsrbmt11_23_1_15	0.0	100	22195	22195	9019	10.61	1.0e+00	0.85657	0.00134	0.85924				
ncsrbmt11_22_1_15	0.0	100	21270	21270	9068	11.13	1.0e+00	0.85373	0.00156	0.85686				

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncsrbmt11_21_1_15	0.0	100	20345	20345	9117	11.70	1.0e+00	0.85521	0.00126	0.85774				
ncsrbmt11_20_1_15	0.0	100	19420	19420	9166	12.32	1.0e+00	0.84989	0.00157	0.85303				
ncsrbmt11_19_1_15	0.0	100	18496	18496	9216	13.00	1.0e+00	0.85069	0.00155	0.85378				
ncsrbmt11_18_1_15	0.0	100	17571	17571	9265	13.76	1.0e+00	0.84676	0.00182	0.85039				
ncsrbmt11_17_1_15	0.0	100	16646	16646	9314	14.60	1.0e+00	0.84566	0.00147	0.84859				
ncsrbmt11_16_1_15	0.0	100	15721	15721	9363	15.54	1.0e+00	0.84458	0.00125	0.84708				
ncsrbmt11_15_1_15	0.0	100	14796	14796	9412	16.60	1.0e+00	0.83932	0.00148	0.84229				
ncsrbmt11_14_1_15	0.0	100	13872	13872	9461	17.80	1.0e+00	0.83752	0.00133	0.84019				
ncsrbmt11_13_1_15	0.0	100	12947	12947	9510	19.17	1.0e+00	0.83532	0.00151	0.83834				
ncsrbmt11_12_1_15	0.0	100	11097	11097	9608	22.60	1.0e+00	0.82792	0.00133	0.83057				
ncsrbmt11_11_1_15	0.0	100	10173	10173	9657	24.78	1.0e+00	0.82643	0.00127	0.82898				
ncsrbmt11_10_1_15	0.0	100	9248	9248	9706	27.39	1.0e+00	0.82649	0.00160	0.82968				
ncsrbmt11_9_1_15	0.0	100	8323	8323	9755	30.59	1.0e+00	0.81840	0.00140	0.82119				
ncsrbmt11_8_1_15	0.0	100	7398	7398	9804	34.59	1.0e+00	0.81808	0.00170	0.82148				
ncsrbmt11_7_1_15	0.0	100	6473	6473	9854	39.73	1.0e+00	0.81130	0.00152	0.81434				
ncsrbmt11_6_1_15	0.0	100	5549	5549	9903	46.58	1.0e+00	0.80480	0.00140	0.80761				
ncsrbmt11_5_1_15	0.0	100	4624	4624	9952	56.17	1.0e+00	0.79723	0.00124	0.79971				
ncsrbmt11_4_1_15	0.0	100	3699	3699	10001	70.56	1.0e+00	0.78533	0.00133	0.78799				
ncsrbmt11_3_1_15	0.0	100	2774	2774	10050	94.55	1.0e+00	0.76796	0.00152	0.77099				
ncsrbmt11_2_1_15	0.0	100	1850	1850	10099	142.51	1.0e+00	0.73495	0.00142	0.73778				
ncsrbmt11_1_1_15	0.0	100	925	925	10148	286.41	1.0e+00	0.65230	0.00132	0.65494				
with can spacers (np thickness = 1.4 in.)														
ncsrbmt11_36_2_1	1.4	100	35142	35142	7719	5.73	1.0e-20	0.79252	0.00122	0.79496	hcsrbmt12_36_2_1	0.79368	0.00134	0.79636
ncsrbmt11_36_2_2	1.4	100	35142	35142	7719	5.73	1.0e-05	0.79014	0.00147	0.79309	hcsrbmt12_36_2_2	0.79487	0.00120	0.79727
ncsrbmt11_36_2_3	1.4	100	35142	35142	7719	5.73	1.0e-04	0.79182	0.00134	0.79450	hcsrbmt12_36_2_3	0.79667	0.00135	0.79938
ncsrbmt11_36_2_4	1.4	100	35142	35142	7719	5.73	1.0e-03	0.79144	0.00116	0.79376	hcsrbmt12_36_2_4	0.79705	0.00133	0.79971
ncsrbmt11_36_2_5	1.4	100	35142	35142	7719	5.73	1.0e-02	0.78918	0.00111	0.79141	hcsrbmt12_36_2_5	0.79627	0.00135	0.79898

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncsrbmt11_36_2_6	1.4	100	35142	35142	7719	5.73	1.0e-01	0.80114	0.00117	0.80348	hcsrbmt12_36_2_6	0.80431	0.00130	0.80691
ncsrbmt11_36_2_8	1.4	100	35142	35142	7719	5.73	3.0e-01	0.81416	0.00141	0.81698	hcsrbmt12_36_2_8	0.82035	0.00119	0.82273
ncsrbmt11_36_2_15	1.4	100	35142	35142	7719	5.73	1.0e+00	0.86924	0.00119	0.87162	hcsrbmt12_36_2_15	0.87124	0.00142	0.87408
ncsrbmt11_36_2_15	1.4	100	35142	35142	7719	5.73	1.0e+00	0.86924	0.00119	0.87162				
ncsrbmt11_35_2_15	1.4	100	34217	34217	7768	5.93	1.0e+00	0.86697	0.00130	0.86957				
ncsrbmt11_34_2_15	1.4	100	33292	33292	7817	6.13	1.0e+00	0.86435	0.00138	0.86712				
ncsrbmt11_33_2_15	1.4	100	32367	32367	7866	6.34	1.0e+00	0.86988	0.00130	0.87249				
ncsrbmt11_32_2_15	1.4	100	31442	31442	7915	6.57	1.0e+00	0.86598	0.00145	0.86889				
ncsrbmt11_31_2_15	1.4	100	30518	30518	7964	6.81	1.0e+00	0.86432	0.00153	0.86739				
ncsrbmt11_30_2_15	1.4	100	29593	29593	8013	7.07	1.0e+00	0.85951	0.00163	0.86277				
ncsrbmt11_29_2_15	1.4	100	28668	28668	8062	7.34	1.0e+00	0.85938	0.00134	0.86206				
ncsrbmt11_28_2_15	1.4	100	27743	27743	8111	7.63	1.0e+00	0.85890	0.00133	0.86157				
ncsrbmt11_27_2_15	1.4	100	26819	26819	8160	7.94	1.0e+00	0.85736	0.00143	0.86023				
ncsrbmt11_26_2_15	1.4	100	25894	25894	8209	8.28	1.0e+00	0.85189	0.00129	0.85447				
ncsrbmt11_25_2_15	1.4	100	24969	24969	8258	8.63	1.0e+00	0.84986	0.00148	0.85281				
ncsrbmt11_24_2_15	1.4	100	23119	23119	8357	9.43	1.0e+00	0.85225	0.00131	0.85488				
ncsrbmt11_23_2_15	1.4	100	22195	22195	8406	9.89	1.0e+00	0.84824	0.00142	0.85108				
ncsrbmt11_22_2_15	1.4	100	21270	21270	8455	10.38	1.0e+00	0.84600	0.00135	0.84869				
ncsrbmt11_21_2_15	1.4	100	20345	20345	8504	10.91	1.0e+00	0.84406	0.00150	0.84706				
ncsrbmt11_20_2_15	1.4	100	19420	19420	8553	11.50	1.0e+00	0.83992	0.00126	0.84244				
ncsrbmt11_19_2_15	1.4	100	18496	18496	8602	12.14	1.0e+00	0.83869	0.00134	0.84138				
ncsrbmt11_18_2_15	1.4	100	17571	17571	8651	12.85	1.0e+00	0.83488	0.00152	0.83793				
ncsrbmt11_17_2_15	1.4	100	16646	16646	8700	13.64	1.0e+00	0.83409	0.00130	0.83669				
ncsrbmt11_16_2_15	1.4	100	15721	15721	8749	14.53	1.0e+00	0.83520	0.00135	0.83789				
ncsrbmt11_15_2_15	1.4	100	14796	14796	8798	15.52	1.0e+00	0.83427	0.00129	0.83686				
ncsrbmt11_14_2_15	1.4	100	13872	13872	8847	16.65	1.0e+00	0.83162	0.00157	0.83476				

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2\sigma$	case name	k_{eff}	σ	$k_{eff}+2\sigma$
ncsrbmt11_13_2_15	1.4	100	12947	12947	8896	17.94	1.0e+00	0.82907	0.00147	0.83201				
ncsrbmt11_12_2_15	1.4	100	11097	11097	8995	21.16	1.0e+00	0.82195	0.00149	0.82493				
ncsrbmt11_11_2_15	1.4	100	10173	10173	9044	23.20	1.0e+00	0.81845	0.00120	0.82084				
ncsrbmt11_10_2_15	1.4	100	9248	9248	9093	25.66	1.0e+00	0.81508	0.00142	0.81792				
ncsrbmt11_9_2_15	1.4	100	8323	8323	9142	28.67	1.0e+00	0.81075	0.00138	0.81351				
ncsrbmt11_8_2_15	1.4	100	7398	7398	9191	32.43	1.0e+00	0.81425	0.00169	0.81764				
ncsrbmt11_7_2_15	1.4	100	6473	6473	9240	37.26	1.0e+00	0.80774	0.00155	0.81084				
ncsrbmt11_6_2_15	1.4	100	5549	5549	9289	43.70	1.0e+00	0.80060	0.00138	0.80336				
ncsrbmt11_5_2_15	1.4	100	4624	4624	9338	52.71	1.0e+00	0.79537	0.00167	0.79870				
ncsrbmt11_4_2_15	1.4	100	3699	3699	9387	66.24	1.0e+00	0.78379	0.00136	0.78651				
ncsrbmt11_3_2_15	1.4	100	2774	2774	9436	88.78	1.0e+00	0.76586	0.00130	0.76846				
ncsrbmt11_2_2_15	1.4	100	1850	1850	9485	133.86	1.0e+00	0.73246	0.00135	0.73516				
ncsrbmt11_1_2_15	1.4	100	925	925	9534	269.10	1.0e+00	0.65664	0.00150	0.65963				
content in flooded containment vessel, array packaging model for CSI=0.0														
NCT											HAC			
no can spacers (np thickness = 0.0 in.)														
nciabmt11_36_1_8_1	0.0	100	35142	35142	8332	6.19	1.0e-20	1.13613	0.00121	1.13855	hciabmt12_36_1_8_1	1.13721	0.00124	1.13969
nciabmt11_36_1_8_2	0.0	100	35142	35142	8332	6.19	1.0e-05	1.13830	0.00153	1.14135	hciabmt12_36_1_8_2	1.13634	0.00114	1.13862
nciabmt11_36_1_8_3	0.0	100	35142	35142	8332	6.19	1.0e-04	1.13709	0.00121	1.13952	hciabmt12_36_1_8_3	1.13700	0.00127	1.13954
nciabmt11_36_1_8_4	0.0	100	35142	35142	8332	6.19	1.0e-03	1.13450	0.00115	1.13679	hciabmt12_36_1_8_4	1.13567	0.00121	1.13809
nciabmt11_36_1_8_5	0.0	100	35142	35142	8332	6.19	1.0e-02	1.11154	0.00120	1.11394	hciabmt12_36_1_8_5	1.12232	0.00129	1.12490
nciabmt11_36_1_8_6	0.0	100	35142	35142	8332	6.19	1.0e-01	0.98653	0.00121	0.98894	hciabmt12_36_1_8_6	1.03049	0.00115	1.03278
nciabmt11_36_1_8_8	0.0	100	35142	35142	8332	6.19	3.0e-01	0.91622	0.00135	0.91892	hciabmt12_36_1_8_8	0.95566	0.00126	0.95818
nciabmt11_36_1_8_15	0.0	100	35142	35142	8332	6.19	1.0e+00	0.91008	0.00124	0.91255	hciabmt12_36_1_8_15	0.93645	0.00120	0.93884
nciabmt11_7_1_5_3	0.0	80	6490	5192	9854	49.54	1.0e-04	0.96163	0.00130	0.96423	hciabmt12_7_1_5_3	0.96193	0.00149	0.96490
nciabmt11_6_1_5_3	0.0	80	5563	4450	9903	58.08	1.0e-04	0.95210	0.00130	0.95471	hciabmt12_6_1_5_3	0.95164	0.00139	0.95442

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2\sigma$	case name	k_{eff}	σ	$k_{eff}+2\sigma$
nciabmt11_5_1_5_3	0.0	80	4636	3709	9952	70.04	1.0e-04	0.93892	0.00161	0.94215	hciabmt12_5_1_5_3	0.93880	0.00141	0.94162
nciabmt11_4_1_5_3	0.0	80	3709	2967	10001	87.98	1.0e-04	0.91835	0.00149	0.92133	hciabmt12_4_1_5_3	0.92156	0.00160	0.92476
nciabmt11_3_1_5_3	0.0	80	2781	2225	10050	117.89	1.0e-04	0.89262	0.00129	0.89520	hciabmt12_3_1_5_3	0.89109	0.00160	0.89430
nciabmt11_9_1_4_3	0.0	70	8355	5848	9755	43.54	1.0e-04	0.95952	0.00130	0.96213	hciabmt12_9_1_4_3	0.95495	0.00150	0.95795
nciabmt11_8_1_4_3	0.0	70	7426	5198	9804	49.23	1.0e-04	0.94887	0.00152	0.95191	hciabmt12_8_1_4_3	0.95267	0.00156	0.95578
nciabmt11_7_1_4_3	0.0	70	6498	4549	9854	56.54	1.0e-04	0.94082	0.00132	0.94346	hciabmt12_7_1_4_3	0.94409	0.00125	0.94659
nciabmt11_6_1_4_3	0.0	70	5570	3899	9903	66.29	1.0e-04	0.92987	0.00119	0.93225	hciabmt12_6_1_4_3	0.93280	0.00123	0.93526
nciabmt11_5_1_4_3	0.0	70	4642	3249	9952	79.95	1.0e-04	0.91799	0.00136	0.92070	hciabmt12_5_1_4_3	0.92053	0.00147	0.92347
nciabmt11_10_1_3_3	0.0	60	9295	5577	9706	45.43	1.0e-04	0.94106	0.00152	0.94409	hciabmt12_10_1_3_3	0.94167	0.00126	0.94419
nciabmt11_9_1_3_3	0.0	60	8365	5019	9755	50.73	1.0e-04	0.93671	0.00123	0.93918	hciabmt12_9_1_3_3	0.93973	0.00135	0.94242
nciabmt11_8_1_3_3	0.0	60	7436	4462	9804	57.36	1.0e-04	0.92907	0.00129	0.93166	hciabmt12_8_1_3_3	0.93016	0.00128	0.93273
nciabmt11_7_1_3_3	0.0	60	6506	3904	9854	65.88	1.0e-04	0.92171	0.00118	0.92407	hciabmt12_7_1_3_3	0.92300	0.00130	0.92560
nciabmt11_6_1_3_3	0.0	60	5577	3346	9903	77.24	1.0e-04	0.91221	0.00147	0.91515	hciabmt12_6_1_3_3	0.91017	0.00128	0.91274
with can spacers (np thickness = 1.4 in.)														
nciabmt11_36_2_8_1	1.4	100	35142	35142	7719	5.73	1.0e-20	1.11012	0.00118	1.11249	hciabmt12_36_2_8_1	1.11021	0.00115	1.11250
nciabmt11_36_2_8_2	1.4	100	35142	35142	7719	5.73	1.0e-05	1.10934	0.00103	1.11141	hciabmt12_36_2_8_2	1.10929	0.00137	1.11202
nciabmt11_36_2_8_3	1.4	100	35142	35142	7719	5.73	1.0e-04	1.10991	0.00131	1.11252	hciabmt12_36_2_8_3	1.10922	0.00112	1.11145
nciabmt11_36_2_8_4	1.4	100	35142	35142	7719	5.73	1.0e-03	1.10774	0.00123	1.11020	hciabmt12_36_2_8_4	1.10732	0.00115	1.10963
nciabmt11_36_2_8_5	1.4	100	35142	35142	7719	5.73	1.0e-02	1.08309	0.00140	1.08589	hciabmt12_36_2_8_5	1.09559	0.00114	1.09786
nciabmt11_36_2_8_6	1.4	100	35142	35142	7719	5.73	1.0e-01	0.95955	0.00128	0.96212	hciabmt12_36_2_8_6	1.00216	0.00124	1.00463
nciabmt11_36_2_8_8	1.4	100	35142	35142	7719	5.73	3.0e-01	0.88829	0.00112	0.89053	hciabmt12_36_2_8_8	0.92859	0.00158	0.93175
nciabmt11_36_2_8_15	1.4	100	35142	35142	7719	5.73	1.0e+00	0.88638	0.00158	0.88953	hciabmt12_36_2_8_15	0.91405	0.00147	0.91698
nciabmt11_5_2_8_3	1.4	100	4624	4624	9338	52.71	1.0e-04	0.94785	0.00147	0.95079	hciabmt12_5_2_8_3	0.95226	0.00143	0.95511
nciabmt11_4_2_8_3	1.4	100	3699	3699	9387	66.24	1.0e-04	0.92504	0.00170	0.92845	hciabmt12_4_2_8_3	0.93069	0.00142	0.93352

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2\sigma$	case name	k_{eff}	σ	$k_{eff}+2\sigma$
nciabmt11_3_2_8_3	1.4	100	2774	2774	9436	88.78	1.0e-04	0.90131	0.00139	0.90409	hciabmt12_3_2_8_3	0.90243	0.00127	0.90497
nciabmt11_2_2_8_3	1.4	100	1850	1850	9485	133.86	1.0e-04	0.85414	0.00141	0.85696	hciabmt12_2_2_8_3	0.85600	0.00123	0.85846
nciabmt11_1_2_8_3	1.4	100	925	925	9534	269.10	1.0e-04	0.74985	0.00124	0.75232	hciabmt12_1_2_8_3	0.75078	0.00135	0.75347
nciabmt11_6_2_7_3	1.4	95	5552	5275	9289	45.97	1.0e-04	0.95078	0.00124	0.95327	hciabmt12_6_2_7_3	0.95399	0.00153	0.95704
nciabmt11_5_2_7_3	1.4	95	4627	4396	9338	55.45	1.0e-04	0.93742	0.00130	0.94002	hciabmt12_5_2_7_3	0.93696	0.00142	0.93981
nciabmt11_4_2_7_3	1.4	95	3701	3516	9387	69.68	1.0e-04	0.91690	0.00149	0.91987	hciabmt12_4_2_7_3	0.92094	0.00140	0.92374
nciabmt11_3_2_7_3	1.4	95	2776	2637	9436	93.39	1.0e-04	0.89089	0.00127	0.89343	hciabmt12_3_2_7_3	0.89250	0.00144	0.89537
nciabmt11_2_2_7_3	1.4	95	1851	1758	9485	140.81	1.0e-04	0.84225	0.00143	0.84510	hciabmt12_2_2_7_3	0.84604	0.00135	0.84875
nciabmt11_6_2_6_3	1.4	90	5556	5000	9289	48.49	1.0e-04	0.93703	0.00127	0.93956	hciabmt12_6_2_6_3	0.93967	0.00130	0.94227
nciabmt11_5_2_6_3	1.4	90	4630	4167	9338	58.49	1.0e-04	0.92640	0.00142	0.92925	hciabmt12_5_2_6_3	0.92390	0.00155	0.92700
nciabmt11_4_2_6_3	1.4	90	3704	3333	9387	73.50	1.0e-04	0.90541	0.00147	0.90835	hciabmt12_4_2_6_3	0.90643	0.00133	0.90909
nciabmt11_3_2_6_3	1.4	90	2778	2500	9436	98.52	1.0e-04	0.87970	0.00157	0.88283	hciabmt12_3_2_6_3	0.87916	0.00154	0.88224
nciabmt11_2_2_6_3	1.4	90	1852	1667	9485	148.54	1.0e-04	0.83371	0.00129	0.83628	hciabmt12_2_2_6_3	0.83414	0.00130	0.83674
nciabmt11_8_2_5_3	1.4	80	7417	5934	9191	40.43	1.0e-04	0.94131	0.00162	0.94455	hciabmt12_8_2_5_3	0.93963	0.00149	0.94261
nciabmt11_7_2_5_3	1.4	80	6490	5192	9240	46.45	1.0e-04	0.92939	0.00127	0.93193	hciabmt12_7_2_5_3	0.93070	0.00160	0.93391
nciabmt11_6_2_5_3	1.4	80	5563	4450	9289	54.48	1.0e-04	0.91981	0.00127	0.92235	hciabmt12_6_2_5_3	0.91987	0.00157	0.92301
nciabmt11_5_2_5_3	1.4	80	4636	3709	9338	65.72	1.0e-04	0.90533	0.00127	0.90787	hciabmt12_5_2_5_3	0.90772	0.00136	0.91044
nciabmt11_4_2_5_3	1.4	80	3709	2967	9387	82.59	1.0e-04	0.88537	0.00136	0.88808	hciabmt12_4_2_5_3	0.88792	0.00150	0.89092
nciabmt11_11_2_4_3	1.4	70	10211	7148	9044	33.02	1.0e-04	0.93094	0.00141	0.93376	hciabmt12_11_2_4_3	0.93119	0.00138	0.93395
nciabmt11_10_2_4_3	1.4	70	9283	6498	9093	36.52	1.0e-04	0.92534	0.00139	0.92813	hciabmt12_10_2_4_3	0.92795	0.00129	0.93052
nciabmt11_9_2_4_3	1.4	70	8355	5848	9142	40.80	1.0e-04	0.91866	0.00122	0.92110	hciabmt12_9_2_4_3	0.92290	0.00125	0.92540
nciabmt11_8_2_4_3	1.4	70	7426	5198	9191	46.15	1.0e-04	0.91902	0.00137	0.92175	hciabmt12_8_2_4_3	0.91835	0.00126	0.92086
nciabmt11_7_2_4_3	1.4	70	6498	4549	9240	53.02	1.0e-04	0.90863	0.00152	0.91166	hciabmt12_7_2_4_3	0.91042	0.00137	0.91316

6-208

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
nciabmt11_15_2_3_3	1.4	60	14872	8923	8798	25.74	1.0e-04	0.93047	0.00133	0.93313	hciabmt12_15_2_3_3	0.93032	0.00114	0.93259
nciabmt11_14_2_3_3	1.4	60	13942	8365	8847	27.61	1.0e-04	0.92560	0.00138	0.92837	hciabmt12_14_2_3_3	0.92828	0.00143	0.93115
nciabmt11_13_2_3_3	1.4	60	12083	7250	8946	32.21	1.0e-04	0.91963	0.00126	0.92214	hciabmt12_13_2_3_3	0.92389	0.00124	0.92638
nciabmt11_12_2_3_3	1.4	60	11154	6692	8995	35.08	1.0e-04	0.91502	0.00155	0.91812	hciabmt12_12_2_3_3	0.91776	0.00138	0.92053
nciabmt11_11_2_3_3	1.4	60	10224	6135	9044	38.48	1.0e-04	0.90892	0.00140	0.91172	hciabmt12_11_2_3_3	0.91237	0.00133	0.91503
content in flooded containment vessel, array packaging model for CSI=0.4														
						NCT							HAC	
no can spacers (np thickness = 0.0 in.)														
											hcf2bmt12_11_1_5_3	0.91900	0.00131	0.92163
											hcf2bmt12_10_1_5_3	0.91775	0.00161	0.92097
											hcf2bmt12_9_1_5_3	0.91229	0.00127	0.91483
ncf1bmt11_8_1_5_3	0.0	80	7417	5934	9804	43.13	1.0e-04	0.92824	0.00156	0.93135	hcf2bmt12_8_1_5_3	0.90367	0.00138	0.90643
ncf1bmt11_7_1_5_3	0.0	80	6490	5192	9854	49.54	1.0e-04	0.92088	0.00131	0.92349				
ncf1bmt11_6_1_5_3	0.0	80	5563	4450	9903	58.08	1.0e-04	0.91164	0.00153	0.91470				
ncf1bmt11_5_1_5_3	0.0	80	4636	3709	9952	70.04	1.0e-04	0.90130	0.00135	0.90400				
ncf1bmt11_4_1_5_3	0.0	80	3709	2967	10001	87.98	1.0e-04	0.88094	0.00128	0.88350				
											hcf2bmt12_15_1_4_3	0.91711	0.00152	0.92016
											hcf2bmt12_14_1_4_3	0.91432	0.00164	0.91760
ncf1bmt11_13_1_4_3	0.0	70	12996	9097	9510	27.28	1.0e-04	0.93558	0.00138	0.93834	hcf2bmt12_13_1_4_3	0.91429	0.00141	0.91711
ncf1bmt11_12_1_4_3	0.0	70	11140	7798	9608	32.16	1.0e-04	0.92957	0.00130	0.93217	hcf2bmt12_12_1_4_3	0.90853	0.00161	0.91175
ncf1bmt11_11_1_4_3	0.0	70	10211	7148	9657	35.26	1.0e-04	0.92397	0.00139	0.92675				
ncf1bmt11_10_1_4_3	0.0	70	9283	6498	9706	38.99	1.0e-04	0.92240	0.00135	0.92510				
ncf1bmt11_9_1_4_3	0.0	70	8355	5848	9755	43.54	1.0e-04	0.91886	0.00139	0.92163				
											hcf2bmt12_21_1_3_3	0.91091	0.00139	0.91369

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
											hcf2bmt12_20_1_3_3	0.90915	0.00144	0.91203
ncf1bmt11_19_1_3_3	0.0	60	18589	11154	9216	21.57	1.0e-04	0.92771	0.00137	0.93044	hcf2bmt12_19_1_3_3	0.90638	0.00160	0.90958
ncf1bmt11_18_1_3_3	0.0	60	17660	10596	9265	22.82	1.0e-04	0.92867	0.00148	0.93164	hcf2bmt12_18_1_3_3	0.90466	0.00124	0.90715
ncf1bmt11_17_1_3_3	0.0	60	16731	10038	9314	24.22	1.0e-04	0.92948	0.00113	0.93173				
ncf1bmt11_16_1_3_3	0.0	60	15801	9481	9363	25.78	1.0e-04	0.92252	0.00158	0.92569				
ncf1bmt11_15_1_3_3	0.0	60	14872	8923	9412	27.53	1.0e-04	0.91999	0.00123	0.92246				
ncf1bmt11_14_1_3_3	0.0	60	13942	8365	9461	29.52	1.0e-04	0.91961	0.00144	0.92248				
with can spacers (np thickness = 1.4 in.)														
											hcf2bmt12_10_2_8_3	0.93154	0.00152	0.93458
ncf1bmt11_9_2_8_3	1.4	100	8323	8323	9142	28.67	1.0e-04	0.94429	0.00138	0.94704	hcf2bmt12_9_2_8_3	0.92329	0.00147	0.92622
ncf1bmt11_8_2_8_3	1.4	100	7398	7398	9191	32.43	1.0e-04	0.94337	0.00169	0.94674	hcf2bmt12_8_2_8_3	0.92153	0.00144	0.92442
ncf1bmt11_7_2_8_3	1.4	100	6473	6473	9240	37.26	1.0e-04	0.93117	0.00172	0.93460				
ncf1bmt11_6_2_8_3	1.4	100	5549	5549	9289	43.70	1.0e-04	0.92119	0.00147	0.92412				
											hcf2bmt12_13_2_7_3	0.93389	0.00167	0.93722
											hcf2bmt12_12_2_7_3	0.92649	0.00146	0.92941
ncf1bmt11_11_2_7_3	1.4	95	10179	9670	9044	24.41	1.0e-04	0.94326	0.00139	0.94604	hcf2bmt12_11_2_7_3	0.92061	0.00130	0.92320
ncf1bmt11_10_2_7_3	1.4	95	9254	8791	9093	27.00	1.0e-04	0.93829	0.00154	0.94138	hcf2bmt12_10_2_7_3	0.91423	0.00145	0.91712
ncf1bmt11_9_2_7_3	1.4	95	8328	7912	9142	30.16	1.0e-04	0.93239	0.00181	0.93600	hcf2bmt12_9_2_7_3	0.90883	0.00137	0.91156
ncf1bmt11_8_2_7_3	1.4	95	7403	7033	9191	34.11	1.0e-04	0.92812	0.00144	0.93100				
ncf1bmt11_7_2_7_3	1.4	95	6478	6154	9240	39.19	1.0e-04	0.91938	0.00130	0.92199				
											hcf2bmt12_15_2_6_3	0.93106	0.00129	0.93364
											hcf2bmt12_14_2_6_3	0.92492	0.00129	0.92749
ncf1bmt11_13_2_6_3	1.4	90	12963	11667	8896	19.90	1.0e-04	0.94806	0.00123	0.95052	hcf2bmt12_13_2_6_3	0.92272	0.00138	0.92548
ncf1bmt11_12_2_6_3	1.4	90	11111	10000	8995	23.48	1.0e-04	0.93464	0.00123	0.93710	hcf2bmt12_12_2_6_3	0.91625	0.00149	0.91924
ncf1bmt11_11_2_6_3	1.4	90	10185	9167	9044	25.75	1.0e-04	0.93068	0.00148	0.93363	hcf2bmt12_11_2_6_3	0.91097	0.00136	0.91370

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2σ$	case name	k_{eff}	σ	$k_{eff}+2σ$
ncf1bmt11_10_2_6_3	1.4	90	9260	8334	9093	28.48	1.0e-04	0.92732	0.00150	0.93032				
ncf1bmt11_9_2_6_3	1.4	90	8334	7500	9142	31.81	1.0e-04	0.91744	0.00145	0.92034				
ncf1bmt11_8_2_6_3	1.4	90	7408	6667	9191	35.98	1.0e-04	0.91952	0.00133	0.92218				
ncf1bmt11_17_2_5_3	1.4	80	16688	13351	8700	17.01	1.0e-04	0.93531	0.00128	0.93787	hcf2bmt12_17_2_5_3	0.91255	0.00114	0.91482
ncf1bmt11_16_2_5_3	1.4	80	15761	12609	8749	18.11	1.0e-04	0.93511	0.00160	0.93832	hcf2bmt12_16_2_5_3	0.91363	0.00123	0.91608
ncf1bmt11_15_2_5_3	1.4	80	14834	11867	8798	19.35	1.0e-04	0.93431	0.00141	0.93713	hcf2bmt12_15_2_5_3	0.91038	0.00115	0.91268
ncf1bmt11_14_2_5_3	1.4	80	13907	11125	8847	20.76	1.0e-04	0.92939	0.00133	0.93205	hcf2bmt12_14_2_5_3	0.90762	0.00139	0.91041
ncf1bmt11_13_2_5_3	1.4	80	12980	10384	8896	22.36	1.0e-04	0.92453	0.00131	0.92715	hcf2bmt12_13_2_5_3	0.90539	0.00137	0.90812
ncf1bmt11_12_2_5_3	1.4	80	11125	8900	8995	26.38	1.0e-04	0.91584	0.00142	0.91868	hcf2bmt12_12_2_5_3	0.89295	0.00174	0.89642
ncf1bmt11_24_2_4_3	1.4	70	23207	16245	8357	13.43	1.0e-04	0.93515	0.00143	0.93801	hcf2bmt12_24_2_4_3	0.91356	0.00125	0.91606
ncf1bmt11_23_2_4_3	1.4	70	22279	15595	8406	14.07	1.0e-04	0.93264	0.00113	0.93490	hcf2bmt12_23_2_4_3	0.91116	0.00113	0.91342
ncf1bmt11_22_2_4_3	1.4	70	21351	14946	8455	14.77	1.0e-04	0.93058	0.00128	0.93314	hcf2bmt12_22_2_4_3	0.90737	0.00145	0.91027
ncf1bmt11_21_2_4_3	1.4	70	20422	14296	8504	15.53	1.0e-04	0.92635	0.00112	0.92859	hcf2bmt12_21_2_4_3	0.90516	0.00140	0.90796
ncf1bmt11_20_2_4_3	1.4	70	19494	13646	8553	16.36	1.0e-04	0.92535	0.00141	0.92818	hcf2bmt12_20_2_4_3	0.90283	0.00136	0.90555
ncf1bmt11_19_2_4_3	1.4	70	18566	12996	8602	17.28	1.0e-04	0.92097	0.00177	0.92450	hcf2bmt12_19_2_4_3	0.89757	0.00144	0.90046
ncf1bmt11_18_2_4_3	1.4	70	17638	12346	8651	18.29	1.0e-04	0.91681	0.00140	0.91961	hcf2bmt12_18_2_4_3	0.89367	0.00144	0.89656
ncf1bmt11_36_2_3_3	1.4	60	35320	21192	7719	9.51	1.0e-04	0.93212	0.00121	0.93455	hcf2bmt12_36_2_3_3	0.90846	0.00137	0.91121
ncf1bmt11_35_2_3_3	1.4	60	34391	20634	7768	9.83	1.0e-04	0.93168	0.00129	0.93426	hcf2bmt12_35_2_3_3	0.90742	0.00118	0.90977
ncf1bmt11_34_2_3_3	1.4	60	33461	20077	7817	10.16	1.0e-04	0.93079	0.00145	0.93368	hcf2bmt12_34_2_3_3	0.90657	0.00134	0.90925
ncf1bmt11_33_2_3_3	1.4	60	32532	19519	7866	10.52	1.0e-04	0.92781	0.00131	0.93042	hcf2bmt12_33_2_3_3	0.90603	0.00117	0.90837
ncf1bmt11_32_2_3_3	1.4	60	31602	18961	7915	10.90	1.0e-04	0.92550	0.00131	0.92811	hcf2bmt12_32_2_3_3	0.90015	0.00127	0.90270
ncf1bmt11_31_2_3_3	1.4	60	30673	18404	7964	11.29	1.0e-04	0.92597	0.00128	0.92853	hcf2bmt12_31_2_3_3	0.90333	0.00122	0.90577
ncf1bmt11_30_2_3_3	1.4	60	29743	17846	8013	11.72	1.0e-04	0.92361	0.00120	0.92601	hcf2bmt12_30_2_3_3	0.89683	0.00144	0.89971
ncf1bmt11_29_2_3_3	1.4	60	28814	17288	8062	12.17	1.0e-04	0.92063	0.00143	0.92350				

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
content in flooded containment vessel, array packaging model for CSI=0.8														
NCT											HAC			
no can spacers (np thickness = 0.0 in.)														
ncf2bmt11_17_1_5_3	0.0	80	16688	13351	9314	18.21	1.0e-04	0.93655	0.00144	0.93942	hcf3bmt12_17_1_5_3	0.92003	0.00129	0.92262
ncf2bmt11_16_1_5_3	0.0	80	15761	12609	9363	19.38	1.0e-04	0.93242	0.00143	0.93529	hcf3bmt12_16_1_5_3	0.91399	0.00148	0.91694
ncf2bmt11_15_1_5_3	0.0	80	14834	11867	9412	20.70	1.0e-04	0.92982	0.00135	0.93251	hcf3bmt12_15_1_5_3	0.91169	0.00139	0.91448
ncf2bmt11_14_1_5_3	0.0	80	13907	11125	9461	22.20	1.0e-04	0.92699	0.00137	0.92972	hcf3bmt12_14_1_5_3	0.90943	0.00135	0.91213
ncf2bmt11_13_1_5_3	0.0	80	12980	10384	9510	23.90	1.0e-04	0.92634	0.00138	0.92909	hcf3bmt12_13_1_5_3	0.90348	0.00133	0.90615
ncf2bmt11_12_1_5_3	0.0	80	11125	8900	9608	28.18	1.0e-04	0.91826	0.00166	0.92158	hcf3bmt12_12_1_5_3	0.89805	0.00155	0.90115
ncf2bmt11_21_1_4_3	0.0	70	20422	14296	9117	16.65	1.0e-04	0.92723	0.00123	0.92968				
ncf2bmt11_20_1_4_3	0.0	70	19494	13646	9166	17.53	1.0e-04	0.92094	0.00124	0.92342	hcf3bmt12_20_1_4_3	0.90398	0.00124	0.90646
ncf2bmt11_19_1_4_3	0.0	70	18566	12996	9216	18.51	1.0e-04	0.92341	0.00144	0.92629	hcf3bmt12_19_1_4_3	0.90150	0.00151	0.90452
ncf2bmt11_18_1_4_3	0.0	70	17638	12346	9265	19.59	1.0e-04	0.91814	0.00135	0.92085	hcf3bmt12_18_1_4_3	0.89955	0.00134	0.90222
ncf2bmt11_17_1_4_3	0.0	70	16709	11697	9314	20.78	1.0e-04	0.91793	0.00133	0.92058	hcf3bmt12_17_1_4_3	0.89730	0.00133	0.89996
ncf2bmt11_16_1_4_3	0.0	70	15781	11047	9363	22.12	1.0e-04	0.91629	0.00133	0.91895	hcf3bmt12_16_1_4_3	0.89458	0.00122	0.89702
ncf2bmt11_15_1_4_3	0.0	70	14853	10397	9412	23.63	1.0e-04	0.91068	0.00125	0.91317	hcf3bmt12_15_1_4_3	0.89088	0.00130	0.89347
ncf2bmt11_36_1_3_3	0.0	60	35320	21192	8332	10.26	1.0e-04	0.93348	0.00105	0.93558	hcf3bmt12_36_1_3_3	0.91223	0.00113	0.91450
ncf2bmt11_35_1_3_3	0.0	60	34391	20634	8381	10.60	1.0e-04	0.93036	0.00127	0.93290	hcf3bmt12_35_1_3_3	0.91033	0.00128	0.91288
ncf2bmt11_34_1_3_3	0.0	60	33461	20077	8430	10.96	1.0e-04	0.92584	0.00127	0.92837	hcf3bmt12_34_1_3_3	0.90950	0.00126	0.91202
ncf2bmt11_33_1_3_3	0.0	60	32532	19519	8479	11.34	1.0e-04	0.92680	0.00142	0.92965	hcf3bmt12_33_1_3_3	0.90720	0.00143	0.91007
ncf2bmt11_32_1_3_3	0.0	60	31602	18961	8529	11.74	1.0e-04	0.92588	0.00144	0.92877	hcf3bmt12_32_1_3_3	0.90425	0.00126	0.90678
ncf2bmt11_31_1_3_3	0.0	60	30673	18404	8578	12.17	1.0e-04	0.92420	0.00123	0.92665	hcf3bmt12_31_1_3_3	0.90271	0.00118	0.90506
ncf2bmt11_30_1_3_3	0.0	60	29743	17846	8627	12.62	1.0e-04	0.92236	0.00165	0.92566	hcf3bmt12_30_1_3_3	0.90323	0.00138	0.90599
ncf2bmt11_29_1_3_3	0.0	60	28814	17288	8676	13.10	1.0e-04	0.91822	0.00113	0.92047	hcf3bmt12_29_1_3_3	0.89982	0.00121	0.90224

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k$_{eff}$	σ	k$_{eff}$+2σ	case name	k$_{eff}$	σ	k$_{eff}$+2σ
								with can spacers (np thickness = 1.4 in.)						
ncf2bmt11_12_2_8_3	1.4	100	11097	11097	8995	21.16	1.0e-04	0.93137	0.00124	0.93385	hcf3bmt12_12_2_8_3	0.91417	0.00139	0.91696
ncf2bmt11_11_2_8_3	1.4	100	10173	10173	9044	23.20	1.0e-04	0.92641	0.00144	0.92928	hcf3bmt12_11_2_8_3	0.91315	0.00164	0.91642
ncf2bmt11_10_2_8_3	1.4	100	9248	9248	9093	25.66	1.0e-04	0.92058	0.00138	0.92334	hcf3bmt12_10_2_8_3	0.90570	0.00166	0.90902
ncf2bmt11_9_2_8_3	1.4	100	8323	8323	9142	28.67	1.0e-04	0.91671	0.00138	0.91947	hcf3bmt12_9_2_8_3	0.89648	0.00131	0.89911
ncf2bmt11_8_2_8_3	1.4	100	7398	7398	9191	32.43	1.0e-04	0.91365	0.00171	0.91706	hcf3bmt12_8_2_8_3	0.89682	0.00139	0.89960
ncf2bmt11_7_2_8_3	1.4	100	6473	6473	9240	37.26	1.0e-04	0.90684	0.00166	0.91016	hcf3bmt12_7_2_8_3	0.88907	0.00143	0.89192
ncf2bmt11_6_2_8_3	1.4	100	5549	5549	9289	43.70	1.0e-04	0.89705	0.00145	0.89995	hcf3bmt12_6_2_8_3	0.87797	0.00166	0.88130
ncf2bmt11_14_2_7_3	1.4	95	13880	13186	8847	17.51	1.0e-04	0.93174	0.00131	0.93437	hcf3bmt12_14_2_7_3	0.91453	0.00162	0.91777
ncf2bmt11_13_2_7_3	1.4	95	12955	12307	8896	18.87	1.0e-04	0.92685	0.00140	0.92965	hcf3bmt12_13_2_7_3	0.91006	0.00135	0.91276
ncf2bmt11_12_2_7_3	1.4	95	11104	10549	8995	22.25	1.0e-04	0.91939	0.00136	0.92210	hcf3bmt12_12_2_7_3	0.89784	0.00132	0.90048
ncf2bmt11_11_2_7_3	1.4	95	10179	9670	9044	24.41	1.0e-04	0.91215	0.00134	0.91483	hcf3bmt12_11_2_7_3	0.89423	0.00146	0.89715
ncf2bmt11_10_2_7_3	1.4	95	9254	8791	9093	27.00	1.0e-04	0.90898	0.00126	0.91151	hcf3bmt12_10_2_7_3	0.89121	0.00159	0.89438
ncf2bmt11_9_2_7_3	1.4	95	8328	7912	9142	30.16	1.0e-04	0.90123	0.00147	0.90416	hcf3bmt12_9_2_7_3	0.88311	0.00145	0.88602
ncf2bmt11_16_2_6_3	1.4	90	15741	14167	8749	16.12	1.0e-04	0.92855	0.00124	0.93103	hcf3bmt12_16_2_6_3	0.91007	0.00134	0.91276
ncf2bmt11_15_2_6_3	1.4	90	14815	13334	8798	17.22	1.0e-04	0.92599	0.00107	0.92813	hcf3bmt12_15_2_6_3	0.90421	0.00136	0.90693
ncf2bmt11_14_2_6_3	1.4	90	13889	12500	8847	18.47	1.0e-04	0.91938	0.00131	0.92200	hcf3bmt12_14_2_6_3	0.90163	0.00129	0.90422
ncf2bmt11_13_2_6_3	1.4	90	12963	11667	8896	19.90	1.0e-04	0.91387	0.00110	0.91607	hcf3bmt12_13_2_6_3	0.89824	0.00123	0.90069
ncf2bmt11_12_2_6_3	1.4	90	11111	10000	8995	23.48	1.0e-04	0.90989	0.00135	0.91258	hcf3bmt12_12_2_6_3	0.88832	0.00136	0.89105
ncf2bmt11_11_2_6_3	1.4	90	10185	9167	9044	25.75	1.0e-04	0.90334	0.00152	0.90637	hcf3bmt12_11_2_6_3	0.88574	0.00168	0.88911
ncf2bmt11_10_2_6_3	1.4	90	9260	8334	9093	28.48	1.0e-04	0.89868	0.00172	0.90212	hcf3bmt12_10_2_6_3	0.87986	0.00134	0.88254
ncf2bmt11_9_2_6_3	1.4	90	8334	7500	9142	31.81	1.0e-04	0.89190	0.00154	0.89499	hcf3bmt12_9_2_6_3	0.87453	0.00140	0.87733
											hcf3bmt12_24_2_5_3	0.90790	0.00134	0.91058
											hcf3bmt12_23_2_5_3	0.90282	0.00121	0.90523

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncf2bmt11_22_2_5_3	1.4	80	21324	17059	8455	12.94	1.0e-04	0.92358	0.00131	0.92619	hcf3bmt12_22_2_5_3	0.90006	0.00139	0.90284
ncf2bmt11_21_2_5_3	1.4	80	20397	16317	8504	13.60	1.0e-04	0.91640	0.00145	0.91930	hcf3bmt12_21_2_5_3	0.89948	0.00134	0.90216
ncf2bmt11_20_2_5_3	1.4	80	19470	15576	8553	14.33	1.0e-04	0.91428	0.00133	0.91694	hcf3bmt12_20_2_5_3	0.89698	0.00122	0.89941
ncf2bmt11_19_2_5_3	1.4	80	18542	14834	8602	15.14	1.0e-04	0.91020	0.00130	0.91281	hcf3bmt12_19_2_5_3	0.89282	0.00129	0.89541
ncf2bmt11_18_2_5_3	1.4	80	17615	14092	8651	16.02	1.0e-04	0.90784	0.00135	0.91054	hcf3bmt12_18_2_5_3	0.88897	0.00125	0.89148
ncf2bmt11_17_2_5_3	1.4	80	16688	13351	8700	17.01	1.0e-04	0.90364	0.00123	0.90610	hcf3bmt12_17_2_5_3	0.88452	0.00123	0.88697
ncf2bmt11_16_2_5_3	1.4	80	15761	12609	8749	18.11	1.0e-04	0.90402	0.00132	0.90666	hcf3bmt12_16_2_5_3	0.88688	0.00121	0.88929
ncf2bmt11_15_2_5_3	1.4	80	14834	11867	8798	19.35	1.0e-04	0.90496	0.00145	0.90786	hcf3bmt12_15_2_5_3	0.88496	0.00135	0.88765
ncf2bmt11_33_2_4_3	1.4	70	32490	22743	7866	9.03	1.0e-04	0.92631	0.00120	0.92871	hcf3bmt12_33_2_4_3	0.90516	0.00118	0.90752
ncf2bmt11_32_2_4_3	1.4	70	31562	22093	7915	9.35	1.0e-04	0.92304	0.00128	0.92560	hcf3bmt12_32_2_4_3	0.90236	0.00135	0.90507
ncf2bmt11_31_2_4_3	1.4	70	30634	21444	7964	9.69	1.0e-04	0.92250	0.00132	0.92514	hcf3bmt12_31_2_4_3	0.90127	0.00111	0.90349
ncf2bmt11_30_2_4_3	1.4	70	29705	20794	8013	10.06	1.0e-04	0.92048	0.00138	0.92325	hcf3bmt12_30_2_4_3	0.89944	0.00124	0.90192
ncf2bmt11_29_2_4_3	1.4	70	28777	20144	8062	10.45	1.0e-04	0.91607	0.00135	0.91878	hcf3bmt12_29_2_4_3	0.89544	0.00139	0.89823
ncf2bmt11_28_2_4_3	1.4	70	27849	19494	8111	10.86	1.0e-04	0.91338	0.00129	0.91596	hcf3bmt12_28_2_4_3	0.89451	0.00127	0.89706
ncf2bmt11_27_2_4_3	1.4	70	26921	18844	8160	11.30	1.0e-04	0.91255	0.00127	0.91510	hcf3bmt12_27_2_4_3	0.88990	0.00135	0.89261
ncf2bmt11_36_2_3_3	1.4	60	35320	21192	7719	9.51	1.0e-04	0.90382	0.00130	0.90642	hcf3bmt12_36_2_3_3	0.88262	0.00120	0.88503
ncf2bmt11_35_2_3_3	1.4	60	34391	20634	7768	9.83	1.0e-04	0.90020	0.00136	0.90291	hcf3bmt12_35_2_3_3	0.87857	0.00132	0.88120
ncf2bmt11_34_2_3_3	1.4	60	33461	20077	7817	10.16	1.0e-04	0.89689	0.00121	0.89932	hcf3bmt12_34_2_3_3	0.87717	0.00111	0.87939
ncf2bmt11_33_2_3_3	1.4	60	32532	19519	7866	10.52	1.0e-04	0.89834	0.00117	0.90069	hcf3bmt12_33_2_3_3	0.87502	0.00127	0.87757
ncf2bmt11_32_2_3_3	1.4	60	31602	18961	7915	10.90	1.0e-04	0.89483	0.00136	0.89755	hcf3bmt12_32_2_3_3	0.87552	0.00129	0.87809
ncf2bmt11_31_2_3_3	1.4	60	30673	18404	7964	11.29	1.0e-04	0.89450	0.00137	0.89723	hcf3bmt12_31_2_3_3	0.87475	0.00139	0.87752
ncf2bmt11_30_2_3_3	1.4	60	29743	17846	8013	11.72	1.0e-04	0.89227	0.00133	0.89493	hcf3bmt12_30_2_3_3	0.87454	0.00121	0.87695
content in flooded containment vessel, array packaging model for CSI=2.0														
NCT											**HAC**			
no can spacers (np thickness = 0.0 in.)														

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	²³⁵U (g)	H₂O (g)	h/x	molfr	k_{eff}	σ	$k_{eff}+2σ$	case name	k_{eff}	σ	$k_{eff}+2σ$
ncf3bmt11_24_1_5_3	0.0	80	23178	18542	8970	12.63	1.0e-04	0.92510	0.00131	0.92772	hcf4bmt12_24_1_5_3	0.88778	0.00138	0.89054
ncf3bmt11_23_1_5_3	0.0	80	22251	17801	9019	13.22	1.0e-04	0.92307	0.00144	0.92595	hcf4bmt12_23_1_5_3	0.88545	0.00131	0.88806
ncf3bmt11_22_1_5_3	0.0	80	21324	17059	9068	13.87	1.0e-04	0.91977	0.00125	0.92228	hcf4bmt12_22_1_5_3	0.88238	0.00140	0.88519
ncf3bmt11_21_1_5_3	0.0	80	20397	16317	9117	14.58	1.0e-04	0.91607	0.00134	0.91876	hcf4bmt12_21_1_5_3	0.87917	0.00128	0.88173
ncf3bmt11_20_1_5_3	0.0	80	19470	15576	9166	15.36	1.0e-04	0.91812	0.00123	0.92059	hcf4bmt12_20_1_5_3	0.87731	0.00132	0.87995
ncf3bmt11_36_1_4_3	0.0	70	35275	24693	8332	8.81	1.0e-04	0.93179	0.00144	0.93467	hcf4bmt12_36_1_4_3	0.89390	0.00117	0.89625
ncf3bmt11_35_1_4_3	0.0	70	34347	24043	8381	9.10	1.0e-04	0.92998	0.00125	0.93248	hcf4bmt12_35_1_4_3	0.89164	0.00140	0.89444
ncf3bmt11_34_1_4_3	0.0	70	33419	23393	8430	9.41	1.0e-04	0.92792	0.00128	0.93049	hcf4bmt12_34_1_4_3	0.88829	0.00123	0.89075
ncf3bmt11_33_1_4_3	0.0	70	32490	22743	8479	9.73	1.0e-04	0.92421	0.00134	0.92690	hcf4bmt12_33_1_4_3	0.88600	0.00117	0.88834
ncf3bmt11_32_1_4_3	0.0	70	31562	22093	8529	10.08	1.0e-04	0.92329	0.00131	0.92591	hcf4bmt12_32_1_4_3	0.88581	0.00140	0.88861
ncf3bmt11_31_1_4_3	0.0	70	30634	21444	8578	10.44	1.0e-04	0.91896	0.00132	0.92160	hcf4bmt12_31_1_4_3	0.88314	0.00132	0.88577
ncf3bmt11_36_1_3_3	0.0	60	35320	21192	8332	10.26	1.0e-04	0.90201	0.00123	0.90447	hcf4bmt12_36_1_3_3	0.86792	0.00130	0.87053
ncf3bmt11_35_1_3_3	0.0	60	34391	20634	8381	10.60	1.0e-04	0.90103	0.00130	0.90363	hcf4bmt12_35_1_3_3	0.86477	0.00150	0.86777
ncf3bmt11_34_1_3_3	0.0	60	33461	20077	8430	10.96	1.0e-04	0.89984	0.00147	0.90278	hcf4bmt12_34_1_3_3	0.86396	0.00137	0.86670
ncf3bmt11_33_1_3_3	0.0	60	32532	19519	8479	11.34	1.0e-04	0.89745	0.00130	0.90004	hcf4bmt12_33_1_3_3	0.86136	0.00134	0.86404
ncf3bmt11_32_1_3_3	0.0	60	31602	18961	8529	11.74	1.0e-04	0.89310	0.00137	0.89585	hcf4bmt12_32_1_3_3	0.86115	0.00124	0.86362
ncf3bmt11_31_1_3_3	0.0	60	30673	18404	8578	12.17	1.0e-04	0.89440	0.00135	0.89711	hcf4bmt12_31_1_3_3	0.85909	0.00151	0.86212
with can spacers (np thickness = 1.4 in.)														
ncf3bmt11_19_2_8_3	1.4	100	18496	18496	8602	12.14	1.0e-04	0.93577	0.00135	0.93847	hcf4bmt12_19_2_8_3	0.89811	0.00149	0.90110
ncf3bmt11_18_2_8_3	1.4	100	17571	17571	8651	12.85	1.0e-04	0.93186	0.00154	0.93494	hcf4bmt12_18_2_8_3	0.89794	0.00151	0.90096
ncf3bmt11_17_2_8_3	1.4	100	16646	16646	8700	13.64	1.0e-04	0.92731	0.00135	0.93002	hcf4bmt12_17_2_8_3	0.89377	0.00134	0.89644
ncf3bmt11_16_2_8_3	1.4	100	15721	15721	8749	14.53	1.0e-04	0.92992	0.00126	0.93244	hcf4bmt12_16_2_8_3	0.89138	0.00121	0.89379
ncf3bmt11_15_2_8_3	1.4	100	14796	14796	8798	15.52	1.0e-04	0.92597	0.00134	0.92865	hcf4bmt12_15_2_8_3	0.89085	0.00130	0.89345
ncf3bmt11_14_2_8_3	1.4	100	13872	13872	8847	16.65	1.0e-04	0.91788	0.00124	0.92037	hcf4bmt12_14_2_8_3	0.88486	0.00143	0.88772
ncf3bmt11_13_2_8_3	1.4	100	12947	12947	8896	17.94	1.0e-04	0.91410	0.00116	0.91642	hcf4bmt12_13_2_8_3	0.88161	0.00147	0.88454

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	²³⁵U (g)	H₂O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncf3bmt11_12_2_8_3	1.4	100	11097	11097	8995	21.16	1.0e-04	0.90586	0.00164	0.90915	hcf4bmt12_12_2_8_3	0.87451	0.00129	0.87708
ncf3bmt11_11_2_8_3	1.4	100	10173	10173	9044	23.20	1.0e-04	0.90034	0.00144	0.90322	hcf4bmt12_11_2_8_3	0.86789	0.00129	0.87047
ncf3bmt11_24_2_7_3	1.4	95	23134	21977	8357	9.92	1.0e-04	0.93439	0.00143	0.93724	hcf4bmt12_24_2_7_3	0.89896	0.00122	0.90141
ncf3bmt11_23_2_7_3	1.4	95	22209	21098	8406	10.40	1.0e-04	0.93453	0.00131	0.93716	hcf4bmt12_23_2_7_3	0.89761	0.00131	0.90024
ncf3bmt11_22_2_7_3	1.4	95	21283	20219	8455	10.91	1.0e-04	0.92992	0.00130	0.93252	hcf4bmt12_22_2_7_3	0.89290	0.00142	0.89574
ncf3bmt11_21_2_7_3	1.4	95	20358	19340	8504	11.48	1.0e-04	0.92588	0.00136	0.92860	hcf4bmt12_21_2_7_3	0.89171	0.00135	0.89441
ncf3bmt11_20_2_7_3	1.4	95	19433	18461	8553	12.09	1.0e-04	0.92140	0.00126	0.92392	hcf4bmt12_20_2_7_3	0.88860	0.00138	0.89135
ncf3bmt11_19_2_7_3	1.4	95	18507	17582	8602	12.77	1.0e-04	0.91794	0.00128	0.92049	hcf4bmt12_19_2_7_3	0.88544	0.00131	0.88806
ncf3bmt11_18_2_7_3	1.4	95	17582	16703	8651	13.52	1.0e-04	0.91432	0.00143	0.91717	hcf4bmt12_18_2_7_3	0.87916	0.00119	0.88154
ncf3bmt11_28_2_6_3	1.4	90	27778	25001	8111	8.47	1.0e-04	0.93537	0.00113	0.93763	hcf4bmt12_28_2_6_3	0.89885	0.00127	0.90138
ncf3bmt11_27_2_6_3	1.4	90	26852	24167	8160	8.81	1.0e-04	0.93322	0.00129	0.93581	hcf4bmt12_27_2_6_3	0.89628	0.00137	0.89902
ncf3bmt11_26_2_6_3	1.4	90	25927	23334	8209	9.18	1.0e-04	0.92880	0.00119	0.93117	hcf4bmt12_26_2_6_3	0.89189	0.00127	0.89443
ncf3bmt11_25_2_6_3	1.4	90	24075	21667	8308	10.01	1.0e-04	0.92446	0.00149	0.92745	hcf4bmt12_25_2_6_3	0.88877	0.00144	0.89165
ncf3bmt11_24_2_6_3	1.4	90	23149	20834	8357	10.47	1.0e-04	0.92270	0.00138	0.92547	hcf4bmt12_24_2_6_3	0.88731	0.00129	0.88990
ncf3bmt11_23_2_6_3	1.4	90	22223	20000	8406	10.97	1.0e-04	0.91857	0.00138	0.92133	hcf4bmt12_23_2_6_3	0.88245	0.00133	0.88512
ncf3bmt11_22_2_6_3	1.4	90	21297	19167	8455	11.51	1.0e-04	0.91639	0.00145	0.91929	hcf4bmt12_22_2_6_3	0.87838	0.00119	0.88076
ncf3bmt11_34_2_5_3	1.4	80	33376	26701	7817	7.64	1.0e-04	0.92540	0.00127	0.92795	hcf4bmt12_34_2_5_3	0.88608	0.00131	0.88869
ncf3bmt11_33_2_5_3	1.4	80	32449	25959	7866	7.91	1.0e-04	0.92436	0.00140	0.92716	hcf4bmt12_33_2_5_3	0.88749	0.00156	0.89061
ncf3bmt11_32_2_5_3	1.4	80	31522	25218	7915	8.19	1.0e-04	0.91919	0.00120	0.92159	hcf4bmt12_32_2_5_3	0.88581	0.00130	0.88841
ncf3bmt11_31_2_5_3	1.4	80	30595	24476	7964	8.49	1.0e-04	0.91747	0.00126	0.92000	hcf4bmt12_31_2_5_3	0.88299	0.00141	0.88582
ncf3bmt11_36_2_4_3	1.4	70	35275	24693	7719	8.16	1.0e-04	0.90114	0.00120	0.90353	hcf4bmt12_36_2_4_3	0.86624	0.00106	0.86835
ncf3bmt11_35_2_4_3	1.4	70	34347	24043	7768	8.43	1.0e-04	0.89908	0.00131	0.90169	hcf4bmt12_35_2_4_3	0.86262	0.00143	0.86549
ncf3bmt11_34_2_4_3	1.4	70	33419	23393	7817	8.72	1.0e-04	0.89841	0.00115	0.90070	hcf4bmt12_34_2_4_3	0.86008	0.00129	0.86265

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2\sigma$	case name	k_{eff}	σ	$k_{eff}+2\sigma$
ncf3bmt11_36_2_3_3	1.4	60	35320	21192	7719	9.51	1.0e-04	0.87206	0.00120	0.87446	hcf4bmt12_36_2_3_3	0.83873	0.00122	0.84116
ncf3bmt11_35_2_3_3	1.4	60	34391	20634	7768	9.83	1.0e-04	0.86988	0.00123	0.87235	hcf4bmt12_35_2_3_3	0.83470	0.00130	0.83731
ncf3bmt11_34_2_3_3	1.4	60	33461	20077	7817	10.16	1.0e-04	0.86818	0.00130	0.87078	hcf4bmt12_34_2_3_3	0.83204	0.00117	0.83439
content in flooded containment vessel, array packaging model for CSI=3.1														
				NCT							**HAC**			
no can spacers (np thickness = 0.0 in.)														
nctf5bmt11_36_1_5_3	0.0	80	35231	28184	8332	7.72	1.0e-04	0.92519	0.00130	0.92779	hctf5bmt12_36_1_5_3	0.90361	0.00119	0.90600
nctf5bmt11_35_1_5_3	0.0	80	34303	27443	8381	7.97	1.0e-04	0.91980	0.00138	0.92255	hctf5bmt12_35_1_5_3	0.90246	0.00137	0.90520
nctf5bmt11_34_1_5_3	0.0	80	33376	26701	8430	8.24	1.0e-04	0.92113	0.00138	0.92389	hctf5bmt12_34_1_5_3	0.89974	0.00136	0.90246
nctf5bmt11_33_1_5_3	0.0	80	32449	25959	8479	8.53	1.0e-04	0.91846	0.00117	0.92079	hctf5bmt12_33_1_5_3	0.89587	0.00129	0.89845
nctf5bmt11_32_1_5_3	0.0	80	31522	25218	8529	8.83	1.0e-04	0.91556	0.00119	0.91795	hctf5bmt12_32_1_5_3	0.89459	0.00148	0.89755
nctf5bmt11_36_1_4_3	0.0	70	35275	24693	8332	8.81	1.0e-04	0.90020	0.00139	0.90299	hctf5bmt12_36_1_4_3	0.87905	0.00142	0.88188
nctf5bmt11_35_1_4_3	0.0	70	34347	24043	8381	9.10	1.0e-04	0.89748	0.00118	0.89984	hctf5bmt12_35_1_4_3	0.87388	0.00126	0.87639
nctf5bmt11_34_1_4_3	0.0	70	33419	23393	8430	9.41	1.0e-04	0.89206	0.00115	0.89437	hctf5bmt12_34_1_4_3	0.87550	0.00150	0.87851
nctf5bmt11_36_1_3_3	0.0	60	35320	21192	8332	10.26	1.0e-04	0.87170	0.00131	0.87433	hctf5bmt12_36_1_3_3	0.85181	0.00121	0.85423
nctf5bmt11_35_1_3_3	0.0	60	34391	20634	8381	10.60	1.0e-04	0.87122	0.00146	0.87414	hctf5bmt12_35_1_3_3	0.85100	0.00135	0.85369
with can spacers (np thickness = 1.4 in.)														
nctf5bmt11_26_2_8_3	1.4	100	25894	25894	8209	8.28	1.0e-04	0.92880	0.00114	0.93108	hctf5bmt12_26_2_8_3	0.90779	0.00115	0.91009
nctf5bmt11_25_2_8_3	1.4	100	24969	24969	8258	8.63	1.0e-04	0.92250	0.00118	0.92485	hctf5bmt12_25_2_8_3	0.90619	0.00136	0.90890
nctf5bmt11_24_2_8_3	1.4	100	23119	23119	8357	9.43	1.0e-04	0.92133	0.00137	0.92406	hctf5bmt12_24_2_8_3	0.90163	0.00125	0.90413
nctf5bmt11_23_2_8_3	1.4	100	22195	22195	8406	9.89	1.0e-04	0.92154	0.00124	0.92401	hctf5bmt12_23_2_8_3	0.90028	0.00150	0.90329
nctf5bmt11_22_2_8_3	1.4	100	21270	21270	8455	10.38	1.0e-04	0.91455	0.00141	0.91737	hctf5bmt12_22_2_8_3	0.89693	0.00148	0.89990
nctf5bmt11_21_2_8_3	1.4	100	20345	20345	8504	10.91	1.0e-04	0.91027	0.00140	0.91306	hctf5bmt12_21_2_8_3	0.89420	0.00140	0.89700

Table 6.9.6-11. Results for HEU broken metal content in packaging calculation model

case name	np (in)	enr. (wt%)	U (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
nctf5bmt11_30_2_7_3	1.4	95	29612	28131	8013	7.43	1.0e-04	0.92409	0.00126	0.92660	hctf5bmt12_30_2_7_3	0.90413	0.00129	0.90670
nctf5bmt11_29_2_7_3	1.4	95	28686	27252	8062	7.72	1.0e-04	0.92175	0.00160	0.92495	hctf5bmt12_29_2_7_3	0.90149	0.00125	0.90400
nctf5bmt11_28_2_7_3	1.4	95	27761	26373	8111	8.03	1.0e-04	0.91662	0.00149	0.91960	hctf5bmt12_28_2_7_3	0.89554	0.00127	0.89809
nctf5bmt11_27_2_7_3	1.4	95	26835	25494	8160	8.35	1.0e-04	0.91290	0.00112	0.91515	hctf5bmt12_27_2_7_3	0.89349	0.00120	0.89588
nctf5bmt11_26_2_7_3	1.4	95	25910	24615	8209	8.71	1.0e-04	0.90934	0.00124	0.91182	hctf5bmt12_26_2_7_3	0.88954	0.00116	0.89187
nctf5bmt11_25_2_7_3	1.4	95	24985	23736	8258	9.08	1.0e-04	0.90900	0.00116	0.91131	hctf5bmt12_25_2_7_3	0.88811	0.00120	0.89051
nctf5bmt11_24_2_7_3	1.4	95	23134	21977	8357	9.92	1.0e-04	0.90460	0.00146	0.90752	hctf5bmt12_24_2_7_3	0.88850	0.00132	0.89113
nctf5bmt11_35_2_6_3	1.4	90	34260	30834	7768	6.58	1.0e-04	0.92200	0.00132	0.92464	hctf5bmt12_35_2_6_3	0.90072	0.00123	0.90318
nctf5bmt11_34_2_6_3	1.4	90	33334	30001	7817	6.80	1.0e-04	0.91799	0.00130	0.92059	hctf5bmt12_34_2_6_3	0.89921	0.00112	0.90145
nctf5bmt11_33_2_6_3	1.4	90	32408	29167	7866	7.04	1.0e-04	0.91789	0.00136	0.92061	hctf5bmt12_33_2_6_3	0.89931	0.00137	0.90206
nctf5bmt11_32_2_6_3	1.4	90	31482	28334	7915	7.29	1.0e-04	0.91514	0.00113	0.91740	hctf5bmt12_32_2_6_3	0.89395	0.00118	0.89631
nctf5bmt11_36_2_5_3	1.4	80	35231	28184	7719	7.15	1.0e-04	0.89457	0.00141	0.89739	hctf5bmt12_36_2_5_3	0.87726	0.00158	0.88041
nctf5bmt11_35_2_5_3	1.4	80	34303	27443	7768	7.39	1.0e-04	0.89528	0.00129	0.89787	hctf5bmt12_35_2_5_3	0.87420	0.00120	0.87660
nctf5bmt11_34_2_5_3	1.4	80	33376	26701	7817	7.64	1.0e-04	0.89346	0.00115	0.89576	hctf5bmt12_34_2_5_3	0.87530	0.00122	0.87775
nctf5bmt11_36_2_4_3	1.4	70	35275	24693	7719	8.16	1.0e-04	0.87119	0.00121	0.87361	hctf5bmt12_36_2_4_3	0.85030	0.00147	0.85323
nctf5bmt11_35_2_4_3	1.4	70	34347	24043	7768	8.43	1.0e-04	0.86740	0.00110	0.86959	hctf5bmt12_35_2_4_3	0.84958	0.00107	0.85173
nctf5bmt11_36_2_3_3	1.4	60	35320	21192	7719	9.51	1.0e-04	0.84212	0.00121	0.84454	hctf5bmt12_36_2_3_3	0.82413	0.00117	0.82647
nctf5bmt11_35_2_3_3	1.4	60	34391	20634	7768	9.83	1.0e-04	0.83953	0.00135	0.84223	hctf5bmt12_35_2_3_3	0.82142	0.00125	0.82393

Table 6.9.6-12. Results for HEU oxide content in CV calculation model

case name	np (in)	Ox (g)	^{235}U (g)	H_2O (g)	h/x	mocfr	k_{eff}	σ	k_{eff}+2σ				
flooded containment vessel, reflected													
no can spacers (np thickness = 0.0 in.)													
cvcroxt11_1_24_1	0.0	24000	21125	6534	9.90	1.0e+00	0.86964	0.00158	0.87280				
cvcroxt11_1_23_1	0.0	23000	20245	6687	10.45	1.0e+00	0.86415	0.00124	0.86664				
cvcroxt11_1_22_1	0.0	22000	19365	6839	11.04	1.0e+00	0.85842	0.00138	0.86118				
cvcroxt11_1_21_1	0.0	21000	18484	6992	11.70	1.0e+00	0.85350	0.00134	0.85618				
cvcroxt11_1_20_1	0.0	20000	17604	7144	12.42	1.0e+00	0.84407	0.00120	0.84646				
cvcroxt11_1_24_1	0.0	24000	21125	6534	9.90	1.0e+00	0.86964	0.00158	0.87280				
cvcroxt11_2_24_1	0.0	24000	20314	6534	9.39	1.0e+00	0.77974	0.00107	0.78188				
cvcroxt11_3_24_1	0.0	24000	19931	6534	9.05	1.0e+00	0.72803	0.00117	0.73037				
with can spacers (np thickness = 1.4 in.)													
cvcroxt11_1_24_2	1.4	24000	21125	5920	9.14	1.0e+00	0.87130	0.00128	0.87386				
cvcroxt11_1_23_2	1.4	23000	20245	6073	9.65	1.0e+00	0.86070	0.00108	0.86285				
cvcroxt11_1_22_2	1.4	22000	19365	6226	10.22	1.0e+00	0.85937	0.00137	0.86211				
cvcroxt11_1_21_2	1.4	21000	18484	6378	10.83	1.0e+00	0.85089	0.00141	0.85371				
cvcroxt11_1_20_2	1.4	20000	17604	6531	11.51	1.0e+00	0.84533	0.00142	0.84817				
cvcroxt11_1_24_2	1.4	24000	21125	5920	9.14	1.0e+00	0.87130	0.00128	0.87386				
cvcroxt11_2_24_2	1.4	24000	20314	5920	8.60	1.0e+00	0.78024	0.00132	0.78287				
cvcroxt11_3_24_2	1.4	24000	19931	5920	8.25	1.0e+00	0.72767	0.00125	0.73017				

Table 6.9.6-13. Results for HEU oxide content in packaging calculation model

case name	np (in)	Ox (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2\sigma$	case name	k_{eff}	σ	$k_{eff}+2\sigma$
content in flooded containment vessel, single package reflected													
NCT										HAC			
no can spacers (np thickness = 0.0 in.)													
ncsroxt11_1_24_1_1	0.0	24000	21125	6534	9.90	1.0e-20	0.69793	0.00126	0.70046	hcsroxt12_1_24_1_1	0.70135	0.00112	0.70360
ncsroxt11_1_24_1_2	0.0	24000	21125	6534	9.90	1.0e-05	0.69871	0.00109	0.70090	hcsroxt12_1_24_1_2	0.70009	0.00100	0.70210
ncsroxt11_1_24_1_3	0.0	24000	21125	6534	9.90	1.0e-04	0.69773	0.00110	0.69993	hcsroxt12_1_24_1_3	0.70278	0.00098	0.70474
ncsroxt11_1_24_1_4	0.0	24000	21125	6534	9.90	1.0e-03	0.69827	0.00111	0.70049	hcsroxt12_1_24_1_4	0.70081	0.00108	0.70297
ncsroxt11_1_24_1_5	0.0	24000	21125	6534	9.90	1.0e-02	0.69818	0.00111	0.70040	hcsroxt12_1_24_1_5	0.70228	0.00120	0.70468
ncsroxt11_1_24_1_6	0.0	24000	21125	6534	9.90	1.0e-01	0.70610	0.00125	0.70859	hcsroxt12_1_24_1_6	0.71223	0.00122	0.71468
ncsroxt11_1_24_1_8	0.0	24000	21125	6534	9.90	3.0e-01	0.72371	0.00111	0.72593	hcsroxt12_1_24_1_8	0.72797	0.00112	0.73021
ncsroxt11_1_24_1_15	0.0	24000	21125	6534	9.90	1.0e+00	0.78093	0.00129	0.78351	hcsroxt12_1_24_1_15	0.78438	0.00117	0.78671
ncsroxt11_1_24_1_15	0.0	24000	21125	6534	9.90	1.0e+00	0.78093	0.00129	0.78351	hcsroxt12_1_24_1_15	0.78438	0.00117	0.78671
ncsroxt11_1_23_1_15	0.0	23000	20245	6686	10.45	1.0e+00	0.77606	0.00112	0.77830	hcsroxt12_1_23_1_15	0.77886	0.00128	0.78143
ncsroxt11_1_22_1_15	0.0	22000	19365	6839	11.04	1.0e+00	0.77139	0.00114	0.77366	hcsroxt12_1_22_1_15	0.77340	0.00131	0.77601
ncsroxt11_1_21_1_15	0.0	21000	18484	6992	11.70	1.0e+00	0.76391	0.00130	0.76650	hcsroxt12_1_21_1_15	0.76612	0.00129	0.76869
ncsroxt11_1_20_1_15	0.0	20000	17604	7144	12.42	1.0e+00	0.75853	0.00124	0.76100	hcsroxt12_1_20_1_15	0.76262	0.00127	0.76515
ncsroxt11_1_19_1_15	0.0	19000	16724	7297	13.21	1.0e+00	0.75339	0.00110	0.75559	hcsroxt12_1_19_1_15	0.75707	0.00120	0.75948
ncsroxt11_1_18_1_15	0.0	18000	15844	7450	14.10	1.0e+00	0.74455	0.00111	0.74677	hcsroxt12_1_18_1_15	0.74887	0.00149	0.75184
ncsroxt11_1_17_1_15	0.0	17000	14964	7602	15.09	1.0e+00	0.73793	0.00111	0.74015	hcsroxt12_1_17_1_15	0.73983	0.00111	0.74205
ncsroxt11_1_16_1_15	0.0	16000	14083	7755	16.20	1.0e+00	0.72778	0.00137	0.73052	hcsroxt12_1_16_1_15	0.73191	0.00111	0.73414
ncsroxt11_1_15_1_15	0.0	15000	13203	7908	17.46	1.0e+00	0.71871	0.00110	0.72091	hcsroxt12_1_15_1_15	0.72073	0.00115	0.72303
ncsroxt11_1_14_1_15	0.0	14000	12323	8060	18.90	1.0e+00	0.70687	0.00118	0.70924	hcsroxt12_1_14_1_15	0.70917	0.00119	0.71156
ncsroxt11_1_13_1_15	0.0	13000	11443	8213	20.56	1.0e+00	0.69465	0.00110	0.69684	hcsroxt12_1_13_1_15	0.69814	0.00120	0.70054
ncsroxt11_1_12_1_15	0.0	12000	10562	8365	22.50	1.0e+00	0.68284	0.00119	0.68522	hcsroxt12_1_12_1_15	0.68451	0.00109	0.68668
ncsroxt11_1_11_1_15	0.0	11000	9682	8518	24.79	1.0e+00	0.66445	0.00116	0.66677	hcsroxt12_1_11_1_15	0.66962	0.00126	0.67213
ncsroxt11_1_10_1_15	0.0	10000	8802	8671	27.54	1.0e+00	0.65050	0.00126	0.65302	hcsroxt12_1_10_1_15	0.65175	0.00116	0.65407

Table 6.9.6-13. Results for HEU oxide content in packaging calculation model

case name	np (in)	Ox (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2\sigma$	case name	k_{eff}	σ	$k_{eff}+2\sigma$
ncsroxt11_1_9_1_15	0.0	9000	7922	8823	30.90	1.0e+00	0.63200	0.00117	0.63435	hcsroxt12_1_9_1_15	0.63539	0.00111	0.63761
ncsroxt11_1_8_1_15	0.0	8000	7042	8976	35.10	1.0e+00	0.60708	0.00100	0.60907	hcsroxt12_1_8_1_15	0.61226	0.00103	0.61431
ncsroxt11_1_7_1_15	0.0	7000	6162	9128	40.49	1.0e+00	0.58235	0.00105	0.58445	hcsroxt12_1_7_1_15	0.58618	0.00110	0.58837
ncsroxt11_1_6_1_15	0.0	6000	5281	9281	47.69	1.0e+00	0.55317	0.00109	0.55535	hcsroxt12_1_6_1_15	0.55461	0.00119	0.55700
ncsroxt11_1_5_1_15	0.0	5000	4401	9434	57.77	1.0e+00	0.51802	0.00097	0.51996	hcsroxt12_1_5_1_15	0.52188	0.00094	0.52376
ncsroxt11_1_4_1_15	0.0	4000	3521	9586	72.89	1.0e+00	0.47642	0.00101	0.47844	hcsroxt12_1_4_1_15	0.48243	0.00100	0.48443
ncsroxt11_1_3_1_15	0.0	3000	2641	9739	98.09	1.0e+00	0.42817	0.00093	0.43002	hcsroxt12_1_3_1_15	0.43527	0.00089	0.43705
ncsroxt11_1_2_1_15	0.0	2000	1760	9892	148.48	1.0e+00	0.36883	0.00090	0.37064	hcsroxt12_1_2_1_15	0.37526	0.00101	0.37729
ncsroxt11_1_1_1_15	0.0	1000	880	10044	299.61	1.0e+00	0.28616	0.00081	0.28778	hcsroxt12_1_1_1_15	0.29450	0.00084	0.29619
ncsroxt11_1_24_1_15	0.0	24000	21125	6534	9.90	1.0e+00	0.78093	0.00129	0.78351	hcsroxt12_1_24_1_15	0.78438	0.00117	0.78671
ncsroxt11_2_24_1_15	0.0	24000	20314	6534	9.39	1.0e+00	0.67533	0.00127	0.67786	hcsroxt12_2_24_1_15	0.67796	0.00104	0.68004
ncsroxt11_3_24_1_15	0.0	24000	19931	6534	9.05	1.0e+00	0.61703	0.00107	0.61918	hcsroxt12_3_24_1_15	0.61912	0.00093	0.62098

content in flooded containment vessel, array packaging model for CSI=0.0

							NCT				HAC		

no can spacers (np thickness = 0.0 in.)

case name	np (in)	Ox (g)	^{235}U (g)	H_2O (g)	h/x	moifr	k_{eff}	σ	$k_{eff}+2\sigma$	case name	k_{eff}	σ	$k_{eff}+2\sigma$
nciaoxt11_1_24_1_3	0.0	24000	21125	6534	9.90	1.0e-04	0.88837	0.00121	0.89079	hciaoxt12_1_24_1_3	0.88563	0.00105	0.88774
nciaoxt11_1_23_1_3	0.0	23000	20245	6686	10.45	1.0e-04	0.88001	0.00138	0.88278	hciaoxt12_1_23_1_3	0.87786	0.00101	0.87989
nciaoxt11_1_22_1_3	0.0	22000	19365	6839	11.04	1.0e-04	0.86544	0.00107	0.86759	hciaoxt12_1_22_1_3	0.86779	0.00128	0.87035
nciaoxt11_1_21_1_3	0.0	21000	18484	6992	11.70	1.0e-04	0.85704	0.00118	0.85940	hciaoxt12_1_21_1_3	0.85699	0.00100	0.85899
nciaoxt11_1_20_1_3	0.0	20000	17604	7144	12.42	1.0e-04	0.84889	0.00123	0.85136	hciaoxt12_1_20_1_3	0.84817	0.00109	0.85034
nciaoxt11_1_19_1_3	0.0	19000	16724	7297	13.21	1.0e-04	0.83839	0.00125	0.84090	hciaoxt12_1_19_1_3	0.83526	0.00107	0.83741
nciaoxt11_1_18_1_3	0.0	18000	15844	7450	14.10	1.0e-04	0.82333	0.00107	0.82547	hciaoxt12_1_18_1_3	0.82359	0.00105	0.82570
nciaoxt11_1_17_1_3	0.0	17000	14964	7602	15.09	1.0e-04	0.81151	0.00109	0.81369	hciaoxt12_1_17_1_3	0.80921	0.00111	0.81143
nciaoxt11_1_16_1_3	0.0	16000	14083	7755	16.20	1.0e-04	0.79826	0.00104	0.80035	hciaoxt12_1_16_1_3	0.79984	0.00145	0.80274
nciaoxt11_1_24_1_3	0.0	24000	21125	6534	9.90	1.0e-04	0.88837	0.00121	0.89079	hciaoxt12_1_24_1_3	0.88563	0.00105	0.88774

6-221

Table 6.9.6-13. Results for HEU oxide content in packaging calculation model

case name	np (in)	Ox (g)	^{235}U (g)	H$_2$O (g)	h/x	moifr	k$_{eff}$	σ	k$_{eff}$+2σ	case name	k$_{eff}$	σ	k$_{eff}$+2σ
nciaoxt11_2_24_1_3	0.0	24000	20314	6534	9.39	1.0e-04	0.78924	0.00100	0.79123	hciaoxt12_2_24_1_3	0.79124	0.00120	0.79365
nciaoxt11_3_24_1_3	0.0	24000	19931	6534	9.05	1.0e-04	0.73569	0.00091	0.73750	hciaoxt12_3_24_1_3	0.73414	0.00108	0.73629
with can spacers (np thickness = 1.4 in.)													
nciaoxt11_1_24_2_3	1.4	24000	21125	5920	9.14	1.0e-04	0.88810	0.00113	0.89037	hciaoxt12_1_24_2_3	0.88582	0.00123	0.88827
nciaoxt11_1_23_2_3	1.4	23000	20245	6073	9.65	1.0e-04	0.87871	0.00137	0.88144	hciaoxt12_1_23_2_3	0.87963	0.00111	0.88186
nciaoxt11_1_22_2_3	1.4	22000	19365	6226	10.22	1.0e-04	0.86777	0.00106	0.86990	hciaoxt12_1_22_2_3	0.86875	0.00126	0.87127
nciaoxt11_1_21_2_3	1.4	21000	18484	6378	10.83	1.0e-04	0.85678	0.00111	0.85900	hciaoxt12_1_21_2_3	0.85827	0.00117	0.86061
nciaoxt11_1_20_2_3	1.4	20000	17604	6531	11.51	1.0e-04	0.84815	0.00124	0.85062	hciaoxt12_1_20_2_3	0.84815	0.00124	0.85063
nciaoxt11_1_19_2_3	1.4	19000	16724	6683	12.26	1.0e-04	0.83738	0.00111	0.83959	hciaoxt12_1_19_2_3	0.83613	0.00121	0.83855
nciaoxt11_1_18_2_3	1.4	18000	15844	6836	13.09	1.0e-04	0.82385	0.00106	0.82597	hciaoxt12_1_18_2_3	0.82342	0.00127	0.82596
nciaoxt11_1_17_2_3	1.4	17000	14964	6989	14.02	1.0e-04	0.80928	0.00111	0.81150	hciaoxt12_1_17_2_3	0.81145	0.00114	0.81373
nciaoxt11_1_16_2_3	1.4	16000	14083	7141	15.06	1.0e-04	0.79700	0.00130	0.79961	hciaoxt12_1_16_2_3	0.79569	0.00108	0.79785
nciaoxt11_1_24_2_3	1.4	24000	21125	5920	9.14	1.0e-04	0.88810	0.00113	0.89037	hciaoxt12_1_24_2_3	0.88582	0.00123	0.88827
nciaoxt11_2_24_2_3	1.4	24000	20314	5920	8.60	1.0e-04	0.78996	0.00089	0.79174	hciaoxt12_2_24_2_3	0.79177	0.00104	0.79385
nciaoxt11_3_24_2_3	1.4	24000	19931	5920	8.25	1.0e-04	0.73406	0.00100	0.73606	hciaoxt12_3_24_2_3	0.73524	0.00091	0.73707

Table 6.9.6-14. Results for UNX crystal content in CV calculation model

case name	np	unh (g)	^{235}U (g)	H$_2$O (g)	h/x	gU/l	mocfr	k$_{eff}$	σ	k$_{eff}$+2σ			
flooded containment vessel, reflected													
no can spacers (np thickness = 0.0 in.)													
cvcrunhct11_24_1	0.0	24000	11303	1620	15.74	1106	1.0e+00	0.82007	0.00128	0.82262			
cvcrunhct11_23_1	0.0	23000	10832	1978	16.77	1060	1.0e+00	0.82120	0.00129	0.82378			
cvcrunhct11_22_1	0.0	22000	10361	2335	17.88	1014	1.0e+00	0.82675	0.00122	0.82919			
cvcrunhct11_21_1	0.0	21000	9890	2693	19.11	968	1.0e+00	0.82938	0.00118	0.83174			

Table 6.9.6-14. Results for UNX crystal content in CV calculation model

case name	np	unh (g)	^{235}U (g)	H$_2$O (g)	h/x	gU/l	mocfr	k_{eff}	σ	k_{eff}+2σ
cvcrunhct11_20_1	0.0	20000	9419	3050	20.45	922	1.0e+00	0.83221	0.00129	0.83480
cvcrunhct11_19_1	0.0	19000	8948	3407	21.94	876	1.0e+00	0.83423	0.00152	0.83728
cvcrunhct11_18_1	0.0	18000	8477	3765	23.59	830	1.0e+00	0.83622	0.00128	0.83878
cvcrunhct11_17_1	0.0	17000	8006	4122	25.44	784	1.0e+00	0.84032	0.00167	0.84365
cvcrunhct11_16_1	0.0	16000	7536	4479	27.51	738	1.0e+00	0.84509	0.00151	0.84811
cvcrunhct11_15_1	0.0	15000	7064	4837	29.87	692	1.0e+00	0.84402	0.00133	0.84667
cvcrunhct11_14_1	0.0	14000	6594	5194	32.56	645	1.0e+00	0.84915	0.00130	0.85175
cvcrunhct11_13_1	0.0	13000	6123	5551	35.67	599	1.0e+00	0.84986	0.00127	0.85241
cvcrunhct11_12_1	0.0	12000	5652	5909	39.29	553	1.0e+00	0.85138	0.00159	0.85456
cvcrunhct11_11_1	0.0	11000	5181	6266	43.57	507	1.0e+00	0.85137	0.00136	0.85408
cvcrunhct11_10_1	0.0	10000	4710	6623	48.71	461	1.0e+00	0.85062	0.00149	0.85359
cvcrunhct11_9_1	0.0	9000	4239	6981	54.99	415	1.0e+00	0.85423	0.00147	0.85718
cvcrunhct11_8_1	0.0	8000	3768	7338	62.83	369	1.0e+00	0.84783	0.00152	0.85088
cvcrunhct11_7_1	0.0	7000	3297	7695	72.92	323	1.0e+00	0.84713	0.00166	0.85044
cvcrunhct11_6_1	0.0	6000	2826	8053	86.38	277	1.0e+00	0.83915	0.00151	0.84218
cvcrunhct11_5_1	0.0	5000	2355	8410	105.2	231	1.0e+00	0.82865	0.00177	0.83220
cvcrunhct11_4_1	0.0	4000	1884	8768	133.5	184	1.0e+00	0.81158	0.00162	0.81483
cvcrunhct11_3_1	0.0	3000	1413	9125	180.6	138	1.0e+00	0.78282	0.00120	0.78522
cvcrunhct11_2_1	0.0	2000	942	9482	274.7	92	1.0e+00	0.73150	0.00114	0.73377
cvcrunhct11_1_1	0.0	1000	471	9840	557.2	46	1.0e+00	0.60716	0.00106	0.60927
with can spacers (np thickness = 1.4 in.)										
cvcrunhct11_24_2	1.4	24000	11303	1007	14.33	1177	1.0e+00	0.78613	0.00148	0.78908
cvcrunhct11_23_2	1.4	23000	10832	1364	15.29	1128	1.0e+00	0.78743	0.00128	0.78999
cvcrunhct11_22_2	1.4	22000	10361	1722	16.34	1079	1.0e+00	0.79414	0.00129	0.79672
cvcrunhct11_21_2	1.4	21000	9890	2079	17.49	1030	1.0e+00	0.79498	0.00129	0.79757
cvcrunhct11_20_2	1.4	20000	9419	2436	18.75	981	1.0e+00	0.79912	0.00121	0.80154

Table 6.9.6-15. Results for UNX crystal content in packaging calculation model

case name	np	unh (g)	^{235}U (g)	H_2O (g)	h/x	gU/l	moifr	k_{eff}	σ	$k_{eff}+2σ$	case name	k_{eff}	σ	$k_{eff}+2σ$
content in flooded containment vessel, single package reflected														
NCT											HAC			
no can spacers (np thickness = 0.0 in.)														
ncsrunhct11_24_1_1	0.0	24000	11303	1620	15.74	1106	1.0e-20	0.60250	0.00130	0.60510	hcsrunhct12_24_1_1	0.60528	0.00129	0.60786
ncsrunhct11_24_1_2	0.0	24000	11303	1620	15.74	1106	1.0e-05	0.59895	0.00119	0.60134	hcsrunhct12_24_1_2	0.60289	0.00142	0.60574
ncsrunhct11_24_1_3	0.0	24000	11303	1620	15.74	1106	1.0e-04	0.59947	0.00124	0.60194	hcsrunhct12_24_1_3	0.60552	0.00130	0.60812
ncsrunhct11_24_1_4	0.0	24000	11303	1620	15.74	1106	1.0e-03	0.60331	0.00132	0.60595	hcsrunhct12_24_1_4	0.60265	0.00112	0.60489
ncsrunhct11_24_1_5	0.0	24000	11303	1620	15.74	1106	1.0e-02	0.60398	0.00118	0.60635	hcsrunhct12_24_1_5	0.60426	0.00152	0.60731
ncsrunhct11_24_1_6	0.0	24000	11303	1620	15.74	1106	1.0e-01	0.61004	0.00142	0.61287	hcsrunhct12_24_1_6	0.61378	0.00127	0.61632
ncsrunhct11_24_1_8	0.0	24000	11303	1620	15.74	1106	3.0e-01	0.63238	0.00143	0.63524	hcsrunhct12_24_1_8	0.63556	0.00128	0.63813
ncsrunhct11_24_1_15	0.0	24000	11303	1620	15.74	1106	1.0e+00	0.69882	0.00142	0.70166	hcsrunhct12_24_1_15	0.70190	0.00129	0.70448
ncsrunhct11_24_1_15	0.0	24000	11303	1620	15.74	1106	1.0e+00	0.69882	0.00142	0.70166	hcsrunhct12_24_1_15	0.70190	0.00129	0.70448
ncsrunhct11_23_1_15	0.0	23000	10832	1978	16.77	1060	1.0e+00	0.70360	0.00134	0.70628	hcsrunhct12_23_1_15	0.70555	0.00129	0.70813
ncsrunhct11_22_1_15	0.0	22000	10361	2335	17.88	1014	1.0e+00	0.70899	0.00132	0.71163	hcsrunhct12_22_1_15	0.70899	0.00136	0.71171
ncsrunhct11_21_1_15	0.0	21000	9890	2693	19.11	968	1.0e+00	0.71172	0.00133	0.71438	hcsrunhct12_21_1_15	0.71348	0.00158	0.71664
ncsrunhct11_20_1_15	0.0	20000	9419	3050	20.45	922	1.0e+00	0.71256	0.00123	0.71501	hcsrunhct12_20_1_15	0.71623	0.00117	0.71858
ncsrunhct11_19_1_15	0.0	19000	8948	3407	21.94	876	1.0e+00	0.71780	0.00132	0.72045	hcsrunhct12_19_1_15	0.71798	0.00132	0.72063
ncsrunhct11_18_1_15	0.0	18000	8477	3765	23.59	830	1.0e+00	0.72130	0.00139	0.72407	hcsrunhct12_18_1_15	0.72545	0.00149	0.72843
ncsrunhct11_17_1_15	0.0	17000	8006	4122	25.44	784	1.0e+00	0.72340	0.00161	0.72663	hcsrunhct12_17_1_15	0.72589	0.00134	0.72856
ncsrunhct11_16_1_15	0.0	16000	7536	4479	27.51	738	1.0e+00	0.72816	0.00141	0.73098	hcsrunhct12_16_1_15	0.73042	0.00147	0.73336
ncsrunhct11_15_1_15	0.0	15000	7064	4837	29.87	692	1.0e+00	0.73150	0.00149	0.73449	hcsrunhct12_15_1_15	0.73525	0.00151	0.73827
ncsrunhct11_14_1_15	0.0	14000	6594	5194	32.56	645	1.0e+00	0.73255	0.00135	0.73524	hcsrunhct12_14_1_15	0.73405	0.00150	0.73704
ncsrunhct11_13_1_15	0.0	13000	6123	5551	35.67	599	1.0e+00	0.73488	0.00128	0.73745	hcsrunhct12_13_1_15	0.73722	0.00159	0.74040
ncsrunhct11_12_1_15	0.0	12000	5652	5909	39.29	553	1.0e+00	0.73982	0.00146	0.74274	hcsrunhct12_12_1_15	0.74114	0.00126	0.74366
ncsrunhct11_11_1_15	0.0	11000	5181	6266	43.57	507	1.0e+00	0.74059	0.00156	0.74370	hcsrunhct12_11_1_15	0.74104	0.00187	0.74477
ncsrunhct11_10_1_15	0.0	10000	4710	6623	48.71	461	1.0e+00	0.74238	0.00148	0.74533	hcsrunhct12_10_1_15	0.74247	0.00134	0.74514

Table 6.9.6-15. Results for UNX crystal content in packaging calculation model

case name	np	unh (g)	^{235}U (g)	H_2O (g)	h/x	gU/l	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
ncsrunhct11_9_1_15	0.0	9000	4239	6981	54.99	415	1.0e+00	0.74214	0.00135	0.74484	hcsrunhct12_9_1_15	0.74537	0.00150	0.74836
ncsrunhct11_8_1_15	0.0	8000	3768	7338	62.83	369	1.0e+00	0.74436	0.00146	0.74728	hcsrunhct12_8_1_15	0.74169	0.00176	0.74521
ncsrunhct11_7_1_15	0.0	7000	3297	7695	72.92	323	1.0e+00	0.73972	0.00146	0.74265	hcsrunhct12_7_1_15	0.74201	0.00129	0.74459
ncsrunhct11_6_1_15	0.0	6000	2826	8053	86.38	277	1.0e+00	0.73458	0.00147	0.73752	hcsrunhct12_6_1_15	0.73491	0.00155	0.73802
ncsrunhct11_5_1_15	0.0	5000	2355	8410	105.22	231	1.0e+00	0.72880	0.00143	0.73166	hcsrunhct12_5_1_15	0.72804	0.00151	0.73107
ncsrunhct11_4_1_15	0.0	4000	1884	8768	133.47	184	1.0e+00	0.71269	0.00158	0.71585	hcsrunhct12_4_1_15	0.71463	0.00147	0.71758
ncsrunhct11_3_1_15	0.0	3000	1413	9125	180.57	138	1.0e+00	0.68768	0.00137	0.69042	hcsrunhct12_3_1_15	0.69065	0.00121	0.69306
ncsrunhct11_2_1_15	0.0	2000	942	9482	274.74	92	1.0e+00	0.64383	0.00118	0.64619	hcsrunhct12_2_1_15	0.64813	0.00131	0.65076
ncsrunhct11_1_1_15	0.0	1000	471	9840	557.20	46	1.0e+00	0.53851	0.00125	0.54101	hcsrunhct12_1_1_15	0.53675	0.00114	0.53903
with can spacers (np thickness = 1.4 in.)														
ncsrunhct11_24_2_1	1.4	24000	11303	1007	14.33	1177	1.0e-20	0.55429	0.00112	0.55653	hcsrunhct12_24_2_1	0.55844	0.00137	0.56119
ncsrunhct11_24_2_2	1.4	24000	11303	1007	14.33	1177	1.0e-05	0.55370	0.00134	0.55638	hcsrunhct12_24_2_2	0.55879	0.00112	0.56103
ncsrunhct11_24_2_3	1.4	24000	11303	1007	14.33	1177	1.0e-04	0.55346	0.00109	0.55565	hcsrunhct12_24_2_3	0.55750	0.00107	0.55964
ncsrunhct11_24_2_4	1.4	24000	11303	1007	14.33	1177	1.0e-03	0.55520	0.00116	0.55752	hcsrunhct12_24_2_4	0.55905	0.00109	0.56123
ncsrunhct11_24_2_5	1.4	24000	11303	1007	14.33	1177	1.0e-02	0.55587	0.00119	0.55825	hcsrunhct12_24_2_5	0.55787	0.00146	0.56079
ncsrunhct11_24_2_6	1.4	24000	11303	1007	14.33	1177	1.0e-01	0.56427	0.00140	0.56707	hcsrunhct12_24_2_6	0.56891	0.00125	0.57140
ncsrunhct11_24_2_8	1.4	24000	11303	1007	14.33	1177	3.0e-01	0.58625	0.00124	0.58873	hcsrunhct12_24_2_8	0.59081	0.00135	0.59352
ncsrunhct11_24_2_15	1.4	24000	11303	1007	14.33	1177	1.0e+00	0.65719	0.00159	0.66037	hcsrunhct12_24_2_15	0.65722	0.00123	0.65968
content in flooded containment vessel, array packaging calculation model for CSI=0.0														
				NCT							**HAC**			
no can spacers (np thickness = 0.0 in.)														
nciaunhct11_8_24_1_1	0.0	24000	11303	1620	15.74	1106	1.0e-20	0.91485	0.00136	0.91756	hciaunhct12_8_24_1_1	0.91665	0.00134	0.91933
nciaunhct11_8_24_1_2	0.0	24000	11303	1620	15.74	1106	1.0e-05	0.91420	0.00120	0.91659	hciaunhct12_8_24_1_2	0.91708	0.00131	0.91969
nciaunhct11_8_24_1_3	0.0	24000	11303	1620	15.74	1106	1.0e-04	0.91426	0.00123	0.91672	hciaunhct12_8_24_1_3	0.91632	0.00112	0.91856
nciaunhct11_8_24_1_4	0.0	24000	11303	1620	15.74	1106	1.0e-03	0.91095	0.00119	0.91333	hciaunhct12_8_24_1_4	0.91159	0.00120	0.91399
nciaunhct11_8_24_1_5	0.0	24000	11303	1620	15.74	1106	1.0e-02	0.88904	0.00117	0.89138	hciaunhct12_8_24_1_5	0.89357	0.00127	0.89610

Table 6.9.6-15. Results for UNX crystal content in packaging calculation model

case name	np	unh (g)	^{235}U (g)	H_2O (g)	h/x	gU/l	moifr	k_{eff}	σ	k_{eff}+2σ	case name	k_{eff}	σ	k_{eff}+2σ
nciaunhct11_8_24_1_6	0.0	24000	11303	1620	15.74	1106	1.0e-01	0.77132	0.00109	0.77350	hciaunhct12_8_24_1_6	0.78417	0.00129	0.78676
nciaunhct11_8_24_1_8	0.0	24000	11303	1620	15.74	1106	3.0e-01	0.71012	0.00130	0.71272	hciaunhct12_8_24_1_8	0.71917	0.00135	0.72188
nciaunhct11_8_24_1_15	0.0	24000	11303	1620	15.74	1106	1.0e+00	0.71873	0.00134	0.72140	hciaunhct12_8_24_1_15	0.72598	0.00147	0.72892
nciaunhct11_8_24_1_3	0.0	24000	11303	1620	15.74	1106	1.0e-04	0.91426	0.00123	0.91672	hciaunhct12_8_24_1_3	0.91632	0.00112	0.91856
nciaunhct11_8_23_1_3	0.0	23000	10832	1978	16.77	1060	1.0e-04	0.91763	0.00110	0.91983	hciaunhct12_8_23_1_3	0.91597	0.00131	0.91860
nciaunhct11_8_22_1_3	0.0	22000	10361	2335	17.88	1014	1.0e-04	0.91550	0.00138	0.91827	hciaunhct12_8_22_1_3	0.91855	0.00140	0.92135
nciaunhct11_8_21_1_3	0.0	21000	9890	2693	19.11	968	1.0e-04	0.91981	0.00142	0.92265	hciaunhct12_8_21_1_3	0.92183	0.00116	0.92414
nciaunhct11_8_20_1_3	0.0	20000	9419	3050	20.45	922	1.0e-04	0.92301	0.00127	0.92555	hciaunhct12_8_20_1_3	0.92376	0.00148	0.92672
nciaunhct11_8_19_1_3	0.0	19000	8948	3407	21.94	876	1.0e-04	0.92233	0.00136	0.92506	hciaunhct12_8_19_1_3	0.92443	0.00126	0.92695
nciaunhct11_8_18_1_3	0.0	18000	8477	3765	23.59	830	1.0e-04	0.92708	0.00153	0.93015	hciaunhct12_8_18_1_3	0.92532	0.00133	0.92797
nciaunhct11_8_17_1_3	0.0	17000	8006	4122	25.44	784	1.0e-04	0.92654	0.00132	0.92919	hciaunhct12_8_17_1_3	0.92751	0.00137	0.93025
nciaunhct11_8_16_1_3	0.0	16000	7536	4479	27.51	738	1.0e-04	0.92844	0.00124	0.93091	hciaunhct12_8_16_1_3	0.92866	0.00155	0.93176
nciaunhct11_8_15_1_3	0.0	15000	7064	4837	29.87	692	1.0e-04	0.92980	0.00125	0.93231	hciaunhct12_8_15_1_3	0.92970	0.00142	0.93255
nciaunhct11_8_14_1_3	0.0	14000	6594	5194	32.56	645	1.0e-04	0.92947	0.00133	0.93212	hciaunhct12_8_14_1_3	0.92913	0.00137	0.93188
nciaunhct11_8_13_1_3	0.0	13000	6123	5551	35.67	599	1.0e-04	0.92974	0.00137	0.93249	hciaunhct12_8_13_1_3	0.92900	0.00139	0.93178
nciaunhct11_8_12_1_3	0.0	12000	5652	5909	39.29	553	1.0e-04	0.93016	0.00130	0.93277	hciaunhct12_8_12_1_3	0.92942	0.00157	0.93256
nciaunhct11_8_11_1_3	0.0	11000	5181	6266	43.57	507	1.0e-04	0.92825	0.00132	0.93090	hciaunhct12_8_11_1_3	0.92834	0.00152	0.93138
nciaunhct11_8_10_1_3	0.0	10000	4710	6623	48.71	461	1.0e-04	0.92490	0.00152	0.92794	hciaunhct12_8_10_1_3	0.92555	0.00137	0.92828
nciaunhct11_8_9_1_3	0.0	9000	4239	6981	54.99	415	1.0e-04	0.92044	0.00124	0.92293	hciaunhct12_8_9_1_3	0.92360	0.00136	0.92631
nciaunhct11_8_8_1_3	0.0	8000	3768	7338	62.83	369	1.0e-04	0.91662	0.00121	0.91905	hciaunhct12_8_8_1_3	0.91875	0.00144	0.92163
nciaunhct11_8_7_1_3	0.0	7000	3297	7695	72.92	323	1.0e-04	0.91132	0.00140	0.91411	hciaunhct12_8_7_1_3	0.90978	0.00135	0.91247
nciaunhct11_8_6_1_3	0.0	6000	2826	8053	86.38	277	1.0e-04	0.90036	0.00128	0.90293	hciaunhct12_8_6_1_3	0.89938	0.00150	0.90238
nciaunhct11_8_5_1_3	0.0	5000	2355	8410	105.22	231	1.0e-04	0.88578	0.00141	0.88860	hciaunhct12_8_5_1_3	0.88489	0.00149	0.88788
nciaunhct11_8_4_1_3	0.0	4000	1884	8768	133.47	184	1.0e-04	0.86530	0.00119	0.86769	hciaunhct12_8_4_1_3	0.86326	0.00139	0.86604
nciaunhct11_8_3_1_3	0.0	3000	1413	9125	180.57	138	1.0e-04	0.82655	0.00120	0.82895	hciaunhct12_8_3_1_3	0.83005	0.00118	0.83242
nciaunhct11_8_2_1_3	0.0	2000	942	9482	274.74	92	1.0e-04	0.76783	0.00123	0.77029	hciaunhct12_8_2_1_3	0.76545	0.00129	0.76804