## 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.

**UNX CRYSTAL CONTENT**

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

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

Table 6.9.6-16 Results for leakage of UNX crystal content out of containment vessel.

**HEU SKULL OXIDE CONTENT**

Table 6.9.6-17 Results for skull oxide (SO) content in CV calculation model.

Table 6.9.6-18a NCT results for SO content in packaging calculation model.

Table 6.9.6-18b HAC results for SO content in packaging calculation model.

**UNIRRADIATED TRIGA REACTOR FUEL ELEMENT CONTENT**

Table 6.9.6-19a Results for $UZrH_x$ content in CV calculation model.

Table 6.9.6-19b Results for $UZrH_x$ content spacing in CV calculation model.

Table 6.9.6-19c Results for $UZrH_x$ content uranium weight fraction in CV calculation model.

Table 6.9.6-20a Results for $UZrH_x$ content at 19.7 wt % $^{235}U$ in packaging calculation model.

Table 6.9.6-20b Results for $UZrH_x$ content at 70.1 wt % $^{235}U$ in packaging calculation model.

Table 6.9.6-20c Results for 1.31 in. Smaller diameter $UZrH_x$ at 70.1 wt % $^{235}U$ content in packaging calculation model.

Table 6.9.6-20d Results for 1.31 in. smaller diameter $UZrH_x$ at 19.7 wt % $^{235}U$ content in packaging calculation model.

**AIR TRANSPORT CONTENT**

Table 6.9.6-21 Results for solid HEU metal content for air transportation.

Table 6.9.6-22a Results for TRIGA ($UZrH_x$) fuel element content at 19.7 wt % $^{235}U$ for air transportation.

Table 6.9.6-22b Results for TRIGA ($UZrH_x$) fuel element content at 70.1 wt % $^{235}U$ for air transportation.

Table 6.9.6-22c Results for research reactor fuel ($U_3O_8$-Al) content for air transportation.

Table 6.9.6-22d Results for research reactor fuel ($UO_2$-Mg with clad Al) content for air transportation.

Table 6.9.6-23 Results for HEU broken metal content for air transport.

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 | $k_{eff}+2\sigma$ | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | $H_2O$ (g) | h/x | moifr | nlf | $k_{eff}$ | σ | $k_{eff}+2σ$ | case name | nlf | $k_{eff}$ | σ | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

**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 | $k_{eff}+2σ$ | case name | nlf | $k_{eff}$ | σ | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | $^{235}U$ (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.) | | | | | | | | | | | | | |
| 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) | $H_2O$ (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 |

**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_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 | $k_{eff}+2σ$ | case name | $k_{eff}$ | σ | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | $k_{eff}+2σ$ | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | $H_2O$ (g) | h/x | mocfr | $k_{eff}$ | σ | $k_{eff}+2\sigma$ | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | | | | |

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 | $k_{eff}+2σ$ | 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) | $H_2O$ (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) | $H_2O$ (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) | $H_2O$ (g) | h/x | mocfr | $k_{eff}$ | σ | $k_{eff}+2\sigma$ |
|---|---|---|---|---|---|---|---|---|---|
| **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) | $H_2O$ (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) | $H_2O$ (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.) | | | | | | | | | | | | | |
| 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) | $H_2O$ (g) | h/x | moifr | $k_{eff}$ | σ | $k_{eff}+2\sigma$ | case name | $k_{eff}$ | σ | $k_{eff}+2\sigma$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | $H_2O$ (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) | $H_2O$ (g) | h/x | moifr | $k_{eff}$ | σ | $k_{eff}+2σ$ | case name | $k_{eff}$ | σ | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | $k_{eff}+2σ$ | case name | $k_{eff}$ | σ | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | $k_{eff}+2σ$ | 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) | $H_2O$ (g) | h/x | mocfr | $k_{eff}$ | σ | $k_{eff}+2\sigma$ | 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 | $k_{eff}+2\sigma$ | case name | $k_{eff}$ | σ | $k_{eff}+2\sigma$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | |
| 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) | $H_2O$ (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) | $H_2O$ (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 |

**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 | $k_{eff}+2\sigma$ | case name | $k_{eff}$ | σ | $k_{eff}+2\sigma$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

**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 | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

**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 | $k_{eff}+2\sigma$ | case name | $k_{eff}$ | σ | $k_{eff}+2\sigma$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | $H_2O$ (g) | h/x | moifr | $k_{eff}$ | σ | $k_{eff}+2\sigma$ | case name | $k_{eff}$ | σ | $k_{eff}+2\sigma$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | $H_2O$ (g) | h/x | mocfr | $k_{eff}$ | σ | $k_{eff}+2\sigma$ | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | | | | |

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 | $k_{eff}+2\sigma$ | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | $H_2O$ (g) | h/x | mocfr | $k_{eff}$ | σ | $k_{eff}+2\sigma$ |
|---|---|---|---|---|---|---|---|---|---|---|
| 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) | $H_2O$ (g) | h/x | mocfr | $k_{eff}$ | σ | $k_{eff}+2\sigma$ |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| 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) | $H_2O$ (g) | h/x | mocfr | $k_{eff}$ | σ | $k_{eff}+2\sigma$ |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 | $k_{eff}+2\sigma$ | 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.) | | | | | | | | | | | | | | |
| 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) | $H_2O$ (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) | $H_2O$ (g) | h/x | moifr | $k_{eff}$ | σ | $k_{eff}+2\sigma$ | case name | $k_{eff}$ | σ | $k_{eff}+2\sigma$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | $H_2O$ (g) | h/x | moifr | $k_{eff}$ | σ | $k_{eff}+2σ$ | case name | $k_{eff}$ | σ | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | $H_2O$ (g) | h/x | moifr | $k_{eff}$ | σ | $k_{eff}+2σ$ | case name | $k_{eff}$ | σ | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | $H_2O$ (g) | h/x | moifr | $k_{eff}$ | σ | $k_{eff}+2σ$ | case name | $k_{eff}$ | σ | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

**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 | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | |
| 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) | $H_2O$ (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) | $H_2O$ (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) | $H_2O$ (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) | $H_2O$ (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) | $^{235}U$ (g) | $H_2O$ (g) | h/x | moifr | $k_{eff}$ | 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) | $^{235}U$ (g) | $H_2O$ (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 | $k_{eff}+2σ$ | case name | $k_{eff}$ | σ | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | |
| 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) | $H_2O$ (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 | $k_{eff}+2\sigma$ | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **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 | $k_{eff}+2σ$ | 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.) | | | | | | | | | | | | | |
| 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 | $k_{eff}+2σ$ | case name | $k_{eff}$ | σ | $k_{eff}+2σ$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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.)** | | | | | | | | | | | | | |
| 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 |

**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 | $k_{eff}+2σ$ | 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) | $H_2O$ (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) | $H_2O$ (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 | $k_{eff}+2\sigma$ | case name | $k_{eff}$ | σ | $k_{eff}+2\sigma$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |