

## Table of Changes for BRR SAR Revision 20

The BRR Package Safety Analysis Report (SAR) has been updated to create Revision 20. Each change in the SAR document from Revision 19 to Revision 20 is marked by a revision bar on the right-hand side of the page. A summary of these changes and brief reason for change is included below.

| Section no. of change                 | Material changed  | Reason for change   |
|---------------------------------------|---|---|
| <b>Front Matter and Chapter 1</b>     |   |   |
| Table of Contents                     | Updated Section 3.8   | To match revised page numbers   |
| 1.0                                   | Revised Figures 1.2-24 and 1.2-26   | BRR Operations request to add flats on RIT end caps, thus showing ensuing changes to geometry |
| <b>Chapter 2</b>                      |   |   |
| Appendix 2.12.8<br>(Section 2.12.8.9) | Added clarifications and cross- references to other SAR Sections  | To address RAIs 2.1, 2.2 and 2.3  |
| <b>Chapter 3</b>                      |   |   |
| Tables 3.3-1 through 3.3-3            | Added basket and inner shell average temperatures   | To address RAI 3.3  |
| Table 3.4-1                           | Added MURR HEU basket and inner shell average HAC temperatures and statement about cavity gas temperature | As a result of addressing RAI 3.3   |
| Figure 3.4-3                          | Added MURR LEU HAC cavity gas temperature   | As a result of addressing RAI 3.3   |
| Appendix Section 3.5.3.9              | Added material thermal properties computations  | To address RAI 3.1  |
| Section 3.7.5.1                       | Assumptions 2 and 4 have been revised   | To address RAI 3.4  |
| Table 3.8.1-1                         | Added footnote 1 and corrected maximum accessible surface temperature                                     | To address missing footnote as stated in reply to RAI 3.2 and to address RAI 7.1              |
| Section 3.8.2.2                       | Fifth paragraph revised   | To address RAI 3.5  |
| Section 3.8.3.1.1.1                   | Updated third paragraph for NCT No Insolation Case  | To address RAI 7.1  |
| Tables 3.8.3-1, 3.8.3-2 and 3.8.3-3   | Added basket and inner shell average temperatures and updated Maximum Accessible Surface Temperature      | To address RAI 3.3 and RAI 7.1  |

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| <b>Section no. of change</b>   | <b>Material changed</b>  | <b>Reason for change</b>                             |
|--------------------------------|--|--|
| Figure 3.8.3-6                 | Revised for NCT No Insolation Case   | To address RAI 7.1                                   |
| Figure 3.8.3-7                 | Revised for NCT No Insolation Case   | To address RAI 7.1                                   |
| Section 3.8.3.1.1.2            | Updated fourth paragraph for NCT No Insolation Case                          | To address RAI 7.1                                   |
| Figure 3.8.3-10                | Revised for NCT No Insolation Case   | To address RAI 7.1                                   |
| New Figure 3.8.3-11            | Added for NCT No Insolation Case   | To address RAI 7.1                                   |
| New Figure 3.8.3-12            | Added for NCT No Insolation Case   | To address RAI 7.1                                   |
| Section 3.8.3                  | Incremented by 2 all figures that follow new Figure 3.8.3-12                 | To accommodate changes because of addressing RAI 7.1 |
| Section 3.8.3.4                | Last two paragraphs revised to clarify helium backfill and cooldown period   | To address RAI 3.7                                   |
| Section 3.8.3.5                | Backfill pressure updated  | As a result of addressing RAI 3.3                    |
| Table 3.8.3-4                  | Added ATR LEU Fuel basket and inner shell average vacuum drying temperatures | As a result of addressing RAI 3.3                    |
| Newly Numbered Figure 3.8.3-16 | Replaced Figure 3.8.3-14 (now Figure 3.8.3-16) with corrected time axis      | To address RAI 3.6                                   |
| Section 3.8.4.3                | Statement about cavity gas temperature updated                               | As a result of addressing RAI 3.3                    |
| Table 3.8.4-1                  | Added ATR LEU Fuel, basket and inner shell average HAC temperatures          | As a result of addressing RAI 3.3                    |
| Table 3.8.4-2                  | Added MURR LEU Fuel, basket and inner shell average HAC temperatures         | As a result of addressing RAI 3.3                    |
| Figure 3.8.4-3                 | Added ATR LEU HAC cavity gas temperature                                     | As a result of addressing RAI 3.3                    |
| Figure 3.8.4-6                 | Added ATR LEU Fuel, basket and inner shell average HAC temperatures          | As a result of addressing RAI 3.3                    |