

August 29, 2022  
2021-035-SCL-01

ATTN: Document Control Desk  
Director, Division of Fuel Management  
Office of Nuclear Material Safety and Safeguards  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**Subject: Amendment request for the Certificate of Compliance No. 9365 and  
Revision of the Safety Analysis Report for the RT-100 Package**

**Need by Date: 05/31/2023**

Reference: RT-100, Certificate No. 9365 USA/9365/B(U)-96  
Docket No. 71-9365

Document Control Desk, Dear Sir or Madam:

Pursuant to 10 CFR 71.38, Robatel Technologies, LLC hereby submits its Safety Analysis Report (SAR) Revision 8, to amend the Certificate of Compliance No. 9365 Revision 2 which was previously issued on July 29, 2019. We have attached a table summarizing the changes in SAR Revision 8. These changes incorporate new activated hardware contents and flexibility to ship filters of varying activities by limiting the radioactive waste's mass.

This license amendment supports decommissioning nuclear plants such as, IPEC, Oyster creek, Palisades, Pilgrim, Vermont Yankee, and Crystal River via the safe and efficient transport of activated reactor internals components. The amendment would help maintain decommissioning workforce dose ALARA through the creation of larger segments requiring less cutting and loading of fewer packages, and by reducing the number of truck shipments of Class 7 material, reduce risk to the public. In particular, the amendment will support efficient shipments of segments of large cylindrically shaped components as well as smaller components that satisfy the specific activity requirements for definition of LSA-II material per 49CFR173.403 that either individually or as a packaged group of segments/components, have 3m dose rates that exceed the 1R/hr limit at 3m of 49CFR173.427(a)(1) thereby necessitating shipment in a Type B package.

Below is a high-level summary of the major changes in each Chapter. All changes are marked with revision bars and summarized on the Record of Revisions\_RT-100 SAR REV 8 that is attached to this cover letter.

- Chapter 1 – Editorial changes to incorporate the new activated hardware contents. Additionally, Robatel revised the RT-100 Bill of Material (RT100 NM 1000 Rev. G — Bill of Material) to change the NUREG/CR-6407 classification of ITEM 1012-07 from A to B. Justification for this change is included in the Record of Revisions\_RT-100 SAR REV 8.
- Chapter 2 – Changes to this chapter are limited to Section 2.13 Closure Bolt Evaluation and more specifically Sections 2.13.2.1 (Internal Pressure Loads), 2.13.2.2 (Temperature Loads), 2.13.2.4 (Impact Loads), and 2.13.3 (Load Combinations). Mistakes in the load combination method in Section 2.13.3 were identified during the SAR review for this license amendment. Some calculations were revised to correct the mistakes, and the new load combinations were performed in accordance with the method presented in Table 4.9-I of NUREG/CR-6007 as documented on the Record of Revisions\_RT-100 SAR REV 8. The primary and secondary lid bolts are still compliant with the basic allowable stress limits for both NCT and HAC. Note that these changes are not related to this license amendment.

- Chapter 3 – Only a few editorial changes as marked and documented on the Record of Revisions\_RT-100 SAR REV 8. Robatel didn't make any technical changes to the thermal calculations in this revision of the SAR.
- Chapter 4 – Editorial changes throughout as marked with revision bars. The only technical changes to this Chapter are in Section 4.4 to account for the activated hardware volume ( $V_H$ ) in the hydrogen gas generation analysis. Refer to the Record of Revisions\_RT-100 SAR REV 8 for detailed list of changes.
- Chapter 5 – Added a new Section 5.5 for the mass restricted resins and filters shielding evaluation and Section 5.6 for the activated hardware shielding evaluation.
- Chapter 7 – Changed the hydrogen gas analysis to match the changes made in Chapter 4. Revised the loading table (2013-015-PR-LT-001-REV5) and the loading table procedure to include the new activated hardware contents.
- Chapter 8 – One editorial change to the list reference 1 in Section 8.4.

Some of the content of the Safety Analysis Report is Robatel's proprietary and trade secret information. The exact details and references are made in the attached affidavit related to this submittal.

Should you or members of your staff have any questions about this submittal, please contact me at [ashakhatreh@robateltech.com](mailto:ashakhatreh@robateltech.com) or Jared Bower at [jbower@robateltech.com](mailto:jbower@robateltech.com). Thank you for your attention to this submittal.

Respectfully,

Abdulsalam Shakhathreh  
Engineering Manager  
[ashakhatreh@robateltech.com](mailto:ashakhatreh@robateltech.com)

Attachments:

- 1) Affidavit\_RT-100 SAR REV 8, concerning Confidential information and trade secrets
- 2) Record of Revisions\_RT-100 SAR REV 8

Enclosure:

- 1) RT-100 Safety Analysis Report Rev 8 (PROPRIETARY), Dated August 29, 2022.
- 2) RT-100 Safety Analysis Report Rev 8 (Non-PROPRIETARY), Dated August 29, 2022.