HOLTEC INTERNATIONAL

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April 17, 2020

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

Docket No.: Docket No. 71-9367 (HI-STAR 180D Model)
EPID No: L-2019-LLA-0088

References: [1] Holtec Letter, Luis Hinojosa to Michael Layton, dated April 25, 2019 (Initial submittal of LAR 9367-2 and Request of CoC Renewal)
[2] USNRC Letter, Pierre Saverot to Luis Hinojosa, dated October 22, 2019 (Request for Additional Information)
[3] Holtec Letter, Luis Hinojosa to Pierre Saverot, dated November 27, 2019 (RAI response submittal for LAR 9367-2)

Subject: Submittal of Final SAR for Holtec's LAR 9367-2 for the design certification of the HI-STAR 180D Transportation Package

Dear Mr. Saverot,

Holtec International is pleased to submit the final SAR on Holtec's LAR 9367-2 for the design certification of the HI-STAR 180D Transportation Package [1] and [3].

The final SAR includes minor enhancements to Chapters 2, 3, 5 and 8 with additional enhancements to thermal and shielding calculation packages as follows:

- Minor clarification to note in SAR Table 2.5.1 to refer to an analysis of a similar trunnion design and to add a reference to the specific revision of the structural calculation package containing that evaluation.
- Enhancement to SAR Table 2.1.14 regarding charpy testing of dose blocker parts consistent with the Holtec response to NRC RAI 2-1 associate with HI-STAR 180 SAR (Docket 71-9325) LAR 9325-3 (Holtec letter 1553043-NRC).
- Minor clarifications to second paragraph of Subsection 3.3.3 and first paragraph of Subsection 3.3.3 item b for readability. Minor clarification to the last paragraph of SAR Subsection 3.3.5 of Chapter 3 regarding discussion of temperature results of the steady state

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thermal analysis for defense-in-depth hypothetical scenario. The thermal calculation package is updated in the same manner.

- Editorial clarification to SAR Paragraph 5.1.2.2 of Chapter 5 to refer to the impact limiter component by the name reflected in the licensing drawing package.
- Various editorial enhancements to shielding calculation package HI-2125255 mainly to provide reasoning for the additional evaluations presented and that in general additional evaluations are complimentary to NRC guidance on safety evaluations. Discussion of ICRP 74 was removed since it does not pertain to the calculation package and other similar adjustments made to text in the calculation package for example.
- Enhancement to SAR Subsection 8.1.2 (item 3) regarding basket FSW examination and repair to follow-up on Holtec response to NRC RAI 2-9 in reference [3] and consistent with Holtec response to NRC RAI 2-1 on HI-STAR 180 SAR (Docket 71-9325) associated with LAR 9325-3 (Holtec letter 1553043-NRC) with the exception of FSW classification as Type VI instead of III.
- Minor clarification to reference section of SAR Chapter 8 to update the edition of reference [8.1.2].

Enclosures 1 and 2 contain proprietary and non-proprietary versions of the final HI-STAR 180D SAR. Enclosure 3 contains the final drawing package associated with the final SAR. Enclosure 4 and 5 contain supporting calculation packages.

Enclosure 6 is an affidavit prepared in accordance with 10 CFR 2.390 requesting that Enclosures noted below as proprietary be withheld from public disclosure due to their proprietary nature.

If you have any questions, then please contact me at 856-797-0900, ext. 3698.

Sincerely,

Luis Hinojosa
Corporate Adjunct Licensing Manager
Project Manager of Licensing of Transportation Systems
Holtec International

cc: (letter only)
Andrea Kock, USNRC
Christopher Regan, USNRC

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Enclosures:

Enclosure 1: HI-STAR 180D Safety Analysis Report (SAR), HI-2125175, Revision 5
(Holtec Proprietary Information)
Enclosure 2: HI-STAR 180D Safety Analysis Report (SAR), HI-2125175, Revision 5
(Holtec Non-Proprietary Information)
Enclosure 3: HI-STAR 180D Cask Licensing Drawing No. 8545, Rev. 8
HI-STAR 180D F-37 & F-32 Basket Licensing Drawing No. 8553, Rev.7
HI-STAR 180D Impact Limiter Licensing Drawing No. 8552, Rev. 3
(Holtec Proprietary Information)
Enclosure 4: Thermal Evaluation of the HI-STAR 180D in Transport, HI-2125241, Revision 7
(Holtec Proprietary Information)
Enclosure 5: Shielding Analysis for the HI-STAR 180D, HI-2125255, Revision 6
(Holtec Proprietary Information)
Enclosure 6: Affidavit Pursuant to 10 CFR 2.390 to Withhold Information from Public Disclosure