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April 10, 2020

Pierre Saverot, Project Manager – Storage and Transportation Licensing Branch 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.: 71-9381 EPID No.: L-2018-NEW-0007

Subject: Application for a Certificate of Compliance (CoC) for Holtec's Model No. HI-STAR 180L Type B(U)F-96 Transportation Package

Dear Mr. Saverot,

Holtec International herewith submits its application for the design certification of the HI-STAR 180L Transportation Package pursuant to 10 CFR Part 71.

The HI-STAR 180L (HI-STAR 180 Version L) is a longer variant of the HI-STAR 180 transport cask initially licensed under Docket No. 71-9325 in 2009. The design and construction of the containment components and shielding components parallel those of HI-STAR 180 with minor dimensional adjustments to accommodate for a somewhat smaller diameter and longer cask cavity. The HI-STAR 180L Package uses the same set of impact limiters specified for the HI-STAR 180 Package. Due to the retained geometric similarities overall, HI-STAR 180L's shielding, heat rejection and structural performance can remain on par with HI-STAR 180.

Enclosure 1 to this letter contains Holtec's proposed Certificate of Compliance (CoC). The nonproprietary and proprietary versions of the Safety Analysis Report (SAR) for the HI-STAR 180L Package are provided in Enclosures 2 and 3 respectively. Enclosures 4 through 10 contain calculation packages with analyses performed in support of the HI-STAR 180L SAR.

Enclosure 11 to this letter is an affidavit prepared in accordance with 10 CFR 2.390 requesting that Enclosures 3 through 10 be withheld from public disclosure due to their proprietary nature.

If you have any questions, please contact me at (856)-797-0900 ext. 3844.



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Sincerely,

Maryth Waysh

Royston Ngwayah Licensing Engineer Holtec International

cc: Ms. Andrea Kock (NRC)

## Enclosures:

- Enclosure 1: Proposed CoC No. 9381 for the HI-STAR 180L Package (Non-Proprietary)
- Enclosure 2: "Safety Analysis Report (SAR) on the HI-STAR 180L Package", Report HI-2177805 Rev. 1 (Non-Proprietary)
- Enclosure 3: "Safety Analysis Report (SAR) on the HI-STAR 180L Package", Report HI-2177805 Rev. 1 (Holtec Proprietary Information)
- Enclosure 4: Structural Calculation Package for the HI-STAR 180L System, Report HI-2177918R0 (Holtec Proprietary Information)
- Enclosure 5: Structural Finite Element Analyses for the HI-STAR 180L Package, Report HI-2178010R2 (Holtec Proprietary Information)
- Enclosure 6: Effective Thermal Properties of BWR Fuel in HI-STAR 180L Cask, Report HI-2177894R1 (Holtec Proprietary Information)
- Enclosure 7: Thermal Evaluations of HI-STAR 180L in Transport, Report HI-2177931R2 (Holtec Proprietary Information)
- Enclosure 8: Shielding Analysis for HI-STAR 180L for Transport, Report HI-2178014R3 (Holtec Proprietary Information)
- Enclosure 9: HI-STAR 180L Source Terms, Report HI-2188091R3 (Holtec Proprietary Information)
- Enclosure 10: Criticality Evaluation of the HI-STAR 180L Cask, Report HI-2177952R2 (Holtec Proprietary Information)
- Enclosure 11: Affidavit Pursuant to 10 CFR 2.390 to Withhold Information from Public Disclosure