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January 29, 2016

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

Docket No.: 71-9261 (HI-STAR 100 Model)

Subject: Submittal of License Amendment Request 9261-10 to HI-STAR 100 Certificate of Compliance 71-9261

Dear Mr. Saverot,

Holtec International herewith submits License Amendment Request (LAR) 9261-10 proposing certain changes to the HI-STAR 100 System 10 CFR 71 Certificate of Compliance (CoC) Number 9261, Revision 9 and its corresponding supporting Safety Analysis Report (SAR), Revision 15. The changes proposed for the license amendment are documented in SAR Revision 16 provided herein.

The main focus of this LAR is to add an MPC-32 designed for Diablo Canyon SNF and to add a HI-STAR 100 package designed for reactor-related waste and referred to as HI-STAR 100 Version HB GTCC. The LAR also updates licensing drawings with various proposed design changes and one-time manufacturing deviations most of which correspond to changes previously implemented in as-manufactured equipment in accordance with 10CFR72).

A complete and updated SAR (Revision 16) is provided with this LAR. The SAR's Revision Summary Log section includes information on the SAR's revision status and configuration control.

In addition to the SAR's Revision Summary Log, a summary of proposed changes (SOPC) is provided in Enclosure 1 as a tool to facilitate the staff's review. The SOPC includes reasons and justifications for various safety significant changes proposed by this LAR.

Enclosure 2 contains Holtec's proposed Certificate of Compliance (CoC) for the staff's convenience.

Enclosures 3 and 4 contain the Safety Analysis Report (SAR) for the HI-STAR 100 Package (both proprietary and non-proprietary versions). Enclosure 5 contains the drawings that make up the licensing drawing package.

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Enclosures 6 through 18 contain various supporting documents such as calculation packages and computer data files. Supporting documents that have not been revised and were previously submitted in the initial license application of the HI-STAR 100 are not included.

Enclosure 19 is an affidavit prepared in accordance with 10 CFR 2.390 requesting that Enclosures marked proprietary be withheld from public disclosure due to their proprietary nature.

Please contact the undersigned at (856)797-0900 Extension 3698 if you have any questions or require any additional information.

Sincerely,

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

cc: (letter only w/o attachments)
Mark Lombard (NRC)
Michelle Sampson (NRC)
Anthony Hsia (NRC)

Enclosures: (3 and 5 through 18 contain Holtec Proprietary Information)

- Enclosure 1: Summary of Proposed Changes (SOPC)
(Holtec Non-Proprietary Information)
- Enclosure 2: Holtec Proposed Changes to Certificate of Compliance (No. 9261) for the HI-STAR 100 (Holtec Non-Proprietary Information)
- Enclosure 3: HI-STAR 100 Safety Analysis Report (SAR), HI-951251, Revision 16
(Holtec Proprietary Information)
- Enclosure 4: HI-STAR 100 Safety Analysis Report (SAR), HI-951251, Revision 16
(Holtec Non-Proprietary Information)
- Enclosure 5: Complete Licensing Drawing Package (corresponding to HI-STAR 100 SAR (HI-951251) Revision 16 and proposed CoC No. 9261
(Holtec Proprietary Information)

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- Enclosure 6: Thermal Analysis of the HI-STAR 100 LAR 9261-10, HI-2156893, Revision 0
(Holtec Proprietary Information)
- Enclosure 7: Shielding Analysis for Transportation of HI-STAR HB GTCC Package with GWC-HB, HI-2156914, Revision 0
(Holtec Proprietary Information)
- Enclosure 8: HI-STAR 100 Shielding Design and Analysis for Transport and Storage, HI-951322, Revision 21 (Appendices 42, 44 and 45 only)
(Holtec Proprietary Information)
- Enclosure 9: ISFSI Dose Assessment for Humboldt Bay, HI-2033047, Revision 8
(Holtec Proprietary Information)
- Enclosure 10: Containment Analysis for HI-STAR 100 LAR 9261-10, HI-2156825, Revision 0
(Holtec Proprietary Information)
- Enclosure 11: Analyses of HI-STAR HB Transport Package Drop Accidents Supporting an Improved Aluminum Honeycomb Impact Limiter Design, HI-2156708, Revision 0
(Holtec Proprietary Information)
- Enclosure 12: Structural Evaluation of the HI-STAR HB GTCC Package, HI-2114941, Revision 1
(Holtec Proprietary Information)
- Enclosure 13: Miscellaneous Calculations for the HI-STAR HB, HI-2033042, Revision 5
(Holtec Proprietary Information)
- Enclosure 14: Structural Calculation Package for HI-STAR Overpack, HI-2012786, Revision 4
(Holtec Proprietary Information)
- Enclosure 15: Structural Calculation Package for MPC, HI-2012787, Revision 18
(Holtec Proprietary Information)
- Enclosure 16: Burnup Credit for the MPC-32 with MCNP5 and CASMO5, HI-2156611, Revision 0
(Holtec Proprietary Information)
- Enclosure 17: Shielding – Supporting Computer Input/Output Data Files corresponding to HI-951322 (Enclosure 8) and HI-2156914 (Enclosure 7)
(Holtec Proprietary Information)
- Enclosure 18: Criticality – Supporting Computer Input/Output Data Files corresponding to HI-2156611 (Enclosure 16)
(Holtec Proprietary Information)
- Enclosure 19: Affidavit Pursuant to 10 CFR 2.390 to Withhold Information from Public Disclosure

AFFIDAVIT PURSUANT TO 10 CFR 2.390

I, Kimberly Manzione, being duly sworn, depose and state as follows:

- (1) I have reviewed the information described in paragraph (2) which is sought to be withheld, and am authorized to apply for its withholding.
- (2) The information sought to be withheld is information provided in Enclosures 3 and 5 through 18 to Holtec Letter 5014799. This attachment contains Holtec Proprietary information.
- (3) In making this application for withholding of proprietary information of which it is the owner, Holtec International relies upon the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 USC Sec. 552(b)(4) and the Trade Secrets Act, 18 USC Sec. 1905, and NRC regulations 10CFR Part 9.17(a)(4), 2.390(a)(4), and 2.390(b)(1) for "trade secrets and commercial or financial information obtained from a person and privileged or confidential" (Exemption 4). The material for which exemption from disclosure is here sought is all "confidential commercial information", and some portions also qualify under the narrower definition of "trade secret", within the meanings assigned to those terms for purposes of FOIA Exemption 4 in, respectively, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975F2d871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704F2d1280 (DC Cir. 1983).

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- (4) Some examples of categories of information which fit into the definition of proprietary information are:
- a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by Holtec's competitors without license from Holtec International constitutes a competitive economic advantage over other companies;
 - b. Information which, if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product.
 - c. Information which reveals cost or price information, production, capacities, budget levels, or commercial strategies of Holtec International, its customers, or its suppliers;
 - d. Information which reveals aspects of past, present, or future Holtec International customer-funded development plans and programs of potential commercial value to Holtec International;
 - e. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs 4.a, 4.b, and 4.e above.

- (5) The information sought to be withheld is being submitted to the NRC in confidence. The information (including that compiled from many sources) is of a sort customarily held in confidence by Holtec International, and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by Holtec International. No public disclosure has been made, and it is not available in public sources. All disclosures to third parties, including any required transmittals to the NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as

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proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.

- (6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within Holtec International is limited on a "need to know" basis.
- (7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, by the manager of the cognizant marketing function (or his designee), and by the Legal Operation, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside Holtec International are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.
- (8) The information classified as proprietary was developed and compiled by Holtec International at a significant cost to Holtec International. This information is classified as proprietary because it contains detailed descriptions of analytical approaches and methodologies not available elsewhere. This information would provide other parties, including competitors, with information from Holtec International's technical database and the results of evaluations performed by Holtec International. A substantial effort has been expended by Holtec International to develop this information. Release of this information would improve a competitor's position because it would enable Holtec's competitor to copy our technology and offer it for sale in competition with our company, causing us financial injury.

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- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to Holtec International's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of Holtec International's comprehensive spent fuel storage technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology, and includes development of the expertise to determine and apply the appropriate evaluation process.

The research, development, engineering, and analytical costs comprise a substantial investment of time and money by Holtec International.

The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

Holtec International's competitive advantage will be lost if its competitors are able to use the results of the Holtec International experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

The value of this information to Holtec International would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive Holtec International of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

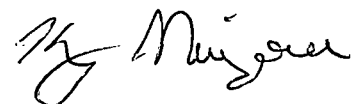
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STATE OF NEW JERSEY)
) ss:
COUNTY OF BURLINGTON)

Kimberly Manzione, being duly sworn, deposes and says:

That she has read the foregoing affidavit and the matters stated therein are true and correct to the best of her knowledge, information, and belief.

Executed at Marlton, New Jersey, this 29th day of January, 2016.



Kimberly Manzione
Licensing Manager
Holtec International

Subscribed and sworn before me this 29th day of January, 2016.



ERIKA GRANDRIMO

NOTARY PUBLIC
My Commission Expires 1/17/2017