



One Holtec Drive, Marlton, NJ 08053

Telephone (856) 797-0900

Fax (856) 797-0909

August 19, 2016

Pierre Saverot, Project Manager
Spent Fuel 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. 71-9373 (HI-STAR 190 Model), CAC No. L25056

Reference: 1. USNRC Letter, "Request for Additional Information for the Review of the Model No. HI-STAR 190 Package," from P. Saverot (NRC) to K. Manzione (Holtec) dated April 8, 2016

Subject: Submittal of RAI Responses on HI-STAR 190 Application

Dear Mr. Saverot:

Holtec is pleased to submit responses to the staff's requests for additional information (RAIs) on Holtec's application for the design certification of the HI-STAR 190 Transportation Package [1].

Enclosures 1 and 2 contain the responses in proprietary and non-proprietary versions, respectively. Enclosures 3 and 4 contain proprietary and non-proprietary versions of the HI-STAR 190 SAR Revision 0.C which includes all changes from previous RSI responses as well as changes due to the RAI responses.

Enclosures 5 through 14 contain proprietary Holtec reports that support the RAI responses and HI-STAR 190 SAR. Since many of the enclosures to this letter are considered proprietary, an affidavit in accordance with 10 CFR 2.390 is included requesting that this information be withheld from public disclosure.

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

Sincerely,

Document ID: 5024006

Page 1 of 2

NM5501



One Holtec Drive, Marlton, NJ 08053

Telephone (856) 797-0900

Fax (856) 797-0909

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

cc:

Mark Lombard (NRC)
John McKirgan (NRC)

Enclosures:

- Enclosure 1: Responses to HI-STAR 190 RAIs (proprietary)
- Enclosure 2: Responses to HI-STAR 190 RAIs (non-proprietary)
- Enclosure 3: HI-STAR 190 SAR, Revision 0.C (proprietary)
- Enclosure 4: HI-STAR 190 SAR, Revision 0.C (non-proprietary)
- Enclosure 5: HI-2167314, "Holtite-B Sourcebook," Revision 0 (proprietary)
- Enclosure 6: HI-2146321, "Finite Element Analyses of the HI-STAR 190 Transport Package Drop Accidents," Revision 1 (proprietary)
- Enclosure 7: HI-2146413, "Structural Calculation Package for HI-STAR 190 Transport Cask System," Revision 2 (proprietary)
- Enclosure 8: HI-2156765 "Benchmarking of LS-DYNA for Free Drops Involving Steel Casks in Absence of Impact Limiters," Revision 0 (proprietary)
- Enclosure 9: DS-438, "Holtec International Position Paper on Acceptable Flaw Size for MPC Transportability Inspection," Revision 0 (proprietary)
- Enclosure 10: HI-2146286, "Thermal Evaluations of HI-STAR 190 System," Revision 2 (proprietary)
- Enclosure 11: HI-2146294, "Shielding Analysis for the HI-STAR 190 Cask," Revision 2 (proprietary)
- Enclosure 12: HI-2156424, "Criticality Evaluation of HI-STAR 190," Revision 2 (proprietary)
- Enclosure 13: HI-2146423, "HI-STAR 190 Source Terms and Loading Patterns," Revision 2 (proprietary)
- Enclosure 14: HI-2167312r0 "Shielding Axial Burnup Profiles," Revision 0 (proprietary)
- Enclosure 15: Affidavit Pursuant to 10 CFR 2.390

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 Enclosures 1, 3, 5 through 14 to Holtec Letter 5024006, which 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).

AFFIDAVIT PURSUANT TO 10 CFR 2.390

- (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 4e 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

AFFIDAVIT PURSUANT TO 10 CFR 2.390

regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as 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.

AFFIDAVIT PURSUANT TO 10 CFR 2.390

- (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.

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Document ID 5024006
Non-Proprietary Enclosure 15

AFFIDAVIT PURSUANT TO 10 CFR 2.390

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

Kimberly Manzione, being duly sworn, deposes and says:

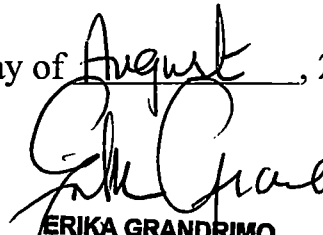
That she has read the foregoing affidavit and the matters stated therein are true and correct to the best of her knowledge, information, and belief.

Executed at Marlton, New Jersey, this 19th day of August, 2016.



Kimberly Manzione
Licensing Manager
Holtec International

Subscribed and sworn before me this 19th day of August, 2016.



ERIKA GRANDRIMO
NOTARY PUBLIC
My Commission Expires 1/17/2017

