



One Holtec Drive, Marlton, NJ 08053

Telephone (856) 797-0900

Fax (856) 797-0909

October 20, 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.: 71-9374 (HI-STAR 80 Model)
CAC No.: L25141

References: [1] Holtec Letter, Luis Hinojosa to Pierre Saverot, dated August 23, 2016
[2] USNRC Letter, Pierre Saverot to Luis Hinojosa, dated October 6, 2016

Subject: Submittal of RSI Responses for Holtec's application for the design certification of the HI-STAR 80 Transportation Package

Dear Mr. Saverot:

Holtec International is pleased to submit responses to the staff's requests for supplemental information [2] on Holtec's application for the design certification of the HI-STAR 80 Transportation Package [1].

Enclosures 1 and 2 contain proprietary and non-proprietary versions of Holtec's response to RSIs. Enclosures 3 and 4 contain proprietary and non-proprietary versions of Holtec's enhanced application, HI-STAR 80 SAR Revision 2.A. The response to RSIs does not propose changes to the Licensing drawing package.

Enclosures 5 through 9 contain updated SAR supporting documents (proprietary designations are noted accordingly).

Enclosure 10 to this letter 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.

NMSS01



One Holtec Drive, Marlton, NJ 08053

Telephone (856) 797-0900

Fax (856) 797-0909

Sincerely,

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

cc: (letter only w/o enclosures)
Mark Lombard (NRC)
John McKirgan (NRC)

Enclosures:

- Enclosure 1: Responses to HI-STAR 80 RSIs (proprietary)
- Enclosure 2: Responses to HI-STAR 80 RSIs (non-proprietary)
- Enclosure 3: HI-2146261, "Safety Analysis Report on the HI-STAR 80 Package", Revision 2.A (proprietary)
- Enclosure 4: HI-2146261, "Safety Analysis Report on the HI-STAR 80 Package", Revision 2.A (non-proprietary)
- Enclosure 5: HI-2156468, "Thermal Evaluations of HI-STAR 80 in Transport," Revision 1 (proprietary)
- Enclosure 6: HI-2167211, "Shielding Analysis for HI-STAR 80", Revision 1 (proprietary)
- Enclosure 7: HI-2167210, "Radiation Source Terms Calculations for HI-STAR 80", Revision 1 (proprietary)
- Enclosure 8: Parker Seal Test Report -- FF400 Compression Set (proprietary)
- Enclosure 9: Parker Seal Information (non-proprietary)
 - FF400 Parker Information Sheet
 - V1289-75 Parker Information Sheet
 - V1289-75 Parker Compound Data Sheet
- Enclosure 10: Affidavit Pursuant to 10 CFR 2.390 to Withhold Information from Public Disclosure (signed by Holtec International)
- Enclosure 11: Affidavit Pursuant to 10 CFR 2.390 to Withhold Information from Public Disclosure (signed by Parker)

AFFIDAVIT PURSUANT TO 10 CFR 2.390

I, Christie Lakin, on behalf of Parker Hannifin, 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 "Effects of Short-Term Temperature Spike on FF400 Compression Set", Parker Hannifin Corporation Research and Development Laboratory Report, September 7, 2016, which contains Parker Hannifin Corporation proprietary information.
- (3) In making this application for withholding of proprietary information of which it is the owner, Parker Hannifin Corporation 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 Parker's competitors without license from Parker Hannifin Corporation 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 Parker Hannifin Corporation, its customers, or its suppliers;
 - d. Information which reveals aspects of past, present, or future Parker Hannifin Corporation customer-funded development plans and programs of potential commercial value to Parker Hannifin Corporation;
 - 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 Parker Hannifin Corporation, 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 Parker Hannifin Corporation. No public disclosure has been made, and it is not available in public sources. All disclosures to third parties, including any

AFFIDAVIT PURSUANT TO 10 CFR 2.390

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 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 Parker Hannifin Corporation 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 Parker Hannifin Corporation 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 Parker Hannifin Corporation at a significant cost to Parker Hannifin Corporation. 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 Parker Hannifin Corporation's technical database and the results of evaluations performed by Parker Hannifin Corporation. A substantial effort has been expended by Parker Hannifin Corporation to develop this information. Release of this information would improve a competitor's position because it would enable Parker'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 Parker Hannifin Corporation's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of Parker Hannifin Corporation'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 Parker Hannifin Corporation.

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.

Parker Hannifin Corporation's competitive advantage will be lost if its competitors are able to use the results of the Parker Hannifin Corporation 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 Parker Hannifin Corporation 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 Parker Hannifin Corporation of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

AFFIDAVIT PURSUANT TO 10 CFR 2.390

STATE OF KENTUCKY

COUNTY OF FAYETTE

) ss:
)

Christie Lakin, on behalf of Parker Hannifin, 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.

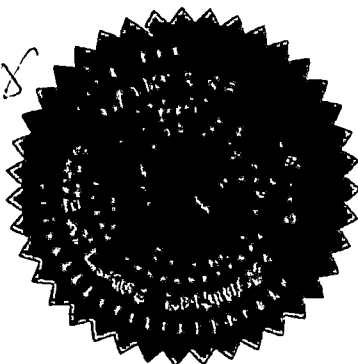
Executed at Lexington, KY, this 20th day of October, 2016.

Christie Lakin

Christie Lakin
Pricing/Contracts Analyst
Parker Hannifin Corporation

Subscribed and sworn before me this 20 day of October, 2016.

Catherine M. Vasix



My Commission Expires March 24, 2019

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 and 5 through 7 to Holtec Letter 2370002-NRC, which contains Holtec Proprietary information. In addition Enclosure 8 to Holtec Letter 2370002-NRC, contains Parker Proprietary information for which a separate Affidavit is provided.
- (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 2370002-NRC
Non-Proprietary Enclosure 10

AFFIDAVIT PURSUANT TO 10 CFR 2.390

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

Kimberly Manzione, being duly sworn, deposes and says:

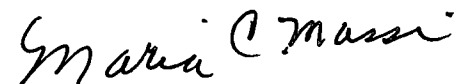
That she has read the foregoing affidavit and the matters stated therein are true and correct to the best of her knowledge, information, and belief.

Executed at Marlton, New Jersey, this 20th day of October, 2016.



Kimberly Manzione
Licensing Manager
Holtec International

Subscribed and sworn before me this 20th day of _____, 2016.



MARIA C. MASSI
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires April 25, 2020