



Holtec Center, 555 Lincoln Drive West, Marlton, NJ 08053

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January 20, 2009

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Reference: 1. USNRC Docket No. 71-9325 (HI-STAR 180 Model)  
2. Holtec Letter to USNRC Dated January 19<sup>th</sup>, 2009 (Doc. ID 1553023-NRC)  
"License Application for the HI-STAR 180 Type B(U) Transportation Package"

Subject: Supporting Documents and Computer Data Files for HI-STAR 180

Dear Mr. Saverot:

To ensure that the SFST has access to all proprietary documents that may possibly be consulted during their regulatory review, we herewith provide the entire batch of non-public domain documents under the auspices of 10CFR2.390, including the LS-DYNA benchmark report, the Sourcebook on Metamic-HT that contains the testing qualifications, and the array of calculation packages and other supporting documents germane to the HI-STAR 180 SAR. A complete listing of supporting documents (and computer data files) being forwarded to the USNRC Document Control Desk and SFST staff is provided in Attachment A to this letter.

We trust that the above supporting documents will help expedite SFST's review and approval of this package to support our need date of June 19<sup>th</sup>, 2009 (the basis of which is documented in Ref. 2.).

Sincerely,

Luis Hinojosa  
Project Manager, HI-STAR 180 Licensing

Document ID: 1553024-NRC

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NMSSO

NMSS



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Approved

Dr Stefan Anton  
Vice President of Engineering

cc (with all attachments): Mr. Pierre Saverot, Project Manager, NRC SFST, NMSS  
cc (without attachments): Mr. Pierre Monsigny  
cc (without attachments): Holtec Groups 0, 1 and 2

Attachment A: Listing of Supporting Documents and Computer Data Files  
Attachment B: Affidavit on Proprietary Status



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**Attachment A**  
**Listing of Supporting Documents and Computer Data Files**

The following documents are being submitted to the USNRC Document Control Desk in support of the license application for the HI-STAR 180 Type B(U) Transportation Package. All supporting documents are being submitted as paper hard copy and all supporting computer data files are being submitted in varying types of electronic media as noted below. Additional convenience copies are being submitted to the USNRC Staff as paper hard copy and/or other types of electronic media as appropriate.

<b>Attachment 1 - General Supporting Documents on Paper Hardcopy</b>				
<b>Item No.</b>	<b>Document I.D.</b>	<b>Title</b>	<b>Rev. #</b>	<b>Proprietary Status</b>
1	HI-2073684	Performance Characterization of Holtite-B as a Neutron Shielding Material	0	Proprietary
2	HI-2084122	Metamic-HT Qualification Sourcebook	0	Proprietary
<b>Attachment 2A - Structural Supporting Documents on Paper Hardcopy</b>				
<b>Item No.</b>	<b>Document I.D.</b>	<b>Title</b>	<b>Rev. #</b>	<b>Proprietary Status</b>
3.	HI-2063584	Finite Element Analysis Supporting HI-STAR 180 SAR	3	Proprietary
4	HI-2063552	Calculation Package for the HI-STAR 180 Transport Cask System	3	Proprietary
5	HI-2063591	Benchmarking of LS-DYNA for Simulations of Hypothetical Accident Conditions of Transport	1	Proprietary



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6	HI-2073743	Benchmarking of LS-DYNA Impact Response Prediction Model for the HI-STAR Transport Package Using the AL-STAR Impact Limiter Test Data	1	Proprietary
7	HI-981891	Impact Limiter Drop Test Report – Second Series (a.k.a scale mode test data report)	3	Proprietary
8	Drawing 1546 (Sheet 1)	HI-STAR 100 ¼ Scale Model - Overpack See note 3 below.	9	Proprietary
9	Drawing 1546 (Sheet 2)	HI-STAR 100 ¼ Scale Model - Overpack See note 3 below.	5	Proprietary
10	Drawing 1547	HI-STAR 100 ¼ Scale Model – MPC See note 3 below.	2	Proprietary
11	Drawing 1916	HI-STAR 100 ¼ Scale Model – Dummy Impact Limiter See note 3 below.	5	Proprietary
12	Drawing 3913	HI-STAR 100 Overpack (Licensing Drawings) See note 3 below.	8	Non-Proprietary
13	Drawing C1765 (Sheets 1 – 7)	Impact Limiter Drawing Series (Licensing Drawings referenced by NRC CoC 9261-5 Rev. 5 under Docket 71-9261) See note 3 below	-	Non-Proprietary
14	Drawing Series 1765	Impact Limiter Drawing Series as found in HI-STAR 100 SAR HI-951251 Rev. 6 (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	-	Proprietary
15	Drawing Series 1765	Impact Limiter Drawing Series as found in HI-STAR 100 SAR HI-951251 Rev. 7 (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	-	Proprietary



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16	Drawing 1765 Sheet 1	HI-STAR 100 Impact Limiter (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	8	Proprietary
17	Drawing 1765 Sheet 1	HI-STAR 100 Impact Limiter (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	9	Proprietary
18	Drawing 1765 Sheet 2	HI-STAR 100 Bottom Impact Limiter (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	7	Proprietary
19	Drawing 1765 Sheet 4	HI-STAR 100 Top Impact Limiter (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	8	Proprietary
<b>Attachment 2B - Structural Supporting Data Files on Ultrium LT03 Tape</b>				
Item No.	Data File Description		Rev. #	Proprietary Status
20	All input and output computer data files identified in supporting documents HI-2063584 and HI-2063552 (See Note 3 and Note 5)		-	Proprietary
<b>Attachment 3A - Thermal Supporting Documents on Paper Hardcopy</b>				
Item No.	Document I.D.	Title	Rev. #	Proprietary Status
21	HI-2073649	Thermal Analysis of the HI-STAR 180	4	Proprietary
22	HI-992252	Topical Report on the HI-STAR/HI-STORM Thermal Model and its Benchmarking with Full-Size Cask Test Data	1	Proprietary
<b>Attachment 3B - Thermal Supporting Data Files on Ultrium LT03 Tape</b>				
Item No.	Data File Description		Rev. #	Proprietary Status
23	All input and output computer data files identified in supporting document HI-2073649 (See Note 6)		-	Proprietary



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<b>Attachment 4A – Shielding Supporting Documents on Paper Hardcopy</b>				
<b>Item No.</b>	<b>Document I.D.</b>	<b>Title</b>	<b>Rev. #</b>	<b>Proprietary Status</b>
24	HI-2073655	Shielding Analysis for the HI-STAR 180	7	Proprietary
25	HI-2073653	Source Term for the HI-STAR 180	2	Proprietary
<b>Attachment 4B – Shielding Supporting Data Files on Standard DVD Media</b>				
<b>Item No.</b>	<b>Data File Description</b>		<b>Rev. #</b>	<b>Proprietary Status</b>
26	Selected input and output computer data files identified in supporting documents HI-2073655 and HI-2073653		-	Proprietary
<b>Attachment 5A – Criticality Supporting Documents on Paper Hardcopy</b>				
<b>Item No.</b>	<b>Document I.D.</b>	<b>Title</b>	<b>Rev. #</b>	<b>Proprietary Status</b>
27	HI-2073654	Criticality Analysis for the HI-STAR 180	3	Proprietary
28	HI-2032982	Isotopic Benchmarks for Burnup Credit	2	Proprietary
<b>Attachment 5B – Criticality Supporting Data Files on Standard CD Media</b>				
<b>Item No.</b>	<b>Data File Description</b>		<b>Rev. #</b>	<b>Proprietary Status</b>
29	Selected input and output computer data files identified in supporting document HI-2073654		-	Proprietary

Attachment A Notes:

1. Supporting documents include calculation packages, technical reports, test reports, and other documents that are not readily available to the USNRC.
2. Please be informed that supporting documents may reference previous revisions of the latest drawings provided in the drawing package in Section 1.3 of the Safety Analysis Report supplied with Holtec Letter 1553023-NRC. Holtec's QA process does not require supporting documents to be revised if they are not materially affected by changes in other project documents. For convenience to the NRC SFST Staff, Revision 4 of Holtec Drawing 4845 "HI-STAR 180 Cask", Holtec Proprietary Licensing Drawing is provided with Attachment 1 above.



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Attachment A Notes (continued):

3. Documents that have been previously submitted to the USNRC are indicated with the applicable Docket Number in each reference section of the Safety Analysis Report, as applicable. The following Holtec documents are no longer considered structural supporting documents and not referenced by revision 2 of the Safety Analysis Report; however, they are listed herein for historical purposes:

- Holtec proprietary report, HI-971774, Rev. 1, "Impact Limiter Drop Test Report"
- Holtec proprietary report, HI-971823, Rev. 0, "Improved Correlation of 30' Drop Testing at ORNL – August, 1997 Tests"

In case the SFST staff is still interested in these specific documents, they have been previously submitted, most recently via Holtec letter ID 1553015 (dated June 29<sup>th</sup>, 2007) under Docket Number 71-9325, USNRC (TAC No. L24076).

Structural input/output files supporting document HI-2073743 (Item 6) have been previously submitted to the USNRC via Holtec Letter 1630043-NRC under Docket Number Docket No. 71-9336 (TAC No. L24121).

Finally, the drawings indicated as items 8 through 19 have been previously provided under Docket number 71-9261; however, they are resubmitted for the convenience of the SFST staff. Any additional drawings that may be referenced by the supporting documents will be provided promptly upon SFST staff request.

4. For those items indicated as proprietary, Attachment B: Affidavit Pursuant to 10CFR2.390 – Affidavit, requests proprietary information be withheld from public disclosure. HI-STAR 180 Safety Analysis Report text, figures or drawings containing proprietary information are either highlighted in gray or indicated as proprietary.



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Attachment A Notes (continued):

5. Attachment 2B: In lieu of the Ultrium LT03 Tape media (Item 20) provided to the USNRC Document Control Desk, we are providing the SFST staff with a Western Digital (S/N: WCASU4660384) 500GB capacity external hard drive with USB capability. The hard drive has been shipped in its original box with all cables, manual(s), etc included. The hard drive is provided for the convenience of the SFST staff reviewer to facilitate his/her review. It is requested, that upon completion of the SFST staff review of the License Application and issuance of the SER, the hard drive be returned to Holtec International.
  
6. Attachment 3B: In lieu of the Ultrium LT03 Tape media (Item 23) provided to the USNRC Document Control Desk, we are providing the SFST staff with a Seagate (S/N: 2GE11IAR) 320GB capacity external hard drive with USB capability. The hard drive has been shipped with USB cable and manual included. The hard drive is provided for the convenience of the SFST staff reviewer to facilitate his/her review. It is requested that upon completion of the SFST staff review of the License Application and issuance of the CoC, the hard drive be returned to Holtec International.

**AFFIDAVIT PURSUANT TO 10CFR2.390**

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I, Luis E. Hinojosa, 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 the information identified as proprietary information in Holtec International Report HI- HI-2073681 entitled "Safety Analysis Report on the HI-STAR 180 Package" (SAR).
- (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

**AFFIDAVIT PURSUANT TO 10CFR2.390**

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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 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 10CFR2.390**

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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.

**AFFIDAVIT PURSUANT TO 10CFR2.390**

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

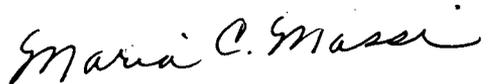
Mr. Luis E. Hinojosa, being duly sworn, deposes and says:

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

Executed at Marlton, New Jersey, this 17th day of January, 2009

  
Luis E. Hinojosa  
Holtec International

Subscribed and sworn before me this 17<sup>th</sup> day of January, 2009.



MARIA C. MASSI  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires April 25, 2010

**AFFIDAVIT PURSUANT TO 10CFR2.390**

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- (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 the proprietary information listed in Attachment A of Holtec Letter ID 1553024-NRC. The information is considered proprietary to Holtec International and is appropriately annotated as such.
- (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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- (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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STATE OF NEW JERSEY     )  
  )     ss:  
COUNTY OF BURLINGTON )

Mr. Luis E. Hinojosa, being duly sworn, deposes and says:

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

Executed at Marlton, New Jersey, this 19th day of January, 2009.



Luis E. Hinojosa  
Holtec International

Subscribed and sworn before me this 19<sup>th</sup> day of January, 2009.



MARIA C. MASSI  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires April 25, 2010



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We trust that the above supporting documents will help expedite SFST's review and approval of this package to support our need date of June 19<sup>th</sup>, 2009 (the basis of which is documented in Ref. 2.).

Sincerely,

Luis Hinojosa  
Project Manager, HI-STAR 180 Licensing

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KIMSS



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Approved

Dr Stefan Anton  
Vice President of Engineering

cc (with all attachments): Mr. Pierre Saverot, Project Manager, NRC SFST, NMSS

cc (without attachments): Mr. Pierre Monsigny

cc (without attachments): Holtec Groups 0, 1 and 2

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6	HI-2073743	Benchmarking of LS-DYNA Impact Response Prediction Model for the HI-STAR Transport Package Using the AL-STAR Impact Limiter Test Data	1	Proprietary
7	HI-981891	Impact Limiter Drop Test Report – Second Series (a.k.a scale mode test data report)	3	Proprietary
8	Drawing 1546 (Sheet 1)	HI-STAR 100 ¼ Scale Model - Overpack See note 3 below.	9	Proprietary
9	Drawing 1546 (Sheet 2)	HI-STAR 100 ¼ Scale Model - Overpack See note 3 below.	5	Proprietary
10	Drawing 1547	HI-STAR 100 ¼ Scale Model – MPC See note 3 below.	2	Proprietary
11	Drawing 1916	HI-STAR 100 ¼ Scale Model – Dummy Impact Limiter See note 3 below.	5	Proprietary
12	Drawing 3913	HI-STAR 100 Overpack (Licensing Drawings) See note 3 below.	8	Non-Proprietary
13	Drawing C1765 (Sheets 1 – 7)	Impact Limiter Drawing Series (Licensing Drawings referenced by NRC CoC 9261-5 Rev. 5 under Docket 71-9261) See note 3 below	-	Non-Proprietary
14	Drawing Series 1765	Impact Limiter Drawing Series as found in HI-STAR 100 SAR HI-951251 Rev. 6 (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	-	Proprietary
15	Drawing Series 1765	Impact Limiter Drawing Series as found in HI-STAR 100 SAR HI-951251 Rev. 7 (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	-	Proprietary



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16	Drawing 1765 Sheet 1	HI-STAR 100 Impact Limiter (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	8	Proprietary
17	Drawing 1765 Sheet 1	HI-STAR 100 Impact Limiter (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	9	Proprietary
18	Drawing 1765 Sheet 2	HI-STAR 100 Bottom Impact Limiter (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	7	Proprietary
19	Drawing 1765 Sheet 4	HI-STAR 100 Top Impact Limiter (Licensing Drawings referenced by NRC under Docket 71-9261, TAC L22019 and L22085) See note 3 below	8	Proprietary
<b>Attachment 2B - Structural Supporting Data Files on Ultrium LT03 Tape</b>				
<b>Item No.</b>	<b>Data File Description</b>		<b>Rev. #</b>	<b>Proprietary Status</b>
20	All input and output computer data files identified in supporting documents HI-2063584 and HI-2063552 (See Note 3 and Note 5)		-	Proprietary
<b>Attachment 3A - Thermal Supporting Documents on Paper Hardcopy</b>				
<b>Item No.</b>	<b>Document I.D.</b>	<b>Title</b>	<b>Rev. #</b>	<b>Proprietary Status</b>
21	HI-2073649	Thermal Analysis of the HI-STAR 180	4	Proprietary
22	HI-992252	Topical Report on the HI-STAR/HI-STORM Thermal Model and its Benchmarking with Full-Size Cask Test Data	1	Proprietary
<b>Attachment 3B - Thermal Supporting Data Files on Ultrium LT03 Tape</b>				
<b>Item No.</b>	<b>Data File Description</b>		<b>Rev. #</b>	<b>Proprietary Status</b>
23	All input and output computer data files identified in supporting document HI-2073649 (See Note 6)		-	Proprietary



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<b>Attachment 4A – Shielding Supporting Documents on Paper Hardcopy</b>				
<b>Item No.</b>	<b>Document I.D.</b>	<b>Title</b>	<b>Rev. #</b>	<b>Proprietary Status</b>
24	HI-2073655	Shielding Analysis for the HI-STAR 180	7	Proprietary
25	HI-2073653	Source Term for the HI-STAR 180	2	Proprietary
<b>Attachment 4B – Shielding Supporting Data Files on Standard DVD Media</b>				
<b>Item No.</b>	<b>Data File Description</b>		<b>Rev. #</b>	<b>Proprietary Status</b>
26	Selected input and output computer data files identified in supporting documents HI-2073655 and HI-2073653		-	Proprietary
<b>Attachment 5A – Criticality Supporting Documents on Paper Hardcopy</b>				
<b>Item No.</b>	<b>Document I.D.</b>	<b>Title</b>	<b>Rev. #</b>	<b>Proprietary Status</b>
27	HI-2073654	Criticality Analysis for the HI-STAR 180	3	Proprietary
28	HI-2032982	Isotopic Benchmarks for Burnup Credit	2	Proprietary
<b>Attachment 5B – Criticality Supporting Data Files on Standard CD Media</b>				
<b>Item No.</b>	<b>Data File Description</b>		<b>Rev. #</b>	<b>Proprietary Status</b>
29	Selected input and output computer data files identified in supporting document HI-2073654		-	Proprietary

Attachment A Notes:

1. Supporting documents include calculation packages, technical reports, test reports, and other documents that are not readily available to the USNRC.
2. Please be informed that supporting documents may reference previous revisions of the latest drawings provided in the drawing package in Section 1.3 of the Safety Analysis Report supplied with Holtec Letter 1553023-NRC. Holtec's QA process does not require supporting documents to be revised if they are not materially affected by changes in other project documents. For convenience to the NRC SFST Staff, Revision 4 of Holtec Drawing 4845 "HI-STAR 180 Cask", Holtec Proprietary Licensing Drawing is provided with Attachment 1 above.



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Attachment A Notes (continued):

3. Documents that have been previously submitted to the USNRC are indicated with the applicable Docket Number in each reference section of the Safety Analysis Report, as applicable. The following Holtec documents are no longer considered structural supporting documents and not referenced by revision 2 of the Safety Analysis Report; however, they are listed herein for historical purposes:

- Holtec proprietary report, HI-971774, Rev. 1, "Impact Limiter Drop Test Report"
- Holtec proprietary report, HI-971823, Rev. 0, "Improved Correlation of 30' Drop Testing at ORNL – August, 1997 Tests"

In case the SFST staff is still interested in these specific documents, they have been previously submitted, most recently via Holtec letter ID 1553015 (dated June 29<sup>th</sup>, 2007) under Docket Number 71-9325, USNRC (TAC No. L24076).

Structural input/output files supporting document HI-2073743 (Item 6) have been previously submitted to the USNRC via Holtec Letter 1630043-NRC under Docket Number Docket No. 71-9336 (TAC No. L24121).

Finally, the drawings indicated as items 8 through 19 have been previously provided under Docket number 71-9261; however, they are resubmitted for the convenience of the SFST staff. Any additional drawings that may be referenced by the supporting documents will be provided promptly upon SFST staff request.

4. For those items indicated as proprietary, Attachment B: Affidavit Pursuant to 10CFR2.390 – Affidavit, requests proprietary information be withheld from public disclosure. HI-STAR 180 Safety Analysis Report text, figures or drawings containing proprietary information are either highlighted in gray or indicated as proprietary.



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Attachment A Notes (continued):

5. Attachment 2B: In lieu of the Ultrium LT03 Tape media (Item 20) provided to the USNRC Document Control Desk, we are providing the SFST staff with a Western Digital (S/N: WCASU4660384) 500GB capacity external hard drive with USB capability. The hard drive has been shipped in its original box with all cables, manual(s), etc included. The hard drive is provided for the convenience of the SFST staff reviewer to facilitate his/her review. It is requested, that upon completion of the SFST staff review of the License Application and issuance of the SER, the hard drive be returned to Holtec International.
  
6. Attachment 3B: In lieu of the Ultrium LT03 Tape media (Item 23) provided to the USNRC Document Control Desk, we are providing the SFST staff with a Seagate (S/N: 2GE11IAR) 320GB capacity external hard drive with USB capability. The hard drive has been shipped with USB cable and manual included. The hard drive is provided for the convenience of the SFST staff reviewer to facilitate his/her review. It is requested that upon completion of the SFST staff review of the License Application and issuance of the CoC, the hard drive be returned to Holtec International.

**AFFIDAVIT PURSUANT TO 10CFR2.390**

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I, Luis E. Hinojosa, 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 the proprietary information listed in Attachment A of Holtec Letter ID 1553024-NRC. The information is considered proprietary to Holtec International and is appropriately annotated as such.
- (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 10CFR2.390**

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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

**AFFIDAVIT PURSUANT TO 10CFR2.390**

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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 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 10CFR2.390**

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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.

