

To: Kimberly Hardin  
Cc: Larry Pulley  
Subject: Supplemental Information for LAR 9261-5

Kim,

Attached please find a copy of letter 5014635 which transmitted Holtec Report HI-2002420 Revision 1 to the NRC Document Control desk to be docketed under 71-9261.

Regards,

Tammy Morin, M.S. Eng

Holtec International

797-0900 x 687

tammy\_morin@holtec.com

The information contained herein is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged material. Review, retransmission, dissemination, or other use of this information in whole or part for any other purpose by persons outside the recipient's organization is permitted only after an explicit authorization to such effect has been issued by the sender of this message. If you received this e-mail in error, please contact the sender and delete this e-mail and its attachments immediately. When issued on a project, an e-mail from Holtec International should be treated as an official communication from the company. Holtec International saves all incoming and outgoing e-mails in company's filing system for archival reference and expects the correspondent entity to do the same. Except when commercial information is involved, an e-mail is not followed by a hard copy (signature bearing) transmittal.

**CC:** "Robert Nelson" <RAN@nrc.gov>, "Stefan Anton" <Stefan\_Anton@holtec.com>, "Evan Rosenbaum" <Evan\_Rosenbaum@holtec.com>

71-9261

**From:** "Tammy Morin" <Tammy\_Morin@holtec.com>  
**To:** "Kimberly Hardin" <KJH4@nrc.gov>  
**Date:** 10/04/2007 2:57:37 PM  
**Subject:** FW: Supplemental Information for LAR 9261-5

Kim,

I am attaching the affidavit to this email for the report (HI-2002420 Rev 1) transmitted to the Document Control Desk last Thursday (9/27/07) with Holtec letter 5014635. (635aff.pdf)

Please understand a hardcopy of the report was sent to the document control desk since it was an older file and I did not want there to be any delays in getting it properly docketed due to the current restraints on electronic submittals. The disk that I sent to you (via Bob Nelson) last week contains the above report in PDF format.

The other Holtite-A report HI-2002396 Rev 3, which was submitted with affidavit on May 29, 2003 under docket 71-9261/HI-STAR 100 with Holtec Letter 5014484 (attached), was also included on the disk.

We will send the shielding input files for information as stated in RAI 5-9. This will be sent tomorrow on disk with appropriate affidavit via Fed Ex.

Also attached please find a record of our telephone conversation today (10-4-2007 with NRC.pdf).

Please let me know if you require anything further.

Regards,

Tammy

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From: Tammy Morin  
Sent: Thursday, September 27, 2007 1:48 PM

71-9261

**Mail Envelope Properties** (47053792.72F : 1 : 5935)

**Subject:** FW: Supplemental Information for LAR 9261-5  
**Creation Date** 10/04/2007 2:56:44 PM  
**From:** "Tammy Morin" <Tammy\_Morin@holtec.com>

**Created By:** Tammy\_Morin@holtec.com.

**Recipients**

nrc.gov

EBGWPO01.HQGWDO01  
KJH4 (Kimberly Hardin)  
RAN CC (Robert Nelson)

holtec.com

Evan\_Rosenbaum CC (Evan Rosenbaum)  
Stefan\_Anton CC (Stefan Anton)

**Post Office**

EBGWPO01.HQGWDO01

**Route**

nrc.gov  
holtec.com

Files	Size	Date & Time
MESSAGE	2500	10/04/2007 2:56:44 PM
TEXT.htm	10930	
5014635.pdf	47548	
635aff.pdf	252739	
5014484.pdf	299995	
10-4-2007 with NRC.pdf	114997	
Mime.822	1003107	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling  
This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User

Junk Mail handling disabled by Administrator

Junk List is not enabled

Junk Mail using personal address books is not enabled

Block List is not enabled



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

September 27, 2007

Reference: 1. USNRC Docket No. 71-9261 (HI-STAR 100), TAC L24029  
2. Holtec Project 5014  
3. Letter from K. Hardin (USNRC) to S. Anton (Holtec), dated June 15, 2007  
4. Holtec Letter 5014605, dated October 5, 2006

Subject: Supplemental Information for Response to Request for Additional Information (RAI)  
on License Amendment Request (LAR) 9261-5 to HI-STAR 100 Certificate of  
Compliance (CoC) No. 9261

Dear Sir:

Attached please find Holtec Report HI-2002420 Revision 1, which is provided to aid in the review of the responses to NRC RAI [3] on Holtec LAR 9261-5 to HI-STAR 100 CoC [4].

Also attached is an affidavit requesting that appropriately marked Holtec Proprietary information in Attachment 1 be withheld from public disclosure.

Attachment 1: Holtec Proprietary Report HI-2002420 Revision 1  
Attachment 2: Affidavit Pursuant to 10CFR2.390

Sincerely,

Tammy Morin  
Project Manager, LAR 9261-5  
Holtec International

cc: USNRC Document Control Desk  
Ms. Kimberly Hardin, NRC, w/o attachments via email  
Mr. Lawrence Pulley, PSE&G, w/o attachments via email

Document ID: 5014635

NM5501  
NM55

**AFFIDAVIT PURSUANT TO 10 CFR 2.390**

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I, Stefan Anton, 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 Holtec report provided in Attachment 1 to Holtec letter Document ID 5014635, containing 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 and 4.b, 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

**AFFIDAVIT PURSUANT TO 10 CFR 2.390**

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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 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**

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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.

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Document ID 5014635  
Non-Proprietary Attachment

**AFFIDAVIT PURSUANT TO 10 CFR 2.390**

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

Dr. Stefan Anton, being duly sworn, deposes and says:

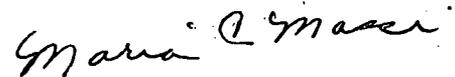
That he has read the foregoing affidavit and the matters stated therein are true and correct to the best of his knowledge, information, and belief.

Executed at Marlton, New Jersey, this 27th day of September, 2007.



Dr. Stefan Anton  
Holtec International

Subscribed and sworn before me this 27 day of September, 2007.



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

# MINUTES-OF-THE-MEETING

Holtec International / 555 Lincoln Drive West / Marlton, New Jersey 08053  
www.holtecinternational.com

Holtec Project No.	5014	Date of Meeting	10/04/2007	Place of Meeting	Telephone Call
Participating Organizations	Holtec / NRC (SFST)		Subject of Meeting	LAR 9261-5 and Administrative Items	
Names of Participants (indicate those who attended part-time or by video conference). A signed attendance list may be attached in lieu of a typed list (indicate in next column if attached).	Stefan Anton		Robert Nelson		
	Tammy Morin		Kimberly Hardin		
	Evan Rosenbaum				
Prepared by	Tammy Morin	Verified by	Stefan Anton		

### *Summary of Discussions*

A teleconference was held between Holtec and the SFST to discuss administrative items related to LAR 9261-5 RAI:

- 1) SFST requires a copy of the affidavit sent with Holtec Report HI-2002420 Rev 1 to NRC Document Control Desk to properly identify the document as proprietary information.
- 2) SFST requires SAS2H and ORIGENS input files associated with RAI 5-9.
- 3) Concerns were raised by Holtec on the acceptance process of electronic submittals to the NRC Document Control Desk. SFST informed Holtec that others were having problems with electronic documents being rejected by document control. SFST suggested that Holtec write a letter, addressed to them, to document our concerns and that they may discuss with the Document Control Desk.
- 4) It was verified that Holtec should continue to send information to the Document Control Desk with a copy to the NRC Project Manager

(Continue on Page 2 et. seq. as necessary.)

### **Commitments Made**

<i>Task</i>	<i>Due Date</i>	<i>Responsible Party</i>
<b>Submit affidavit for Report HI-2002420 Rev 1 to Ms. Hardin</b>	<b>10/5/07</b>	<b>Holtec</b>
<b>Submit SAS2H and ORIGENS files to Document Control and Ms. Hardin</b>	<b>10/5/07</b>	<b>Holtec</b>
<b>Document in a letter Holtec's concerns with electronic submittals</b>	<b>TBD</b>	<b>Holtec</b>

This template must be used to document and memorialize the substantive discussions that occur in a meeting on a Holtec project. The contents of these minutes must be verified by a second participant in the meeting. The verifier should preferably be from the interfacing organization. The preparer must be a meeting participant from Holtec.



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May 29, 2003

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

Subject: USNRC Docket No. 71-9261, TAC L23474  
HI-STAR 100 Certificate of Compliance 9261  
HI-STAR License Amendment Request 9261-2, Revision 1  
Submittal of Calculation Packages and Input Files

References: 1. Holtec Project 5014  
2. Holtec Letter, B. Gutherman, "Response to Request for Additional Information – Holtec HI-STAR 100 Amendment – Certificate of Compliance No. 9261", to USNRC Document Control Desk, dated May 23, 2003.

Dear Sir:

As we committed in our Reference 2 letter, we herewith provide two compact disks (CDs) containing the input files and calculation packages that support License Amendment Request (LAR) 9261-2, Revision 1 for HI-STAR 100 10 CFR 71 Certificate of Compliance (CoC) Number 9261. The contents of the CDs are as follows, with Holtec-proprietary information identified appropriately:

**Compact Disk 1**

**Thermal Input Files (Holtec Proprietary)**

Over 40 ANSYS input files are provided covering two subjects:

1. MPC Fuel Basket Composite Wall Conductivities
2. MPC Fuel Basket Planar Conductivities

**Shielding Input Files (Holtec Proprietary)**

Code	Input File	Description
MCNP	m4n5b01	Neutron calculation for the MPC-24. Radial tallies with impact limiters for normal conditions.
MCNP	m4n1b03	Neutron calculation for the MPC-24E Trojan basket. Radial tallies with impact limiters for normal conditions.
MCNP	m2n5b02	Neutron calculation for the MPC-32. Radial tallies with impact limiters for normal conditions.



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INTERNATIONAL

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Criticality Input Files (Holtec Proprietary)

Code	Basket	Array/Class	Enrichment	Fuel Condition	Filename
MCNP	MPC-24E/EF	15x15F	4.5	Intact	1rf5fx5
MCNP	MPC-24E/EF	17x17A	4.4	Intact	1rf7ac5
MCNP	Trojan MPC-24E/EF	17x17B	3.7	Intact & Damaged/Debris (modeled as 16x16 bare fuel rod array)	tnpd16a

Compact Disk 2

The following calculation packages are included on Compact Disk 2 in .pdf format:

1. Holtec Report No. HI-2012754, "Dry Storage Structural ECO Compendium," Revision 1 (Holtec Proprietary).
2. Holtec Report No. HI-2012786, "Structural Calculation Package for HI-STAR Overpack," Revision 0 (Holtec Proprietary).
3. Holtec Report No. HI-2012787, "Structural Calculation Package for MPC," Revision 4 (Holtec Proprietary).
4. Holtec Report No. HI-2022869, "[Structural] Analysis for Trojan Damaged Fuel Container," Revision 2 (Holtec Proprietary).
5. Portland General Electric Calculation No. TI-012, "TranStor™ System Lifting Analysis for the Failed Fuel Can," Revision 2.
6. Portland General Electric Calculation No. TI-050, "Structural Evaluation of the Failed Fuel Can," Revision 4.
7. Holtec Report No. HI-2033007, "HI-STORM License Amendment 1014-2 Thermal Analysis," Revision 0 (Holtec Proprietary).
8. Holtec Report No. HI-2033009, "HI-STAR License Amendment 9261-2 Thermal Analysis," Revision 0 (Holtec Proprietary).



# HOLTEC INTERNATIONAL

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9. Holtec Report No. HI-971788, "Effective Property Evaluations of HI-STAR 100 and HI-STORM Dry Cask System Multi-Purpose Canisters," Revision 11 (Holtec Proprietary).
10. Holtec Report No. HI-971826, "HI-STAR 100 System Storage and Transport Condition Thermal Evaluation," Revision 6 (Holtec Proprietary).
11. Holtec Report No. HI-971789, "Effective Thermal Conductivity Evaluations of LWR Fuel Assemblies in Dry Storage Casks," Revision 7 (Holtec Proprietary).
12. Holtec Report No. HI-2002396, "Holtite-A Development History and Thermal Performance Data," Revision 3 (Holtec Proprietary).
13. Holtec Report No. HI-2012771, "HI-STAR 100 and HI-STORM 100 Additional Criticality Calculations," Revision 3 (Holtec Proprietary).
14. Holtec Report No. HI-951321, "Criticality Evaluation of HI-STAR 100 Cask Designs," Revision 17 (Holtec Proprietary).
15. Holtec Report No. HI-971780, "Containment Analysis for the HI-STAR 100," Revision 3 (Holtec Proprietary).

Please note that the latest revision of the following criticality calculation package applicable to this review was previously submitted to the NRC on another docket and is not included on CD number 2:

Holtec Report No. HI-2012681, "Criticality Evaluation for the Trojan ISFSI Completion Project," Revision 6 (submitted on Docket 72-0017, July 25, 2002).

Sincerely,

Brian Gutherman, P.E.  
Manager, Licensing and Technical Services

Enclosures: As Stated.

Attachment: Affidavit Pursuant to 10CFR2.790

Document ID: 5014484



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Distribution: Mr. Meraj Rahimi, USNRC (Cover letter w/attach. and 5 Compact Disks)  
NRC Document Control Desk (Cover Letter w/attach. and One Compact Disk)

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