March 30, 2017

Mr. Michael Layton, Director
Division of Spent Fuel Management
Office of Nuclear Material Safety and Safeguards

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

Ref: USNRC Docket No. 72-1051

Subject: Holtec International HI-STORE CIS (Consolidated Interim Storage Facility) License Application


Dear Mr. Layton:

Holtec International is pleased to submit its specific license application for a consolidated interim storage facility in Southeast New Mexico called HI-STORE CIS under the provisions of 10 CFR Part 72 [1] by the target date previously communicated to the NRC [2].

Holtec is requesting an initial authorization for 500 canisters of spent nuclear fuel for a 40-year license duration. The proposed away from reactor (AFR) installation is envisaged to fulfill the national commitment for an interim storage facility for used nuclear fuel as articulated in the Blue Ribbon Commission's report which was subsequently adopted by the DOE.

Holtec International plans to deploy its state-of-the-art HI-STORM UMAX canister storage system (docket # 72-1040) at the HI-STORE CIS, which stores fuel safely in a subterranean configuration, and has thus far been adopted by Callaway and SONGS, as well as an earlier low heat load version currently in use at Humboldt Bay. As stated in its FSAR, the HI-STORM UMAX Canister storage system has been engineered to store the entire complement of canisters currently deployed at ISFSIs around the country. This HI-STORE CIS submittal relies on the
To help facilitate expedited licensing, Holtec International has ensured that the margins for all design basis safety metrics are even larger than those (already large margins) that undergird the general certification of the HI-STORM UMAX system in Docket number 72-1040.

A listing of the attachments to this letter and their regulatory nexus to fully comply with the requirements in 10 CFR Part 72 and the current regulatory practice is provided in the following:

- A Safety Analysis Report (SAR) prepared pursuant to 10 CFR 72.24 and following the guidance of NUREG-1567. Both proprietary and non-proprietary versions of this document are included in Attachments 1 and 2.
- A proposed license and associated technical specifications in accordance with 10 CFR 72.26 and 72.44, included as Attachment 3.
- An Environmental Report, pursuant to 10 CFR 72.34 which evaluates the cumulative impact of up to 10,000 canisters at the site, included as Attachment 4.
- A training program pursuant to 10 CFR 72.28 is included as Attachment 5, and further described in Chapter 10 of the SAR.
- Proposed decommissioning and decommissioning funding plans are included as Attachments 6 and 7, pursuant to the requirements in 10 CFR 72.22(e) and 72.30.
- The HI-STORE Emergency Response Plan is included pursuant to 10 CFR 72.32, as Attachment 8.
- A description of Holtec’s financial qualifications is included as Attachment 9, pursuant to 10 CFR 72.22.
- To support the request for a 40 year license, detailed information on the aging management of the facility is included in Attachment 10, and described in Chapter 18 of the SAR.
- The Calculation Packages which support the technical information in the SAR are provided to aid the staff’s review as Attachments 11 through 21. These attachments also include the input and output files for those reports, as necessary.
- The Physical Security Plan, Safeguards Contingency Plan, and Security Training Plan will be submitted under a separate letter due to their Safeguards Information Status.
- Holtec International is utilizing a previously NRC-approved QA program, under docket 71-0784. In accordance with 10 CFR 72.140(d), this program is incorporated by reference into the HI-STORE CIS application, as described in Chapter 12 of the SAR.
- A description of Holtec International’s technical qualifications is provided in Chapter 1 of the SAR, pursuant to 10 CFR 72.22 and 72.28(a).
An affidavit pursuant to 10CFR2.390 is included herein as Attachment 22, requesting withholding of the business-sensitive and proprietary attachments to this letter from public disclosure.

If you have any questions, please contact me at 856-797-0900. extension 3951.

Sincerely,

Kimberly Manzione
Licensing Manager,
Holtec International

Attachments:
Attachment 1: HI-STORE Safety Analysis Report, HI-2167374R0 (proprietary)
Attachment 2: HI-STORE Safety Analysis Report, HI-2167374R0 (non-proprietary)
Attachment 3: HI-STORE Proposed License and Technical Specifications (non-proprietary)
Attachment 4: Environmental Report on the HI-STORE CIS Facility, HI-2167521R0 (non-proprietary)
Attachment 5: HI-STORE Consolidated Interim Storage Facility – Training and Qualification Program, HI-2177562R0 (proprietary)
Attachment 6: HI-STORE Consolidated Interim Storage Facility – Decommissioning Plan, HI-2177558R0 (proprietary)
Attachment 7: HI-STORE Consolidated Interim Storage Facility – Decommissioning Cost Estimate and Funding Plan, HI-2177565R0 (proprietary)
Attachment 8: HI-STORE Consolidated Interim Storage Facility – Emergency Response Plan, HI-2177535R0 (proprietary)
Attachment 9: HI-STORE Financial Assurance & Project Life Cycle Cost Estimates, HI-2177593R0 (proprietary)
Attachment 10: Aging Assessment and Management Program for HI-STORE CIS, HI-2167378R0 (proprietary)
Attachment 11: HI-STORE Structural Calculation Package, HI-2177585R0, (proprietary)
Attachment 12: HI-STORM UMAX Structural Calculation Package, HI-2125228R9 (proprietary)
Attachment 13: Regulatory Guide 1.60 Time Histories Using EZ-FRISK, HI-2146083R2 (proprietary)
Attachment 14: HI-STORE Structural Calculations, Input/Output Files (proprietary)
Attachment 15: HI-TRAC CS Thermal Analysis, HI-2177553R0 (proprietary)
Attachment 16: Thermal Analysis of HI-STORM UMAX and HI-STORE, HI-2177591R0 (proprietary)
Attachment 17: HI-STORE CTF Thermal Analysis, HI-2177597R0 (proprietary)
Attachment 18: HI-STORE Thermal Calculations, Input/Output Files (proprietary)
Attachment 19: HI-STORE Site Boundary Dose Analysis, HI-2177599RO (proprietary)
Attachment 20: HI-STORE Occupational Dose Analysis, HI-2177600RO (proprietary)
Attachment 21: HI-STORE Shielding Calculations, Input/Output Files (proprietary)
Attachment 22: Affidavit in Accordance with 10CFR2.390

cc (letter only):

Melinda Allen, Director
Lea County Economic Development Corp.
299 East Broadway Street
Hobbs, NM 88240

Ron Black
Chairman of Lea County Commission
216 West Albertson Drive
Hobbs, NM 88240

Commissioner Garry Buie
200 E. Broadway St.
Hobbs, NM 88240

Commissioner Joseph Calderon
200 E. Broadway St.
Hobbs, NM 88240

Senator Carlos Cisneros
PO Box 1129
Questa, NM 87556

Johnny Cope, Board Member
Eddy-Lea Energy Alliance
400-2 Cascades Avenue, Suite 201
Carlsbad, NM 88220

Jose Cuadrado
US NRC, Division of Spent Fuel Management
Washington, DC 20555-001

Commissioner Stella Davis
101 W Greene Street
Room 211
Carlsbad, NM 88220

Dan Alpert, Sr. Legal Asst.
123 East Marcy Street, Suite 103
Santa Fe, NM 87501

Representative Cathrynn Brown
1814 N. Guadalupe
St.Carlsbad, NM 88220

Commissioner Cynthia Calderon
200 E. Broadway St.
Hobbs, NM 88240

Wesley Carter
101 N, Halagueno
Carlsbad, NM 88221

Sam Cobb, Vice-Chair, Eddy-Lea Alliance
Mayor, City of Hobbs
City Hall, 200 East Broadway
Hobbs, NM 88240

Susan Crockett, Treasurer, Eddy-Lea Alliance
Chair, Eddy County Commission
400-2 Cascades Avenue, Suite 201
Carlsbad, NM 88220

Mayor Dale Janway
City of Carlsbad – City Hall
101 N. Haloqueno
Carlsbad, NM 88221

J.R. Doporto
101 N, Halagueno
Carlsbad, NM 88221
Richard Doss
101 N, Halagueno
Carlsbad, NM 88221

Representative Brian Egolf
123 W. San Francisco
Santa Fe, NM 87501

Lisa A. Anaya-Flores
101 N, Halagueno
Carlsbad, NM 88221

Representative David Gallegos
PO Box 998
Eunice, NM 88231

Keith Gardner, Chief of Staff
Office of the Governor
490 Old Santa Fe Trail, Room 400
Santa Fe, NM 87501

Senator Ron Griggs
2704 Birdie Loop
Alamogordo, NM 88310

Allan Hall, Esquire
Eddy-Lea Energy Alliance
400-2 Cascades Avenue, Suite 201
Carlsbad, NM 88220

Representative Jason Harper
4917 Foxmoore Court NE
Rio Rancho, NM 87144

Adam Heflin, CEO
Wolf Creek Nuclear Operating Co.
1550 Oxen Lane, N.E.
Burlington, Kansas 66839

Rick Rudometkin, Administrator
Eddy County
101 West Greene Street
Carlsbad, NM 88220

Leo Estrada
101 N, Halagueno
Carlsbad, NM 88221

Michael Gallagher, County Administrator
Lea County
100 North Main Street, Suite 4
Lovingston, NM 88260

Representative Stephanie Garcia Richard
PO Box 4657
Los Alamos, NM 87544

Commissioner Don Gerth
200 E. Broadway St.
Hobbs, NM 88240

Congresswoman Michelle Lujan Grisham
400 Gold Avenue SW
Suite 680
Albuquerque, NM 87102

Ed Halpin, CNO
Pacific Gas and Electric Co.
Diablo Canyon Power Plant
PO Box 56
Avila Beach, CA 93424

John Heaton, Chairman
Eddy-Lea Energy Alliance
400-2 Cascades Avenue, Suite 201
Carlsbad, NM 88220

Senator Martin Heinrich
123 East Marcy Street, Suite 103
Santa Fe, NM 87501
Commissioner Jon Henry
101 W Greene Street
Room 211
Carlsbad, NM 88220

Tony Hsia
US NRC, Division of Spent Fuel Management
Washington, DC 20555-001

Senator Stuart Ingle
2106 West University Drive
Portales, NM 88130

Commissioner Dean Jackson
100 N. Main Avenue, Suite 4
Loving, NM 88260

L. Jearl Strickland, Director Nuclear Projects
Pacific Gas and Electric Co.
Diablo Canyon Power Plant
PO Box 56
Avila Beach, CA 93424

Representative Carl Trujillo
1 Jerry Hatchet Lane
Santa Fe, NM 87506

Commissioner Don Jones
100 N. Main Avenue, Suite 4
Loving, NM 88260

Senator Gay Kernan
928 W Mesa Verde
Hobbs, NM 88240

John Kotek, Assistant Energy Secretary
United States Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Senator Carroll H. Leavell
PO Drawer D
Jal, NM 88252

Commissioner Rebecca Long
100 N. Main Avenue, Suite 4
Loving, NM 88260

Chip Lowe, CPA
Lea County Finance Manager
100 N. Main Street, Suite 11
Loving, NM 88260

Congressman Ben Ray Lujan
2446 Rayburn HOB,
Washington, DC 20515

Representative Patricia Lundstrom
3406 Bluehill Avenue
Gallup, NM 87301

Senator Martin Heinrich
United States Senate
123 East Marcy Street, Suite 103
Santa Fe, NM 87501

Senator Richard Martinez
PO Box 762
Espanola, NM 87532

Representative Bill McCamley
PO Box 458
Mesilla Park, NM 88048

Brian McCormack, Chief of Staff
United States Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585

Steve McCutcheon, City Administrator
City of Carlsbad
101 Halaqueno
Carlsbad, NM 88221

John McKirgan
US NRC, Division of Spent Fuel Management
Washington, DC 20555-001
Senator Tom Udall  
United States Senate  
102 West Hagerman Street, Suite A  
Carlsbad, NM 88220

Representation James Townsend  
69 W. Compress Rd.  
Artesia, NM 88210

David Victor, Chair  
Edison Community Engagement Panel  
University of California, San Diego  
9500 Gilman Drive, MC 0519  
La Jolla, CA 92039

Butch Tongate  
Secretary of Environment state of New Mexico  
1190 Saint Francis Drive  
Santa Fe, NM 87505

Representative Jim Trujillo  
1901 Morris Place  
Santa Fe, NM 87505

Jack Volpato, Board Member  
Eddy-Lea Energy Alliance  
400-2 Cascades Avenue, Suite 201  
Carlsbad, NM 88220

Commissioner James Walterscheid  
101 W Greene Street  
Room 211  
Carlsbad, NM 88220

John Waters, Director  
Carlsbad Department of Development  
400-2 Cascades Avenue, Suite 201  
Carlsbad, NM 88220

Gay West, Eddy County Finance Manager  
101 West Greene Street  
Carlsbad, NM 88220

Senator Peter Wirth  
708 Paseo de Peralta  
Santa Fe, NM 87501

Commissioner Larry E. Wood  
101 W Greene Street  
Room 211  
Carlsbad, NM 88220
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 provided in Attachments 1, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, and 21 to Holtec Letter 5025012, which contain 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).
(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 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.
(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 10 CFR 2.390

STATE OF NEW JERSEY )
COUNTY OF CAMDEN ) ss:

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 Camden, New Jersey, this 29th day of March 2017.

[Signature]
Kimberly Manzione
Holtec International

Subscribed and sworn before me this 29 day of March, 2017.

[Signature]
MARIA C. MASSI
NOTARY PUBLIC OF NEW JERSEY
(My Commission Expires April 25, 2020)