~~Proprietary Information - Withhold from Public Disclosure Under 10 CFR 2.390~~
~~The balance of this letter may be considered non-proprietary upon removal of Attachment 2.~~

Entergy

Entergy Nuclear Operations, Inc.
1340 Echelon Parkway
Jackson, MS 39213
Tel 601-368-5573

Ron Gaston
Director, Nuclear Licensing

10 CFR 50.12

NL-20-008

January 6, 2020

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

Subject: Transmittal of Presentation Slides for Partially Closed Pre-Submittal Meeting to Discuss a Planned License Amendment Request to Replace the Indian Point Nuclear Generating Unit 3 Fuel Handling Building Crane

Indian Point Nuclear Generating Unit 3
NRC Docket Nos. 50-286
Renewed Facility Operating License No. DPR-64

Reference: Meeting Notice, "Partially Closed Meeting with Entergy Operations, Inc. and Holtec International to Discuss License Amendment Request to Replace the Indian Point Nuclear Generating Unit No. 3 Fuel Handling Building Crane with a New Holtec High-Lift Crane)," (ADAMS Accession No. ML20002A033), dated January 2, 2020

A partially closed meeting between Entergy Operations, Inc. (Entergy), Holtec International (Holtec), and the U.S. Nuclear Regulatory Commission (NRC) staff is scheduled for January 16, 2020. The purpose of this meeting is to discuss a planned license amendment request to replace the Indian Point Nuclear Generating Unit 3 Fuel Handling Building Crane with a new Holtec High-Lift Crane. The purpose of this letter is to transmit both proprietary and non-proprietary versions of the presentation slides that Entergy will use during the meeting.

Attachment 1 provides a non-proprietary version of the presentation slides. Attachment 2 provides a proprietary version of the presentation slides. Since Attachment 2 contains information proprietary to Holtec, it is supported by an Affidavit signed by Holtec, the owner of the information, which is provided in Attachment 3. The Affidavit sets forth the basis on which the information may be withheld from public disclosure by the NRC and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.390 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Holtec (i.e., Attachment 2) be withheld from public disclosure in accordance with 10 CFR Section 2.390 of the Commission's regulations.

Correspondence with respect to the copyright or proprietary aspects of the items listed above, or the supporting Holtec Affidavit, should be addressed to Ms. Kimberley Manzione, Licensing Manager, Holtec International, 2500 Broadway, Camden, NJ 08104

This letter contains no new commitments and no revisions to existing commitments.

Should you have any questions or require additional information, please contact Ron Gaston at 601-368-5573.

Sincerely,

Ron Gaston

RWG/jls

Attachments:
1. Presentation Slides, "Indian Point Energy Center Unit 3, Pre-Submittal Meeting, License Amendment Request, HI-LIFT System," (Non-Proprietary)
2. Presentation Slides, "Indian Point Energy Center, Unit 3 Pre-Submittal Meeting, License Amendment Request NRC, HI-LIFT System," (Proprietary)
3. Holtec Affidavit Pursuant to 10 CFR 2.390, "Pre-Submittal Meeting on IPEC HI-LIFT, dated December 31, 2019

cc: Regional Administrator, NRC Region I
NRC Senior Resident Inspector, Indian Point Nuclear Generating Units 2 and 3
NRC Senior Project Manager, NRC/NRR/DORL
President and CEO, NYSERDA
New York State Public Service Commission

Attachment 1

NL-20-008

Presentation Slides

Indian Point Energy Center Unit 3, Pre-Submittal Meeting
License Amendment Request, HI-LIFT System (Non-Proprietary)

Indian Point Nuclear Generating Unit 3
NRC Docket No. 50-286
Renewed Facility Operating License DPR-64

Indian Point Energy Center Unit 3

Pre-Submittal Meeting
License Amendment Request
HI-LIFT System

Entergy®

Introduction and Meeting Purpose

Present information on the design, operation, and qualification of a new auxiliary lifting device that will be installed at Indian Point Unit 3 (IP3) to facilitate improved handling of dry cask storage (DCS) transfer casks

Describe planned LAR necessary to implement the new auxiliary lifting device

Solicit NRC Staff feedback prior to LAR submittal to facilitate a more efficient NRC review

Agenda

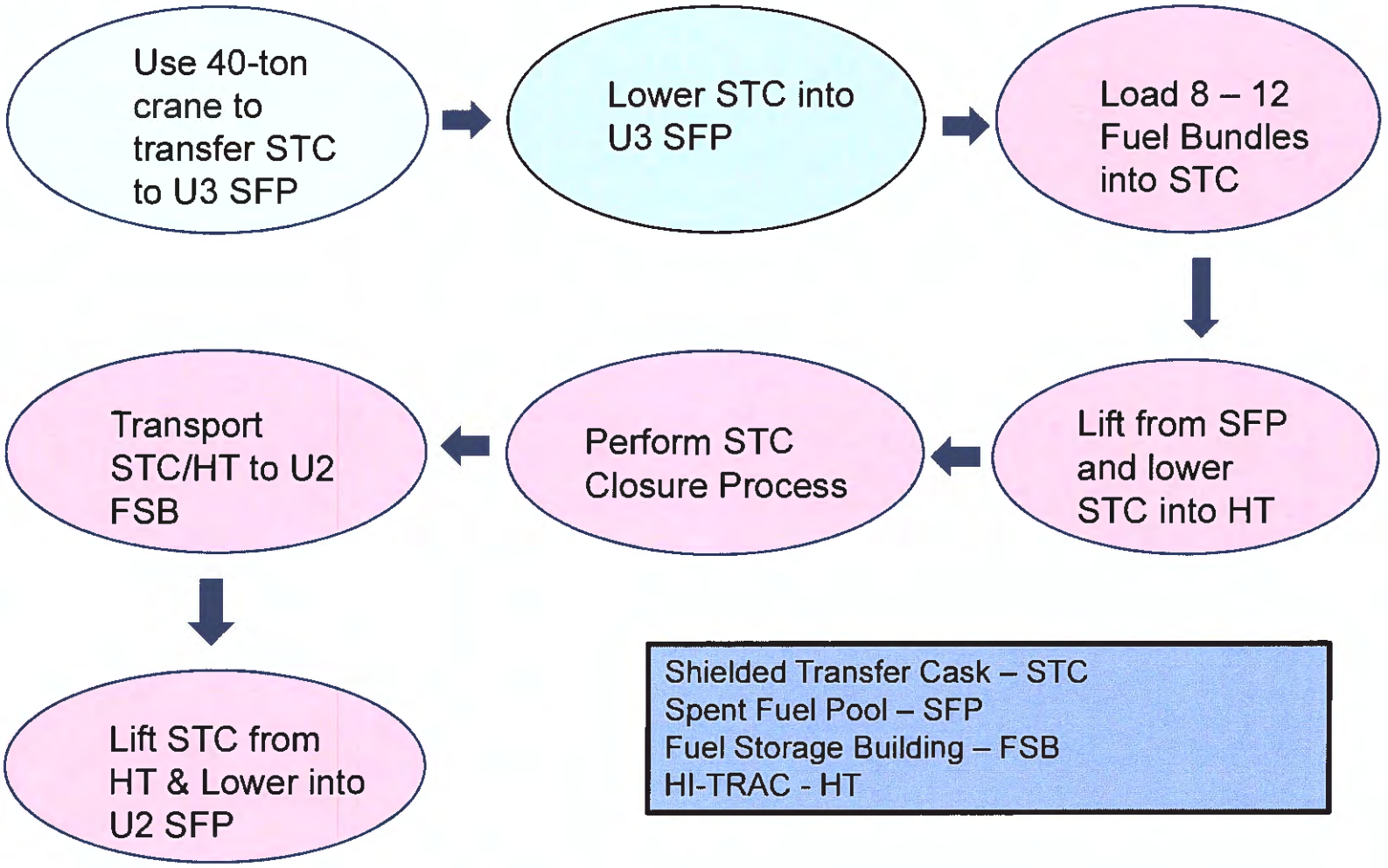
- Current Dry Cask Loading Process at IP3
- Proposed Change to Current Process
- HI-LIFT System
- Benefits of HI-LIFT System
- Technical Discussion of HI-LIFT System
- License Amendment Request Schedule

Dry Cask Loading at IPEC Using Wet Transfer

- Fuel is transferred from IP3 Spent Fuel Pool (SFP) to IP2 SFP using the Shielded Transfer Canister (STC).
- The STC is placed in a HI-TRAC to transfer from U3 to U2
- At this time IPEC is the only licensee in the country that transfers spent fuel from one SFP to another SFP prior to loading fuel

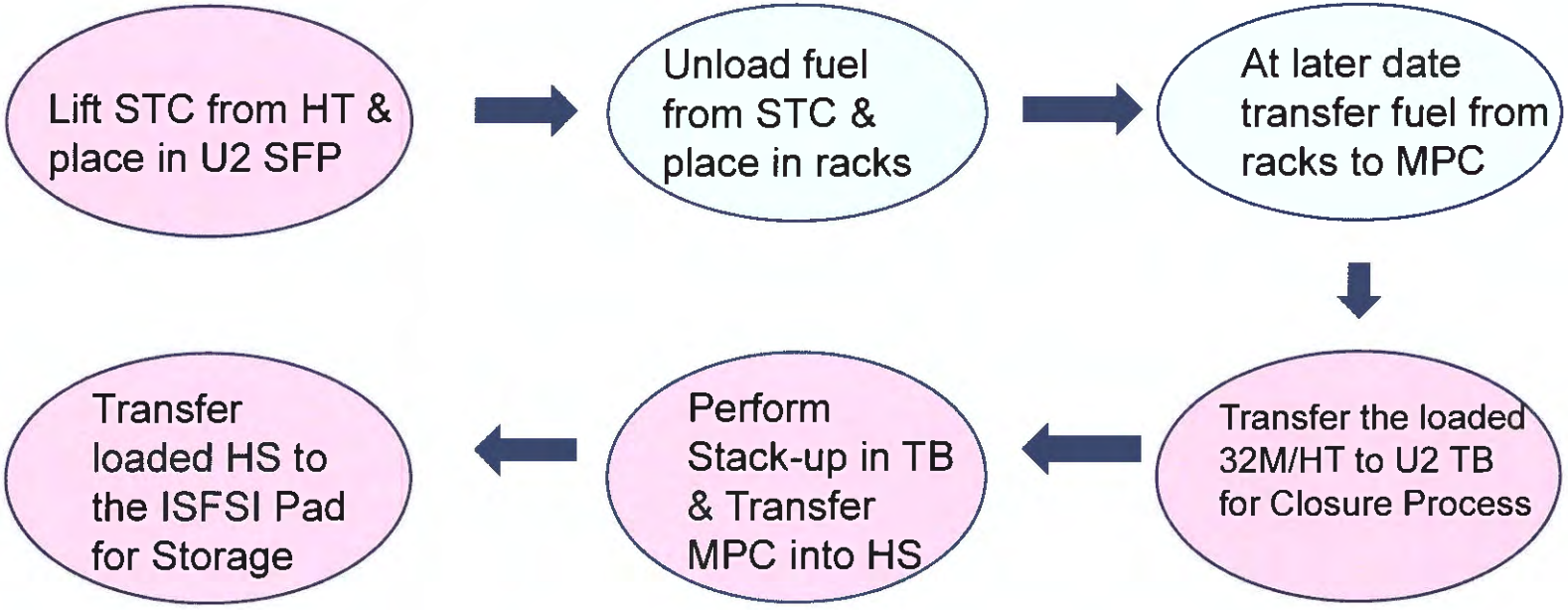
The Wet Transfer Process – Unit 3

Process:



Wet Transfer Process Unit 2

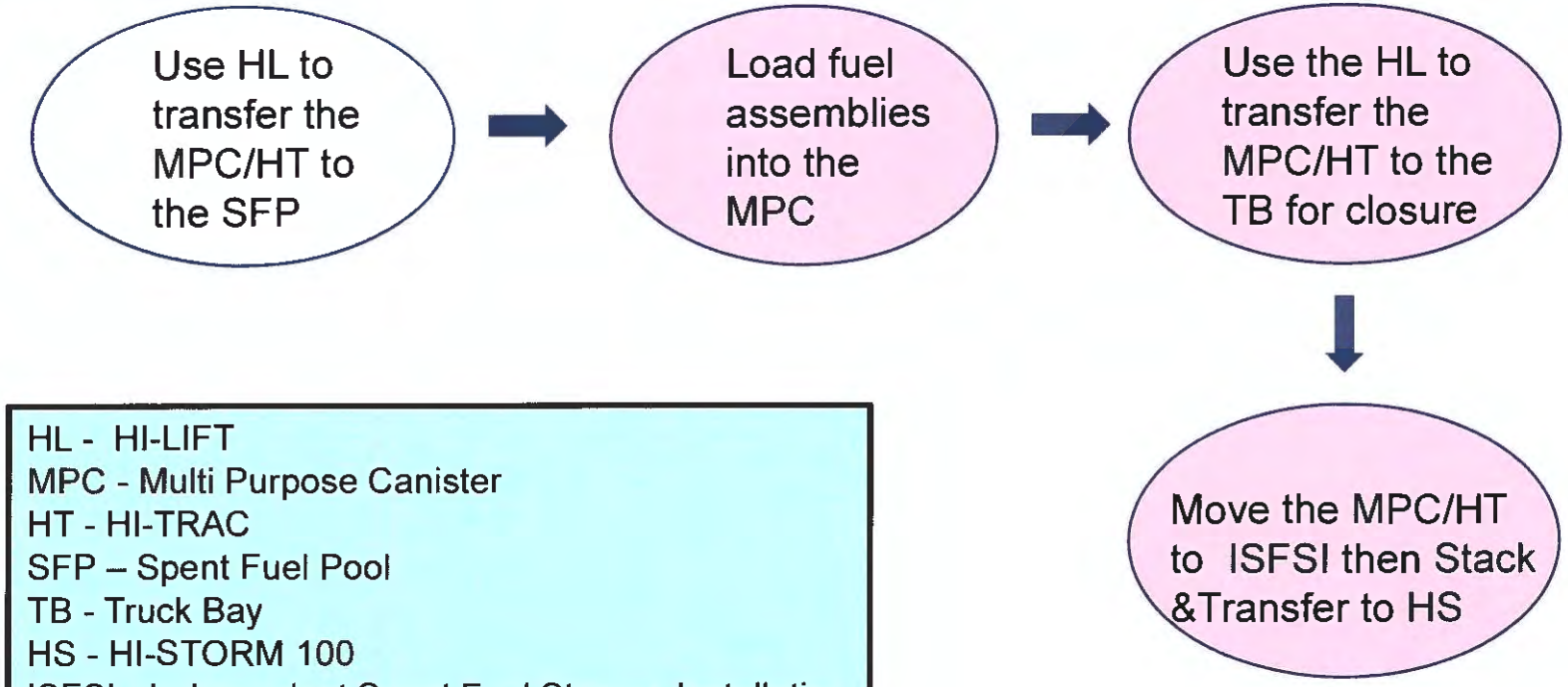
Process:



STC - Shielded Transfer Cask
HT - HI-TRAC
SFP – Spent Fuel Pool
Multi Purpose Canister - MPC
HS - High Storm 100
TB – Truck Bay
ISFSI – Interim Spent Fuel Storage Facility

Dry Cask Loading at IP3 using the HI-LIFT System

Process:



HL - HI-LIFT
MPC - Multi Purpose Canister
HT - HI-TRAC
SFP – Spent Fuel Pool
TB - Truck Bay
HS - HI-STORM 100
ISFSI - Independent Spent Fuel Storage Installation

HI-LIFT Benefits Over Current Process

- Direct loading of fuel into MPC 32M/HI-TRAC from the IP3 SFP
- Reduced number of fuel handling movements
  - Current method: 3 load movements per cask
  - HI-LIFT method: 1 load movement per cask
- Reduced potential for loading errors
- Time reduction
  - Approximately 12 years longer to remove all spent fuel from the IP3 SFP using wet transfer system
- Dose reduction
  - Approximately 50 mrem per wet transfer
  - Estimate a minimum of 100 wet transfers
  - Estimate dose reduction of 5 rem

HI-LIFT Design

- HI-LIFT is a custom designed lifting device to handle empty and fully loaded HI-TRAC transfer casks with MPC-32M storage canisters
- HI-LIFT is wall mounted and removable
- HI-LIFT capacity is rated for 100 tons and tested to 125% capacity. The weight of a fully loaded MPC-32M/HI-TRAC is approximately 97 Tons
- HI-LIFT meets all applicable requirements of ASME NOG-1 to ensure all safety requirements are met during operation

HI-LIFT Design (continued)

Provides handling for empty and fully loaded HI-TRAC with MPC-32M storage canisters at IP3

[

PROPRIETARY INFORMATION WITHHELD PER 10CFR2.390

]

HI-LIFT Design (continued)

- Connects with a suitable lifting yoke to engage with lifting trunnions on the HI-TRAC positioned at ground level in the IP3 FSB washdown area
- Lifts MPC 32M/HI-TRAC from washdown area to clear SFP wall on southeast side of IP3 SFP
- Translates MPC 32M/HI-TRAC over SFP
- Lowers MPC 32M/HI-TRAC into SFP in a slow controlled manner within range of fuel handling machine
- Crane configuration prohibits cask movement over spent fuel assemblies
- Lifts loaded MPC 32M/HI-TRAC from SFP, translates and lowers MPC 32M/HI-TRAC to IP3 washdown area
- Retreats to clear area for completion of MPC-32M closure activities

HI-LIFT Design - Installation

- HI-LIFT is supported by the reinforced concrete structure of the FSB
  - HI-LIFT is supported entirely on the robust southeast pool wall and balanced by imparting vertical reactions into the south truck bay wall of the FSB
  - Field installed anchor system physically connects the HI-LIFT to the FSB walls
  - [PROPRIETARY INFORMATION WITHHELD PER 10CFR2.390]
  - Will require modifications to the existing building/systems
    - Relocation of Backup SFP Cooling
    - Removal of Waste Processing Skid
    - Modification to Truck Bay curb

HI-LIFT Design – Demonstration

PROPRIETARY INFORMATION
WITHHELD PER 10CFR2.390

HI-LIFT Design – Demonstration

PROPRIETARY INFORMATION
WITHHELD PER 10CFR2.390

HI-LIFT Design – Demonstration

PROPRIETARY INFORMATION
WITHHELD PER 10CFR2.390

HI-LIFT Design – Demonstration

PROPRIETARY INFORMATION
WITHHELD PER 10CFR2.390

HI-LIFT Design Compliance – NOG-1

- HI-LIFT is designed as a Type I crane per NOG-1 requirements
- Lifting requirements:
  - Utilize NOG-1 load cases
  - Utilize NOG-1 seismic analysis methodology
  - Conforms with NOG-1 safety factors for mechanical and structural components
  - Includes NOG-1 safety features in control systems
- Other requirements:
  - Comply with NQA-1 quality requirements for procurement and fabrication
  - Comply with NOG-1 requirements for factory and site testing

HI-LIFT Design – Structural Analysis

- Analysis performed under normal and accident (seismic) conditions considering the 3 limiting configurations.
  - [PROPRIETARY INFORMATION WITHHELD PER 10CFR2.390
  -
  -]

- The limiting conditions were based on;
  - [PROPRIETARY INFORMATION WITHHELD PER 10CFR2.390
  -

HI-LIFT Design – Structural Analysis

PROPRIETARY INFORMATION
WITHHELD PER 10CFR2.390

HI-LIFT Design – Structural Analysis

- HI-LIFT
  - 3D ANSYS Finite Element Analysis (FEA) modeling performed
  - Reaction forces and bending moments from ANSYS analyses are obtained for all welded and bolted connections and anchor locations
  - Support reactions are also obtained for FSB wall structural analyses.
  - Stress results from FEA and supplemental calculations used to show compliance with NOG-1
  - These results were verified by a qualified 3rd party reviewer (LPI)

HI-LIFT Design – Structural Analysis

- HI-LIFT
  - FEA results verify stress limits of all members of the HI-LIFT are below allowable stress limits per NOG-1
  - Load reactions used to verify weld and bolted connections are below allowable stress limits per NOG-1
  - Support reactions input to models of supporting concrete walls to verify reactions are below allowable limits.

HI-LIFT Design – Structural Analysis

- Normal Lifting Condition
  - Heaviest loading condition in each configuration is considered
  - Primary stress limits from NOG-1 Section 4300 used to qualify the structural members
  - Load combinations per NOG-1 Section 4140 are used where applicable
  - Single failure proof handling capability is demonstrated through compliance with NOG-1 requirements for structural and mechanical components

HI-LIFT Design – Structural Analysis

- Accident Condition (Seismic Condition)
  - Heaviest loading condition in each configuration is considered
  - Seismic loads per NOG-1 Section 4136 along with load combinations per Section 4140 considered
  - Seismic load combination is evaluated using a response spectrum analysis per NOG-1 Section 4150
  - Design basis earthquake is taken from current IPEC UFSAR
  - The stress limits from NOG-1 Section 4300 are used to qualify the structural members

Building Walls – Structural Analysis

- HI-LIFT is supported directly by the reinforced concrete structure of the FSB
- Analysis performed for the 6 foot 3-inch thick SFP wall and the 1-foot thick truck bay support wall
- FSB walls are analyzed per American Concrete Institute (ACI) 318-63 to match Plant UFSAR
- FSB walls analyzed using load combinations per ACI 318-63 to match plant UFSAR
- Reaction loads on the FSB walls obtained from structural analysis of the HI-LIFT design under normal and accident conditions

Building Walls – Structural Analysis

PROPRIETARY INFORMATION
WITHHELD PER 10CFR2.390

HI-LIFT Testing and Acceptance

- Follow NOG-1 Section 7000 requirements for factory and site testing
  - Base material testing
  - Weld NDE
  - Dimensional inspection
  - Functional testing (factory and site)
  - Load testing (factory and site)

HI-LIFT LAR

- Incorporate Design Functions into IPEC Licensing Basis
- Consistent with Humboldt Bay precedent
- No change to Technical Specifications
- Supporting technical reports
  - HI-LIFT Specification
  - Structural Analysis of HI-LIFT Device and FSB Walls at Indian Point Unit 3
  - Licensing Drawing

Schedule

- NRC Submittal planned for 1st Quarter 2020
- Request approval in 13 months
- HI-LIFT fabrication and construction; 4th Quarter 2021-2022
- IP3 Cask loading scheduled for 2nd Quarter 2023

Attachment 2

NL-20-008

Presentation Slides

Indian Point Energy Center Unit 3, Pre-Submittal Meeting
License Amendment Request, HI-LIFT System (Proprietary)

Indian Point Nuclear Generating Unit 3
NRC Docket No. 50-286
Renewed Facility Operating License DPR-64

Proprietary Information - Withhold from Public Disclosure Under 10 CFR 2.390

Attachment 3

NL-20-008

Holtec Affidavit Pursuant to 10 CFR 2.390
Pre-Submittal Meeting on IPEC HI-LIFT, dated December 31, 2019

Indian Point Nuclear Generating Unit 3
NRC Docket No. 50-286
Renewed Facility Operating License DPR-64

Attachment 2 contains information proprietary to Holtec International. The proprietary determination is supported by this Affidavit, which is signed by Holtec International, the owner of the information.

This Affidavit sets forth the basis on which the information may be withheld from public disclosure by the NRC and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.390 of the Commission's regulations.

U.S. Nuclear Regulatory Commission
Pre-Submittal Meeting on IPEC HI-LIFT

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 marked information provided in the pre-submittal meeting slides for the Indian Point HI-LIFT LAR. These slides 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, 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 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)
) ss:
COUNTY OF CAMDEN)

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 31st day of December, 2019.

Kimberly Manzione
Licensing Manager
Holtec International

Subscribed and sworn before me this 31st day of December, 2019.

Erika Grandrimo
NOTARY PUBLIC
STATE OF NEW JERSEY
MY COMMISSION EXPIRES January 17, 2022