



~~Proprietary Information — Withhold from Public Disclosure in Accordance
with 10 CFR 2.390.~~

~~Decontrolled when separated from Enclosure 3~~

October 15, 2026

Attn: Document Control Desk
Director, Division of Spent Fuel Management
Office of Nuclear Material Safety and Safeguards
Washington DC 20555-0001

L-2026-143
10 CFR 72.4
10 CFR 72.7

RE: Seabrook Station
Docket No. 50-443
Renewed Facility Operating License No. NPF-86
Docket No. 72-63

Response to Requests for Additional Information (RAIs) Regarding Seabrook Dry Fuel Storage
Exemption Request

References:

1. NextEra Energy Seabrook, LLC, letter to U.S. Nuclear Regulatory Commission, Seabrook Dry Fuel Storage Exemption Request, dated June 17, 2026 (ADAMS Accession No. ML26168A499)
2. U.S. Nuclear Regulatory Commission electronic memorandum dated September 9, 2026, Request for Additional Information, Exemption Request for Deviating from Conditions of Certificate of Compliance No. 1032, Amendment 7 (EPID No. L-2026-LLE-0022) (ADAMS Accession No. ML26247A333)

In Reference 1, NextEra Energy Seabrook, LLC (NextEra) requested a dry fuel storage specific exemption from certain requirements of 10 CFR 72.212 and 10 CFR 72.214. In Reference 2, the NRC requested additional information deemed necessary to complete its review. Enclosure 1 to this letter provides NextEra's response to the NRC requests for additional information (RAIs). Enclosure 2 provides an affidavit from Holtec International affirming the request to withhold the proprietary information in Enclosure 3 from public disclosure. Enclosure 3 contains the Holtec structural calculation demonstrating the structural integrity of the MPC-37 canister under the evaluated site-specific and hypothetical event conditions. Holtec plans to utilize this exemption for all future casks loaded and stored under HI-STORM FW Amendment 7.

This letter contains no new regulatory commitments.

Should you have any questions regarding this submission, please contact Ms. Maribel Valdez, Sr. Manager, Operating Fleet Licensing Manager, at 561-904-5164.

NextEra Energy Seabrook, LLC

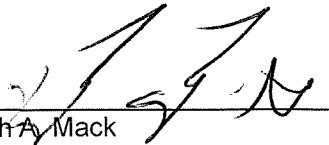
P.O. Box 300, Lafayette Road, Seabrook, NH 03874

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I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 15th day of October 2026.



Kenneth A. Mack
Director, Fleet Regulatory Affairs
Enclosures (3):

1. Seabrook Response to Requests for Additional Information {RAIs}
2. Holtec Affidavit Specifying Proprietary Information
3. Holtec Calculation HI-2260256-R3.0 (Proprietary)

cc: USNRC Region I Administrator
USNRC Project Manager
USNRC Senior Resident Inspector

Director Homeland Security and Emergency Management
New Hampshire Department of Safety
Division of Homeland Security and Emergency Management
Bureau of Emergency Management
33 Hazen Drive
Concord, NH 03305

Kimberly Castle, Technological Hazards Supervisor
The Commonwealth of Massachusetts
Emergency Management Agency
400 Worcester Road
Framingham, MA 01702-5399

ENCLOSURE 1

SEABROOK RESPONSE TO REQUESTS FOR ADDITIONAL INFORMATION (RAIS)

Background

In Reference 1, NextEra Energy Seabrook, LLC (NextEra) requested a dry fuel storage specific exemption from certain requirements of 10 CFR 72.212 and 10 CFR 72.214. In Reference 2, the NRC requested additional information deemed necessary to complete its review. This Enclosure provides NextEra's response to the NRC requests for additional information (RAIs). Enclosure 2 provides an affidavit from Holtec International affirming the request to withhold the proprietary information in Enclosure 3 from public disclosure. Enclosure 3 contains the Holtec structural calculation demonstrating the structural integrity of the MPC-37 canister under the evaluated site-specific and hypothetical event conditions.

Question 1:

Materials Evaluation

RAI M-1

Provide additional information on the assumed operational status of the canister in the analysis provided to support the exemption request and describe how other HI-STORM FW structures, systems and components (SSCs) were considered in the analysis.

The Executive Summary Holtec Calculation HI-2260256-R2.0 states the following:

During cask transfer containing spent fuel within the nuclear facility along the designated haul path or while a cask is stored on the ISFSI pad, a postulated external blast event could challenge the structural integrity of the confinement boundary.

This description ignores details of the transfer operation where the MPC would be expected to be either fully inside of a transfer cask, fully inside of a HI-STORM FW overpack or partially inside of a transfer cask and partially inside a HI-STORM FW overpack during MPC transfer operations. While it appears that the analysis provided by the applicant conservatively ignores any protection of the MPC to the explosive overpressure when the MPC is positioned inside of a transfer cask and/or inside a HI-STORM FW overpack, the analysis does not include a specific statement or assumption stating that the assumed operational status of the MPC conservatively ignores any protection offered by other HI-STORM FW SSCs.

This information is requested to verify compliance with requirements 10 CFR 72.7.

NextEra Response:

As noted in the RAI, the analysis performed in Holtec Calculation HI-2260256-R2.0 ignores any protection of the MPC to the explosive overpressure when the MPC is positioned inside of a transfer cask and/or inside a HI-STORM FW overpack. This means the triangular pressure pulse shown in Figure 9-1 of Holtec Calculation HI-2260256-R2.0 is applied directly to the external surface of the MPC as if it were fully exposed to the open-air environment.

Section 3.3 of Holtec Calculation HI-2260256-R2.0 has been revised to clearly state that the buckling analysis of the MPC conservatively ignores any protection offered by the other HI-STORM SSCs.

Question 2:

Materials Evaluation

RAI M-2

Provide a description of how the allowed variation in the dimensions of the canister (i.e., ovality or non-circularity) considered in the calculation or the basis for why allowed variations in canister dimensions such as ovality can be ignored.

Holtec Calculation HI-2260256-R2.0, Section 4.0, "Assumptions," includes a description to justify the bases for the canister height, backfill pressure, and ignoring the internal canister structure as conservative. The assumptions described in Section 4.0 of Holtec Calculation HI-2260256-R2.0 do not address allowed variation in the dimensions of the canister.

This information is requested to verify compliance with requirements 10 CFR 72.7.

NextEra Response:

Section 4.0, "Assumptions", of Holtec Calculation HI-2260256-R2.0 has been revised to address the allowed variation in the diameter of the canister (i.e., ovality or non-circularity). Per the fabrication drawing for the MPC-37CBS, the inside diameter of the MPC shell has a minimum diameter of 74.61" and a maximum diameter of 74.67". Thus, the allowed variation in the diameter is extremely small (i.e., less than 0.1% of the diameter), and it has a negligible effect on the calculated buckling capacity of the MPC. The effect is even further muted by setting the acceptable blast pressure limit equal to two-thirds of the calculated buckling limit for the MPC as shown in Figure 9-1 of Holtec Calculation HI-2260256-R2.0.

Question 3:

Materials Evaluation

RAI M-3

Provide the following additional information. (1) the source for strain rates greater than 22 in/in that are included in Holtec Calculation HI-2260256-R2.0, Table 5-2: Strain Rate vs Yield Strength Scale Factor for 304/304L (Stainless Steel) at 450 F and (2) the value of, and justification for the expected strain rates for the MPC-37CBS under the explosive overpressure transient described in the application.

Table 5-2 in Holtec Calculation HI-2260256-R2.0 identifies yields strength scale factors for Type 304/304L stainless steel as a function of strain rate. Section 5.0, "Input Data," identifies the ASME B&PV Code Section III Nonmandatory Appendix Table EE-1250-1 as the source of information for these values. The staff note that the referenced ASME B&PV Code table contains yield strength scale factors up to a maximum strain rate of 22 in/in. The applicant should provide the source of information for the yield strength scale factors at strain rates greater than 22 in/in included in Table 5-2 in Holtec Calculation HI-2260256-R2.0.

Table 5-2 in Holtec Calculation HI-2260256-R2.0 identifies yield strength scale factors ranging from 0 in/in (quasi static) to 1000 in/in; however, the strain rate, or possible range of strain rates under the explosive transients described in the exemption request are not stated. The applicant should provide and justify the strain rate value(s) for the explosive transient evaluated in the exemption request.

This information is requested to verify compliance with requirements 10 CFR 72.7.

NextEra Response:

The strain rates in Table 5-2 in Holtec Calculation HI-2260256-R2.0 are obtained from ASME B&PV Code Section III Nonmandatory Appendix Table EE-1250-1. However, the yield strength scale factors at strain rates of 25 in/in and 30 in/in in Table 5-2 are obtained by linear extrapolation of the yield strength scale factors at 5, 10 and 22 in/in. In response to this RAI, the yield strength scale factors in Table 5-2 have been revised to fully align with Table EE-1250-1 of the ASME Code with no extrapolation, and the MPC buckling simulation has been reperformed using LS-DYNA. The new results are provided in Holtec Calculation HI-2260256-R3.0.

Question 4:

Structural Evaluation

RAI St-1

Assuming that the licensee is adhering to the requirements of 10 CFR 72.122(c), confirm or justify that exempting from: a) the dose limit requirements of 10 CFR 72.212(b)(iii), 72.104, and 72.106(b), b) the storage cask structural integrity requirements of 72.212(b)(5)(ii), do not need to be included in the list of the regulations as cited in NextEra Seabrook's exemption request dated June 17, 2026.

The NRC staff noted that certain safety functions have not been specifically addressed, and/or sufficient technical justification has not been included in the June 17, 2026, exemption request, to allow verification that the Holtec HI-STORM FW System Transfer Cask and Storage Cask Overpacks, as applicable, would not be degraded as a result of the blast event, including structural integrity supporting radiation and shielding functions and criticality control.

Provide supporting evidence for the continued functions with respect to the following statements made in June 17, 2026, exemption request:

- 1) In Section III(b): *"This evaluation (summarized below in Section IV) concluded that the proposed system use meets all the requirements of criticality control, shielding, structural, confinement, and thermal safety functions."*
- 2) Safety Conclusion in Section IV: *"The storage system meets the criteria outlined in the HI-STORM FW FSAR...and thus meets all requirements in 10 CFR Part 72."*

This information is requested to verify compliance with requirements 10 CFR 72.7, 72.212(b)(iii), 72.104, 72.106(b), and 72.122(c).

NextEra Response:

The overall evaluation of the HI-STORM FW overpack at Seabrook due to the site-specific explosion event includes the following steps:

- i) Determine the pressure pulse acting on the cask based on the site-specific blast parameters and the minimum distance between the cask and the blast location.
- ii) Perform a kinematic analysis in order to demonstrate that the cask will not (a) overturn due to the site-specific explosion event or (b) undergo excessive sliding causing an impact with another cask or a cask instability.
- iii) Perform a buckling evaluation of the MPC in order to demonstrate that the blast wave, which acts as an external pressure on the MPC, does not cause the MPC shell to collapse.

For steps (i) and (ii), the supporting analyses for the HI-STORM FW overpack at Seabrook have been performed in full compliance with the HI-STORM FW FSAR, and they are documented in Holtec report HI-2260267, which contains safeguards information. This report demonstrates that the site-specific blast hazard at Seabrook does not cause the cask to overturn or impact any other adjacent structures while it is stored on the ISFSI pad.

The June 17, 2026 exemption request is narrowly focused on step (iii) above, and it relates specifically to the method of evaluation used to determine the buckling capacity of the MPC. In lieu of using the statically determined MPC accident external pressure limit in Table 2.2.1 of the HI-STORM FW FSAR, the exemption request seeks NRC approval to use of a time-dependent analysis to establish the buckling capacity of the MPC. The proposed method of analysis is what is presented in Holtec report HI-2260256, which is a generic analysis for the MPC-37 and does not contain any safeguards information.

Together the analyses presented in Holtec reports HI-2260267, found in the HOLTEC 72.212 report, and HI-2260256 demonstrate that the HI-STORM FW overpack does not tipover or otherwise become unstable, and the MPC does not buckle as a result of the time-dependent explosion load. This is the basis for the conclusionary statements in the exemption request that the cask system meets all requirements in 10 CFR Part 72, including criticality control, shielding, structural, confinement, and thermal safety functions. In short, if the cask remains vertically upright on the ISFSI pad and the MPC remains structurally intact with no buckling instability following the site-specific explosion event, then its safety functions are preserved without injury.

To reiterate, the confinement boundary remains intact. There is no change to the fuel geometry inside the system, and subsequently, no change to the shielding or criticality analyses. There is no change to the heat transfer pathways, and there is no change to the materials used in the system, so the performance of the MPC-37CBS and the HI-STORM FW storage overpack remains the same.

References:

1. NextEra Energy Seabrook, LLC, letter to U.S. Nuclear Regulatory Commission, Seabrook Dry Fuel Storage Exemption Request, dated June 17, 2026 (ADAMS Accession No. ML26168A499)
2. U.S. Nuclear Regulatory Commission electronic memorandum dated September 9, 2026, Request for Additional Information, Exemption Request for Deviating from Conditions of Certificate of Compliance No. 1032, Amendment 7 (EPID No. L-2026-LLE-0022) (ADAMS Accession No. ML26247A333)

L-2026-143
Enclosure 2

ENCLOSURE 2

HOLTEC AFFIDAVIT SPECIFYING PROPRIETARY INFORMATION

(5 pages follow)

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 HI-2260256 Rev 3 which contains 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).

AFFIDAVIT PURSUANT TO 10 CFR 2.390

- (4) Some examples of categories of information which fit into the definition of proprietary information are:
- a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by Holtec's competitors without license from Holtec International constitutes a competitive economic advantage over other companies;
 - b. Information which, if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product.
 - c. Information which reveals cost or price information, production, capacities, budget levels, or commercial strategies of Holtec International, its customers, or its suppliers;
 - d. Information which reveals aspects of past, present, or future Holtec International customer-funded development plans and programs of potential commercial value to Holtec International;
 - e. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs 4.a 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

AFFIDAVIT PURSUANT TO 10 CFR 2.390

regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.

- (6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge. Access to such documents within Holtec International is limited on a "need to know" basis.
- (7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist or other equivalent authority, by the manager of the cognizant marketing function (or his designee), and by the Legal Operation, for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside Holtec International are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.
- (8) The information classified as proprietary was developed and compiled by Holtec International at a significant cost to Holtec International. This information is classified as proprietary because it contains detailed descriptions of analytical approaches and methodologies not available elsewhere. This information would provide other parties, including competitors, with information from Holtec International's technical database and the results of evaluations performed by Holtec International. A substantial effort has been expended by Holtec International to develop this information. Release of this information would improve a competitor's position because it would enable Holtec's competitor to copy our technology and offer it for sale in competition with our company, causing us financial injury.

AFFIDAVIT PURSUANT TO 10 CFR 2.390

- (9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to Holtec International's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of Holtec International's comprehensive spent fuel storage technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology, and includes development of the expertise to determine and apply the appropriate evaluation process.

The research, development, engineering, and analytical costs comprise a substantial investment of time and money by Holtec International.

The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

Holtec International's competitive advantage will be lost if its competitors are able to use the results of the Holtec International experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

The value of this information to Holtec International would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive Holtec International of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing these very valuable analytical tools.

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Seabrook Part 72 Exemption Request Support
Affidavit for Holtec Proprietary Information

AFFIDAVIT PURSUANT TO 10 CFR 2.390

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

Kimberly Manzione, being duly sworn, deposes and says:

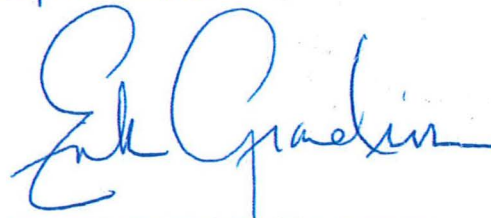
That she has read the foregoing affidavit and the matters stated therein are true and correct to the best of her knowledge, information, and belief.

Executed at Camden, New Jersey, this 25th day of September, 2026.



Kimberly Manzione
Executive Director of Licensing and Regulatory Affairs
Holtec International

Subscribed and sworn before me this 25th day of September, 2026.



Erika Grandrimo NOTARY PUBLIC STATE OF NEW JERSEY MY COMMISSION EXPIRES JANUARY 17, 2027
