



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION REPORT

DOCKET NO. 72-1044

EXEMPTION REQUEST FOR HOLTEC DECOMMISSIONING INTERNATIONAL, LLC

PILGRIM NUCLEAR POWER STATION

INDEPENDENT SPENT FUEL STORAGE INSTALLATION

1.0 SUMMARY

By letter dated August 29, 2022 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML22241A112), as supplemented by letter dated December 9, 2022 (ML22343A165), Holtec Decommissioning International, LLC, (HDI) submitted a request to the U.S. Nuclear Regulatory Commission (NRC, the Commission) for an exemption from Title 10 of the *Code of Federal Regulations* (10 CFR) 72.212 (a)(2), (b)(2), (b)(3), (b)(4), (B)(5)(i), (b)(11), and 72.214 to change the due date for Pilgrim Nuclear Power Station (PNPS or Pilgrim) Independent Spent Fuel Storage Installation (ISFSI) Annual Radioactive Effluent Release Report (ARERR).

PNPS is currently undergoing active decommissioning. The Pilgrim ISFSI is located on the site of PNPS in Plymouth, Massachusetts. The PNPS and the Pilgrim ISFSI are owned by Holtec International, and the licensed decommissioning operator at the Pilgrim site is HDI. HDI is authorized by the NRC under a general license (License No. SFGL-57) to store spent nuclear fuel at the Pilgrim ISFSI¹.

The 10 CFR 72.212 requirements mentioned above identify that HDI must follow the respective certificate of compliance (CoC) technical specifications (TS) for the specific spent fuel cask(s) it uses. Relevant cask TS require HDI to submit a PNPS ISFSI ARERR to the NRC in accordance with 10 CFR 72.44(d)(3), which requires report submittal within 60 days after the end of the 12-month monitoring period. The PNPS's 12-month monitoring period is effectively from January 1 to December 31 of each year. Hence, PNPS is required to submit the effluent monitoring report prior to March 1 of each year.

In its August 29, 2022 letter, as supplemented by letter dated December 9, 2022, HDI requested relief regarding the 60-day reporting requirement, so that the annual liquid and gaseous effluent release report for the PNPS ISFSI be incorporated into and submitted with the Pilgrim site

¹ By order dated August 22, 2019 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML19170A265) and effected in the license transfer amendment on August 27, 2019 (ML19235A050), the NRC approved the direct transfer of Entergy's licensed authority to operate Pilgrim Nuclear Power Station and the Pilgrim ISFSI to Holtec Decommissioning International, LLC and the indirect transfer of Entergy Nuclear Generation Company's ownership interests in the facility licenses to Holtec International (Holtec or HDI).

Enclosure

ARERR on or before May 15, rather than prior to March 1, of each year to align with the submittal of its ARERR as required by PNPS Renewed Facility Operating License, DPR-35, Technical Specification 5.6.3, "Radioactive Effluent Release Report." If granted, the exemption requested would only provide relief from the 60-day requirement so that the annual effluent release report for the PNPS ISFSI may be submitted on or before May 15, rather than prior to March 1, of each year. Hence, if granted, the exemption would only change the due date, and not the content, of the information that the licensee would provide in the annual report.

This safety evaluation report documents the NRC staff's review and evaluation of HDI's exemption request for Pilgrim ISFSI. The NRC staff reviewed HDI's request to determine whether it meets the criteria for an exemption specified in 10 CFR 72.7, "Specific exemptions." The requirements in 10 CFR 72.7 authorize the Commission to grant exemptions from the requirements of 10 CFR Part 72 if the exemption is authorized by law and will not endanger life, property, or the common defense and security, and is otherwise in the public interest.

2.0 REGULATORY BACKGROUND

PNPS, located in Plymouth, Massachusetts, has been storing boiling water reactor spent fuel in its ISFSI since 2015. HDI operates an ISFSI at the PNPS site under a general license in accordance with the provisions of 10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater Than Class C Waste." PNPS uses HDI's dry spent fuel storage design model, HI-STORM 100 system, which the NRC authorized by Amendment No. 14 to CoC No. 1014 — HDI's HI-STORM 100 system, on November 26, 2019 (ML19343B287).

Section 72.44(d)(3) of 10 CFR requires:

An annual report be submitted to the Commission in accordance with Sec. 72.4, specifying the quantity of each of the principal radionuclides released to the environment in liquid and in gaseous effluents during the previous 12 months of operation and such other information as may be required by the Commission to estimate maximum potential radiation dose commitment to the public resulting from effluent releases. On the basis of this report and any additional information that the Commission may obtain from the licensee or others, the Commission may from time to time require the licensee to take such action as the Commission deems appropriate. The report must be submitted within 60 days after the end of the 12-month monitoring period.

Per 10 CFR 72.13(c), 10 CFR 72.44(d)(3) does not apply to general licensees. That said, several provisions in 10 CFR 72.212 require general licensees to use storage casks in accordance with their respective TS. The relevant cask TS is contained in Amendment No. 14 to CoC No. 1014 which requires HDI to submit a PNPS ISFSI ARERR to the NRC in accordance with 10 CFR 72.44(d)(3).

More specifically, per 10 CFR 72.212(a)(2), the general license is limited to storage of spent fuel in casks approved under 10 CFR Part 72. Both 10 CFR 72.212(b)(2) and (b)(4) require general licensees to provide information to the NRC which includes cask certificate number(s) and the CoC amendment number(s) for casks used by the licensees and when applying an amended CoC. The NRC is considering granting PNPS an exemption from 10 CFR 72.212(a)(2), (b)(2), and (b)(4) only to the extent that those three provisions require licensees to use casks exactly as described in the relevant TS. Under 10 CFR 72.212(b)(3), general licensees must ensure that each cask they use conforms to the terms, conditions, and specifications of a CoC or an

amended CoC listed in 10 CFR 72.214. Per 10 CFR 72.212(b)(5)(i), general licensees must perform written evaluations establishing that the cask, once loaded with spent fuel or once the changes authorized by an amended CoC have been applied, will conform to the terms, conditions, and specifications of a CoC or an amended CoC listed in 10 CFR 72.214. Pursuant to 10 CFR 72.212(b)(11), general licensees must, among other things, comply with the terms, conditions, and specifications, of the CoC and, for those casks to which the licensee has applied the changes of an amended CoC, the terms, conditions, and specifications of the amended CoC.

Finally, 10 CFR 72.214 lists the casks approved for use by general licensees under the conditions specified in their CoCs.

3.0 PROPOSED EXEMPTION

By letter dated August 29, 2022, as supplemented by letter dated December 6, 2022, HDI submitted an exemption request to deviate from 10 CFR 72.212 (a)(2), (b)(2), (b)(3), (b)(4), (B)(5)(i), (b)(11), and 72.214 for PNPS ISFSI. The 10 CFR 72.212 requirements mentioned above identify that HDI must follow the respective CoC TS for the specific spent fuel cask(s) it uses. The relevant cask TS is contained in Amendment No. 14 to CoC No. 1014 which requires HDI to submit a PNPS ISFSI ARERR to the NRC in accordance with 10 CFR 72.44(d)(3). The requirement in 10 CFR 72.44(d)(3) states that an annual report be submitted to the NRC regarding effluent releases within 60 days after the end of the 12-month monitoring period. Specifically, HDI requests relief from the 60-day requirement so that the report may be submitted on or before May 15, rather than prior to March 1, of each year. This would allow HDI to align the submission of this report with the timing of the 10 CFR Part 50 ARERR submission.

As described above, general licensees can only store spent fuel in casks with CoC listed in 10 CFR 72.214 and, among other things, must ensure that the casks conform to the terms, conditions, and specifications of a CoC or an amended CoC.

HDI maintains a report documenting the evaluations of the selected dry fuel storage system at PNPS, as required by 10 CFR 72.212, "Conditions of general license issued under § 72.210" (hereafter referred to as "212 Report"). According to its 212 Report, HDI stores spent fuel in the Holtec International HI-STORM 100 Cask System, in accordance with CoC No. 1014, Amendment No. 14, at PNPS. In CoC No. 1014, Amendment No. 14, Appendix A, Technical Specifications (TS) for the HI-STORM 100 System, Section 5.4, "Radioactive Effluent Control Program," subsection c, states the following: "An annual report shall be submitted pursuant to 10 CFR 72.44(d)(3)." As noted above, per 10 CFR 72.44(d)(3), the annual report must be submitted "within 60 days after the end of the 12-month monitoring period." The NRC staff notes that the 12-month monitoring period at PNPS runs from January 1 to December 31. Thus, per Appendix A of CoC No. 1014, Amendment No. 14, currently HDI must submit the annual effluent monitoring report for its ISFSI prior to March 1 of every year.

By the letter dated August 24, 2021 (ML21203A042), the NRC issued Amendment No. 256 to Renewed Facility Operating License No. DPR-35 for the PNPS Permanently Defueled Technical Specifications in response to HDI's application dated March 17, 2021 (ML21076A404), and supplemental letter dated May 28, 2021 (ML21148A199). Amendment No. 256 included changes to Renewed Facility Operating License No. DPR-35 and Appendix A, Technical Specifications (TS), to reflect more fully the permanently shut-down status of the decommissioning facility, as well as the reduced scope of structures, systems, and components necessary to ensure plant safety, since all spent fuel had been permanently moved to the

Pilgrim ISFSI. Specifically, the DPR-35 TS Section 5.0, "Administrative Controls," and the associated requirements in previous TS 5.6, "Reporting Requirements," provided the Annual Radiological Environmental Operating Report [per previous TS 5.6.2] and the ARERR [per previous TS 5.6.3] for the PNPS site. Amendment No. 256 to DPR-35 allowed the removal of the aforementioned TS requirements from the Renewed Facility License and relocating them into Appendix B of the PNPS's Defueled Safety Analysis Report (DSAR), a license basis document controlled under 10 CFR 50.59.

Additionally, in Attachment 3 to its March 17, 2021, license amendment request, HDI provided those TS administrative controls that were being relocated from the TS to the DSAR for PNPS. Specifically, PNPS DSAR Section 5.0, "Administrative Controls," Appendix B, Section B-5.6.3, "Radioactive Effluent Release Report," provides the licensing basis requirements for reporting quantities of radioactive liquid and gaseous effluents and solid waste released from the facility during the previous year prior to May 15 of each year in accordance with 10 CFR 50.36a, "Technical specifications on effluents from nuclear power reactors," and 10 CFR Part 50, Appendix I, Section IV.B.1. This site annual effluent report meets the 10 CFR Part 50 requirements for the overall site.

As discussed in more detail below, with its exemption request, HDI sought to delay its deadline to submit the CoC No. 1014, Amendment No. 14, Appendix A, Section 5.4.c annual report, from prior to March 1, to on or before May 1, to align the reporting deadline with the reporting deadline for the ARERR.

4.0 SAFETY EVALUATION

Under 10 CFR 72.7, "[t]he Commission may, upon application by any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not endanger life or property or the common defense and security and are otherwise in the public interest."

By letter dated August 29, 2022, as supplemented by letter dated December 9, 2022, HDI requested an exemption from 10 CFR 72.212 (a)(2), (b)(2), (b)(3), (b)(4), (B)(5)(i), (b)(11), and 72.214 to change the due date for Pilgrim Nuclear Power Station (PNPS or Pilgrim) Independent Spent Fuel Storage Installation (ISFSI) Annual Radioactive Effluent Release Report (ARERR).

Authorized by Law

The Commission has the legal authority to issue exemptions from the requirements of 10 CFR Part 72 as provided in 10 CFR 72.7. The NRC staff has determined that issuance of this exemption is consistent with the Atomic Energy Act of 1954, as amended, and not otherwise inconsistent with NRC regulations or other applicable laws. Therefore, issuance of the exemption is authorized by law.

Will Not Endanger Life or Property or the Common Defense and Security

The NRC staff reviewed the exemption request submitted by HDI for the PNPS ISFSI and concludes, as discussed below, that the proposed exemption from the requirements of 10 CFR 72.212 (a)(2), (b)(2), (b)(3), (b)(4), (b)(5)(i), (b)(11), and 72.214 would not cause the HI-STORM 100 system to encounter conditions beyond those for which it has already been evaluated and demonstrated to meet the applicable safety requirements in 10 CFR Part 72.

As noted above, per Appendix A to CoC No. 1014 Amendment No. 14, Section 5.4, “Radioactive Effluent Control Program,” Subsection C states, “An annual report shall be submitted pursuant to 10 CFR 72.44(d)(3).” In its submittal, HDI requested an exemption from the portion of 10 CFR 72.44(d)(3) which requires, “An annual report be submitted...within 60 days after the end of the 12-month monitoring period.”

HDI stated that its exemption request addresses only the administrative due date established for the Pilgrim ISFSI ARERR, and that no changes are being proposed for its site procedures with respect to collect, verify, and resolve discrepancies for obtaining effluent samples. HDI also noted, it would still need to submit effluent monitoring data on an annual basis, meaning that the overall frequency with which it must submit data would remain the same. HDI further stated that there are no routine operational events that could result in radioactive effluents release related to the Pilgrim ISFSI, and that it does not expect the Pilgrim ISFSI will impact site effluent data reporting going forward in the future, as discussed in CoC No. 1014, Amendment No. 14, and the 72.212 Report. HDI also noted that, to date, there was no effluent release associated with the Pilgrim ISFSI casks in all its previously submitted ISFSI ARERR reports.

The NRC staff notes that the process of verifying the accuracy of the collected effluent data, ensuring that no effluents are released by the Pilgrim ISFSI, and maintaining facility integrity, would remain the same via the exemption under consideration. Hence, the NRC staff concludes that the proposed exemption dated August 29, 2022, as supplemented by the letter dated December 9, 2022, would not change HDI’s process via PNPS’s continuing program of monitoring and recording radioactive effluents, and reliance upon the existing Pilgrim DSAR requirements for submitting a site radioactive annual effluent release report.

In its request, HDI asserted that the date by which HDI must submit the annual reporting document for PNPS ISFSI is unrelated to “public health and safety issues or the assurance of the common defense and security.” The exemption the NRC staff is considering does not affect any requirements related to the common defense and security. Finally, HDI informed the NRC staff that PNPS has a work instruction in place which provides methodology, parameters, data, and information used in the calculation of offsite doses due to radioactive gaseous and liquid effluents in the conduct of the radiological environmental monitoring program. In addition, the NRC staff reviewed relevant process control procedures for PNPS that cover effluent monitoring, and data from these procedures are compiled to prepare the Pilgrim ISFSI annual effluent release report and ARERR. These PNPS plant procedures are subject to periodic inspections by the NRC. If HDI were to discover a problem with the effluents during the monitoring period at PNPS, it would need to resolve the problem in accordance with its respective site procedures, as appropriate. The annual effluent release report and the ARERR are not the means HDI would use to resolve the issue. Further, as noted above, HDI must still submit effluent data to the NRC on an annual basis and this exemption, if granted, would not substantively change the report’s contents. Since the reporting frequency remains unchanged (i.e., annually), and that the submittal date is unrelated to the resolution of issues discovered with the monitoring program, the NRC staff concludes granting the exemption would not endanger life or property.

Based on the review, the NRC staff finds that allowing HDI to submit a single report, which covers the annual report described in Appendix A to CoC No. 1014, Amendment No. 14, Section 5.4.c, and the ARERR reporting requirements per PNPS DSAR Appendix B to the NRC on or before May 15 of each year, using a single monitoring period, will not endanger life or property or common defense and security.

Otherwise in the Public Interest

According to its August 29, 2022, exemption request, as supplemented by letter dated December 9, 2022, HDI stated that the proposed exemption only changes the due date established for the Pilgrim ISFSI ARERR. HDI also noted, it would still need to submit effluent monitoring data on an annual basis, meaning that the overall frequency with which it must submit data would remain the same. Combining the reporting into a single annual occurrence would entail using resources more efficiently by eliminating the duplication of report preparation and data verification. Consolidating the effluent reporting requirements to allow for submission at a single time would also make it more efficient for the NRC and the public to review effluent monitoring information. The NRC staff reviewed the information provided by HDI and concluded that, because granting this exemption only changes the due date established for the Pilgrim ISFSI ARERR and allows all effluent monitoring data to be provided at the same time, thus increasing efficiency for HDI, the NRC and the public, issuance of the exemption is, therefore, in the public interest.

5.0 ENVIRONMENTAL CONSIDERATION

The NRC staff considered whether there would be any significant environmental impacts associated with the exemption from the reporting requirement in 10 CFR 72.212(a)(2), (b)(2), (b)(3), (b)(4), (b)(5)(i), (b)(11), and 72.214. The NRC staff determined that the proposed action belongs to a category of actions which the Commission has determined to be a categorical exclusion. Specifically, the exemption meets the categorical exclusion in 10 CFR 51.22(c)(25)(vi)(B).

A categorical exclusion for reporting requirements is provided under 10 CFR 51.22(c)(25)(vi)(B) if the criteria in 10 CFR 51.22(c)(25)(i)–(v) are also satisfied. The proposed action constitutes an administrative change to the timing, from prior to March 1, to on or before May 15 of every year, pertaining to the annual effluent release report for the PNPS ISFSI which HDI must submit. The proposed action is unrelated to any operational restriction. Accordingly, in its review of the exemption which the NRC is considering granting, the NRC staff determined that the proposed exemption satisfies the following 10 CFR 51.22(c)(25) requirements:

- (i) There is no significant hazards consideration;
- (ii) There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite;
- (iii) There is no significant increase in individual or cumulative public or occupational radiation exposure;
- (iv) There is no significant construction impact;
- (v) There is no significant increase in the potential for or consequences from radiological accidents; and
- (vi) The requirements from which an exemption is sought involve:
(B) Reporting requirements.

Therefore, the NRC's approval of this exemption is categorically excluded under

10 CFR 51.22(c)(25)(vi)(B), and there are no extraordinary circumstances present that would preclude reliance on this exclusion. Pursuant to 10 CFR 51.22(b), an environmental assessment or an environmental impact statement is not required in connection with the approval of this exemption.

6.0 CONCLUSION

Based on the above, the NRC staff finds that this exemption (1) is authorized by law, (2) will not endanger life or property or the common defense and security, and (3) is otherwise in the public interest. Therefore, the NRC hereby grants HDI an exemption from 10 CFR 72.212(a)(2), (b)(2), (b)(3), (b)(4), (b)(5)(i), (b)(11), and 72.214, pursuant to 10 CFR 72.7, permitting PNPS ISFSI to deviate from the requirements in CoC No. 1014, Amendment No. 14, Appendix A, Section 5.4, "Radioactive Effluent Control Program," Subsection C, which states that "An annual report shall be submitted pursuant to 10 CFR 72.44(d)(3)" to the extent that HDI is allowed to submit the relevant report on or before May 15, as opposed to prior to March 1, of every year. All other relevant requirements shall be met.