



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

November 7, 2022

Jean A. Fleming
Vice President, Regulatory
and Environmental Affairs
Holtec Decommissioning International, LLC
Krishna P. Singh Technology Campus
1 Holtec Boulevard
Camden, NJ 08104

SUBJECT: REQUEST FOR EXEMPTION RELATED TO ALLOWABLE CONTENTS FOR
THE CERTIFICATE OF COMPLIANCE NO. 1014, HI-STORM 100S VERSION E
CASK — ISSUANCE OF EXEMPTION

Dear Jean A. Fleming:

This is in response to your letter dated March 24, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22083A191), as supplemented on June 17, 2022 (ADAMS Accession No. ML22172A174) and on September 20, 2022 (ADAMS Accession No. ML22264A045), in which Holtec Decommissioning International, LLC (HDI), on behalf of Holtec Indian Point 2, LLC and Holtec Indian Point 3, LLC requested NRC approval of an exemption in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 72.7 from 10 CFR 72.212(b)(3) and (b)(11) related to the allowable contents in three MPC-32Ms loaded under Certificate of Compliance (CoC) No. 1014 for the HI-STORM 100S Version E Cask. Specifically, HDI requested an exemption to load up three MPC-32Ms, using Amendment No. 15 for CoC No. 1014, with either up to 32 fuel assemblies each containing either a Californium-252 (Cf-252) or an Antimony-Beryllium (Sb-Be) NSA with sufficient cooling time, or a combination of up to five fuel assemblies each containing a Plutonium-Beryllium (Pu-Be) NSA and up to all of the remaining basket locations with fuel assemblies each containing either a Cf-252 or an Sb-Be NSA with sufficient cooling time. Further, as discussed below, it would permit HDI to load the fuel assemblies containing Cf-252 or Sb-Be NSAs in any location in the basket and the fuel assemblies containing Pu-Be NSAs such that one is located in the center of the basket and no more than one is located in each of the four basket quadrants.

You requested an exemption from the requirements of 10 CFR 72.212(b)(3), and the portion of 10 CFR 72.212(b)(11) that states “[t]he licensee shall comply with the terms, conditions, and specifications of the certificate of compliance (CoC).” To give effect to the requested exemption, the NRC also considered, pursuant to its authority in 10 CFR 72.7, exempting HDI from similar requirements in 10 CFR 72.212(a)(2), 10 CFR 72.212(b)(5)(i); and 10 CFR 72.214, “List of Approved Spent Fuel Storage Casks” on its own initiative. For clarity, when this letter refers to HDI’s exemption request, it is also referring to the exemptions from these other regulations.

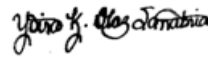
In its exemption request, HDI states that it plans to use Holtec International’s HI-STORM 100 storage system utilizing CoC No. 1014, Amendment No. 15 for dry storage of NSAs at the Indian Point Energy Center under the general license provisions of 10 CFR Part 72 in an upcoming loading campaign. Appendix D, table 2.1-1, section V, “MPC MODEL: MPC-32M,” Item C of Amendment No. 15 for CoC No. 1014 only permits general licensees to load a single

NSA per cask. Further, per Final Safety Analysis Report table 2.II.1.1, Rev. 22, (ADAMS Accession No. ML21221A328), the single NSA must be located in a cell in the inner part of the basket (i.e., fuel storage location 13, 14, 19, or 20). With this exemption, HDI can load up to three MPC-32Ms, using Amendment No. 15 for CoC No. 1014, with either up to 32 fuel assemblies each containing either a Cf-252 or an Sb-Be NSA with sufficient cooling time, or a combination of up to five fuel assemblies each containing a Pu-Be NSA and up to all of the remaining basket locations with fuel assemblies each containing either a Cf-252 or an Sb-Be NSA with sufficient cooling time. Further, it would permit HDI to load the fuel assemblies containing either Cf-252 or Sb-Be NSAs in any location in the basket and the fuel assemblies containing Pu-Be NSAs such that one is located in the center of the basket (i.e., fuel storage location 13, 14, 19, or 20) and no more than one is located in each of the four basket quadrants. As the staff will discuss in the enclosed safety evaluation report, the decay time sufficient for HDI to load up to three MPC-32Ms with either up to 32 Cf-252 and Sb-Be NSAs or Cf-252 and Sb-Be NSAs in combination with Pu-Be NSAs is seven half-lives.

The U.S. Nuclear Regulatory Commission (NRC) staff reviewed HDI's exemption request. The details of the review are included in the enclosed safety evaluation report. Based upon the staff's evaluation, the NRC has determined that the exemption is authorized by law, will not endanger life or property or the common defense and security, and is otherwise in the public interest. Therefore, pursuant to 10 CFR 72.7, the NRC is granting HDI an exemption from the requirements in 10 CFR 72.212(a)(2), 10 CFR 72.212(b)(3), 10 CFR 72.212(b)(5)(i), 10 CFR 72.214, and the portion of 10 CFR 72.212(b)(11) that states "[t]he licensee shall comply with the terms, conditions, and specifications of the certificate of compliance (CoC)." This exemption permits HDI to load and store up three MPC-32Ms, using Amendment No. 15 for CoC No. 1014, with either up to 32 fuel assemblies each containing either a Cf-252 or an Sb-Be NSA with sufficient cooling time, or a combination of up to five fuel assemblies each containing a Pu-Be NSA and up to all of the remaining basket locations with fuel assemblies each containing either a Cf-252 or an Sb-Be NSA with sufficient cooling time. Further, it would permit HDI to load the fuel assemblies containing either Cf-252 or Sb-Be NSAs in any location in the basket and the fuel assemblies containing Pu-Be NSAs such that one is located in the center of the basket and one is located in each of the four basket quadrants.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. If you have any questions, please contact me at (301) 415-8064, or Chris Allen of my staff, at (301) 415-6877.

Sincerely,



Signed by Diaz-Sanabria, Yoira
on 11/07/22

Yoira K. Diaz-Sanabria, Chief
Storage and Transportation Licensing Branch
Division of Fuel Management
Office of Nuclear Material Safety
and Safeguards

CAC No. 001028
Docket Nos.: 72-51, 72-1014,
50-247 and 50-286
EPID No.: L-2022-LLE-0011

Enclosure:
Safety Evaluation Report