

U.S. NUCLEAR REGULATORY COMMISSION

RECORD OF DECISION

HOLTEC INTERNATIONAL'S LICENSE APPLICATION FOR A CONSOLIDATED INTERIM STORAGE FACILITY, LEA COUNTY, NEW MEXICO

Introduction

The U.S. Nuclear Regulatory Commission (NRC) staff prepared this record of decision (ROD) for the proposed Holtec International (Holtec) consolidated interim storage facility (CISF) to construct and operate a CISF for spent nuclear fuel (SNF) and Greater-Than-Class C material, along with a small quantity of mixed oxide fuel in Lea County, New Mexico.

In July 2022 and October 2022, the NRC staff issued a final Environmental Impact Statement (FEIS) and Supplement 1 to the FEIS for the Holtec's license application to construct and operate a proposed CISF (NRC, 2022a, 2022b). In the FEIS, the NRC staff, in accordance with title 10 of the *Code of Federal Regulations* (10 CFR) section 51.91(d), sets forth its recommendation, pursuant to the National Environmental Policy Act 1969, as amended (NEPA), regarding the proposed action. The NRC staff recommended the proposed action, which is the issuance of an NRC license to Holtec to construct and operate a CISF for SNF at the proposed location, subject to the determinations in the staff's safety review of the application (NRC, 2022a).

This ROD satisfies 10 CFR 51.102(a), which states that “[a] Commission decision on any action for which a FEIS has been prepared shall be accompanied by or include a concise public record of decision.” The NRC staff has prepared this ROD in accordance with NRC regulations at 10 CFR sections 51.102(b) and 51.103(a)(1)-(4). In addition, in accordance with 10 CFR section 51.103(c), this ROD incorporates by reference the materials contained in the FEIS and Supplement 1 (NRC, 2022a, 2022b). This ROD also references a new and significant information evaluation performed by the staff just prior to its issuance (NRC, 2023b).

Background

Holtec would store up to 500 canisters for a license period of 40 years at the CISF in Lea County, New Mexico. Because the capacity of individual canisters can vary, the 500 canisters proposed in the Holtec license application have the potential to hold up to 8,680 metric tons uranium (MTUs) [9,568 short tons]. During CISF operations, Holtec would receive SNF from decommissioning and decommissioned reactor facilities (NRC, 2022a).

The Holtec CISF would be built and operated on approximately 421 hectares (ha) [1,040 acres (ac)] of land in Lea County, New Mexico. The storage and operations area of the CISF, which is a smaller land parcel within the full property boundary, would include 134 ha [330 ac] of disturbed land. The proposed project area is approximately 51 kilometers (km) [32 miles (mi)] east of Carlsbad, New Mexico, and 54 km [34mi] west of Hobbs, New Mexico (NRC, 2022a).

Holtec would use the HI-STORM UMAX for in-ground storage. The HI-STORM UMAX system would vertically store the SNF below grade to a total depth of approximately 6.9 meters [22.5 feet]. The HI-STORM UMAX is designed to be fully compatible with all HI-TRAC transfer casks and canisters NRC previously certified for storage. The current Certificate of Compliance for the HI-STORM UMAX system allows for storage of SNF in two specific multi-purpose canister (MPC) types: the Holtec MPC-37 and the Holtec MPC-89 (NRC, 2022a).

Holtec also plans to obtain a permit from the U.S. Bureau of Land Management (BLM) for an easement for a railroad spur to be constructed across BLM land, connecting the proposed site to an existing industrial railroad approximately four miles west of the site. The railroad spur would be used for transportation of the spent fuel from the rail line to the CISF site. The NRC agreed to serve as the lead agency for preparing the FEIS, with the BLM as a cooperating agency in order to meet both agencies NEPA responsibilities for its license or permit decision efficiently (NRC, 2018). Additionally, the New Mexico Environmental Department participated in the environmental review as a cooperating agency by providing special expertise in surface water and groundwater resources for the proposed CISF project (NRC, 2019a).

In accordance with the NRC's NEPA implementing regulations in 10 CFR part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," the NRC staff prepared a site-specific EIS for the issuance of a license pursuant to 10 CFR part 72 for the storage of spent fuel at an independent spent fuel storage installation at a site not occupied by a power reactor (10 CFR 51.20(b)(9)). In this instance, the NRC's major Federal action is the issuance of a license authorizing Holtec to construct and operate the CISF for a 40-year license term.

The Decision

This ROD documents the NRC staff's decision to issue a license to Holtec for a proposed CISF in Lea County, New Mexico. The license authorizes Holtec to construct and operate its facility as proposed in its license application and under the conditions in its NRC license (NRC, 2023c).

After comparing the impacts of the proposed action to the No-Action alternative, the NRC staff, in accordance with 10 CFR part 51.91(d), recommends the proposed action, which is the issuance of an NRC license to Holtec to construct and operate a CISF for SNF at the proposed location, subject to the determinations in the staff's safety review of the application. In addition, BLM staff recommends the issuance of a permit to construct and operate the rail spur. This recommendation is based on (i) the license application, which includes the Environmental Report (ER) and supplement documents and Holtec's responses to the NRC staff's requests for additional information; (ii) consultation with Federal, State, tribal, and local agencies, and input from other stakeholders, including comments on the draft EIS; (iii) independent NRC and BLM staff review; (iv) the assessments provided in the FEIS and Supplement 1; and (v) evaluation of any new and significant information since the issuance of the FEIS (Holtec, 2020; NRC, 2020b, 2022a, 2022b, 2023b).

In its safety and security review, the NRC staff determined that the application met the applicable NRC regulations in 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." In issuing a materials license to Holtec for the CISF, the NRC determined that there is reasonable assurance that: (i) the activities authorized by the license can be conducted without endangering the health and safety of the public; and (ii) these activities will be conducted in compliance with the applicable regulations of 10 CFR part 72. The NRC further determined that issuance of the license will not be inimical to the common defense and security (NRC, 2023a).

Mitigation Measures

The NRC has taken all practicable measures within its jurisdiction to avoid or minimize environmental harm from the proposed action (license issuance). Holtec has committed to several mitigation measures as described in table 6.3-1 of the FEIS (NRC, 2022a). In the FEIS, the NRC determined that impacts to most resource areas would be SMALL (i.e., not detectable or so minor), with SMALL to MODERATE beneficial impacts for local finance and MODERATE (i.e., sufficient to alter noticeably, but not to destabilize, important attributes of the resource) for vegetation, population growth, and employment (NRC, 2022a). The NRC is not imposing any license conditions in connection with mitigation measures for the licensing of the CISF. Holtec is subject to requirements including permits, authorization, and regulatory orders imposed by other federal, State, and local agencies governing facility construction and operation. Holtec's monitoring programs for the proposed project are described in chapter 7 of the FEIS (NRC, 2022a).

Alternatives Considered

In its environmental review, the NRC staff evaluated the environmental consequences of the proposed action (i.e., authorizing the construction and operation of the CISF), and the environmental consequences of the No-Action alternative. FEIS chapter 2, "Proposed Action and Alternatives," and chapter 4, "Environmental Impacts," present the NRC staff's evaluation and analysis of the environmental impacts of the proposed action and the No-Action alternative that were considered, as well as those alternatives that were eliminated from detailed study (NRC, 2022a). The NRC staff discusses the reasons for eliminating these alternatives in section 2.3 of the FEIS. These alternatives included (1) storage of SNF at a government owned CISF operated by the U.S. Department of Energy; (2) alternative design or storage technologies; and (3) alternative CISF locations.

After comparing the impacts of the proposed action to the No-Action alternative and conducting a safety and security review of the proposed action, the NRC staff determined that the NRC should issue a license for the proposed CISF project. The NRC staff based its decision on: (i) review of Holtec application, which includes the ER and supplemental documents, and Holtec's responses to the NRC staff requests for additional information (RAIs); (ii) consultation with Federal, State, tribal, and local agencies, and input from other stakeholders, including comments on the draft EIS (EIS appendix D and Supplement 1); (iii) independent NRC staff review; (iv) the assessments in the FEIS; and (v) the NRC staff's assessments in the final Safety Evaluation Report for the CISF (Holtec, 2020; NRC, 2020, 2022a, 2022b, 2023b).

Public Comments

On March 30, 2018 (83 FR 13802), the NRC staff published in the *Federal Register* (FR) a notice of intent to prepare an EIS and to conduct an environmental scoping process. The NRC staff invited potentially affected Federal, State, tribal, and local governments; organizations; and members of the public to provide comments on the environmental scope and review. The initial scoping period closed on May 29, 2018. The NRC staff extended the scoping comment period through July 30, 2018 (83 FR 22714). The NRC staff hosted six public in-person scoping meetings including: Rockville, Maryland on April 25, 2018; Roswell, New Mexico, on April 30, 2018; Hobbs, New Mexico, on May 1, 2018; Carlsbad, New Mexico, on May 3, 2018; Gallup, New Mexico on May 21, 2018; and Albuquerque, New Mexico on May 22, 2018. In June 2019, the NRC staff issued a scoping summary report (NRC, 2019).

On March 20, 2020, the NRC staff issued the draft EIS, “Environmental Impact Statement for the Holtec International’s License Application for a Consolidated Interim Storage Facility for Spent Nuclear Fuel in Lea County, New Mexico” (85 FR 16150), for an initial 60-day public comment period until May 22, 2020. On April 27, 2020, the NRC extended the comment period an additional 60 days until July 22, 2020 (85 FR 23382) and again on June 24, 2020, for an additional 60 days until September 22, 2020 (85 FR 37964). Additionally, the NRC staff held six public meetings on June 23, July 9, August 20, 25, 26, and September 2, 2020, to discuss the preliminary findings in the draft EIS and to receive comments. The recorded presentations and transcripts were posted on the NRC public project website: <https://www.nrc.gov/waste/spent-fuel-storage/cis/holtec-international.html>. All comments related to the environmental review received during the comment period and responses to these comments are included in appendix D of the FEIS published in July 2022 and Supplement 1 published in October 2022 (NRC, 2022a, 2022b).

On August 15, 2022, the U.S. Environmental Protection Agency submitted a letter to the NRC staff stating that the NRC had addressed its comments on the draft EIS in the FEIS. These comments discussed the process and outcome of government-to-government consultation between the NRC and the tribes and incorporation of minority and low-income populations accessing the shallow aquifer as a water source (EPA, 2022).

In this ROD, the NRC staff has determined that the standards for issuance of a license for Holtec CISF have been met and the requirements of Section 102 of NEPA have been satisfied.

Dated at Rockville, MD, this 9th of May 2023,

APPROVED BY:



Signed by Regan, Christopher
on 05/09/23

Christopher M. Regan, Director
Division of Rulemaking, Environmental,
and Financial Support
Office of Nuclear Material Safety
and Safeguards

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