

**NUCLEAR REGULATORY COMMISSION**

**Docket Nos. 50-003, 50-247, 50-286, 72-051**

**Holtec Decommissioning International, LLC**

**Indian Point Nuclear Generating Station Units Nos. 1, 2, and 3**

**Exemption from Certain Low-Level Waste Shipment Tracking Requirements**

**I. Background**

Indian Point Nuclear Generating Station Units 1, 2, and 3 or Indian Point Energy Center (IPEC), is licensed to Holtec Decommissioning International, LLC (HDI) under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50 (provisional license DPR-5, renewed license DPR-26 and DPR-64, Docket Nos. 50-003, 50-247, 50-286, respectively). The facilities consist of three pressurized-water reactors located in Buchanan, New York, in Westchester County, all of which are permanently shut down. IPEC Unit No. 1 was permanently shut down in 1974 and is in defueled status, IPEC Unit Nos. 2 and 3 permanently ceased operations on April 30, 2020, and April 30, 2021, respectively. Fuel was permanently removed from IPEC Unit Nos. 2 and 3 and placed in spent fuel pools on May 12, 2020, and May 11, 2021, respectively.

HDI is currently decommissioning the IPEC facility. Inherent to the decommissioning process, large volumes of low-level radioactive waste are generated. This low-level radioactive waste requires processing and disposal or disposal without processing, as appropriate. To this end, HDI will transport, by truck or by mixed mode shipments like a combination of truck and rail, low-level radioactive waste from IPEC to locations such as the waste disposal facility operated by Waste Control Specialists (WCS) in Andrews, Texas. The estimated license termination date for IPEC is 2062, and the estimated date for partial site release, for the entire site except for the

Independent Spent Fuel Storage Installation (ISFSI), is 2033. The site restoration activities will be completed by 2062. HDI projects that all decommissioning activities, except for decommissioning the ISFSI, will be completed by early 2032, and expects to complete transfer of spent fuel to the ISFSI by 2024.

## **II. Request/Action**

By letter dated November 19, 2021 (Agencywide Documents Access and Management System [ADAMS] Accession No. ML21323A070), as supplemented on February 3, 2022 (ADAMS Accession No. ML22034A603), HDI requested an exemption from certain requirements 10 CFR Part 20, "Standards for Protection Against Radiation," Appendix G, "Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests," Section III.E for shipments of low-level radioactive waste from IPEC. As indicated by HDI in its request, this regulation requires HDI to investigate, trace, and report to the NRC any low-level radioactive waste shipment or part of a shipment for which acknowledgement of receipt is not received by HDI within 20 days after transfer. HDI requested that this time period be extended from 20 days to 45 days for "mixed mode shipments from IPEC, including combination of truck/rail shipments."

## **III. Discussion**

The NRC's regulations at 10 CFR 20.2301, "Applications for exemptions," allow the Commission to grant exemptions from the requirements of the regulations in 10 CFR Part 20 if it determines the exemption is authorized by law and would not result in undue hazard to life or property.

**A. The Exemption is Authorized by Law**

The requested exemption from 10 CFR Part 20, Appendix G, Section III.E would extend the receipt acknowledgment period from 20 days to 45 days before HDI would have to investigate, trace, and report on the status of a mixed mode, low-level radioactive waste shipment being transported from IPEC to a licensed low-level radioactive waste processing or land disposal facility. As stated above, 10 CFR Section 20.2301 allows the NRC to grant exemptions from the requirements of 10 CFR Part 20 when, in part, the exemptions are authorized by law. The NRC determined that the requested exemption is permissible under the Atomic Energy Act of 1954, as amended, and other regulatory requirements. Therefore, the NRC finds that the requested exemption is authorized by law.

**B. The Exemption Would Not Result in Undue Hazard to Life or Property**

As stated in Enclosure 1 to SECY-18-0055, "Proposed Rule: Regulatory Improvements for Production and Utilization Facilities Transitioning to Decommissioning" (ADAMS Package Accession No. ML18012A019), the underlying purpose of 10 CFR Part 20, Appendix G, Section III.E is to require licensees to investigate, trace, and report on low-level radioactive waste shipments that have not reached their destination, as scheduled, for unknown reasons.

In support of its exemption request, HDI identified the NRC staff statement in Enclosure 1 to SECY-18-0055 that "operating experience indicates that, while the 20-day receipt notification window is adequate for waste shipments by truck, other modes of shipment such as rail, barge, or mixed-mode shipments, such as combinations of truck and rail, barge and rail, and barge and truck shipments, may take more than 20 days to reach their destination due to delays in the route that are outside the shipper's control (e.g., rail cars in switchyards waiting to be included in a complete train

to the disposal facility).” On this basis, the NRC staff proposed to amend 10 CFR Part 20, Appendix G, Section III.E to extend the receipt notification window to 45 days. On November 3, 2021, the Commission approved publication of this proposed rule in the *Federal Register*, including the provision moving the receipt notification window from 20 days to 45 days (ADAMS Accession No. ML21307A046). HDI also stated that its exemption request is similar to those previously submitted to and approved by the NRC for San Onofre Nuclear Generating Station, Fort Calhoun Station, Vermont Yankee Nuclear Power Station, and Pilgrim Nuclear Power Station (ADAMS Accession Nos. ML20287A358, ML20162A155, ML20017A069, and ML21267A519 respectively).

HDI stated that in its experience at IPEC thus far in 2021, numerous rail shipments can take longer than 20 days. According to HDI, exceeding the 20-day requirement results in the administrative burden of investigating and reporting.

HDI stated in the February 3, 2022 supplemental letter in response to NRC staff request for additional information, that in letters dated November 19, 2021, December 21, 2021, and January 13, 2022 (ADAMS Accession Nos. ML21323A108, ML21355A211, and ML22013A706, respectively), HDI reported to the NRC the results of investigations performed to shipments and transport of low-level radioactive waste shipped via truck from IPEC to Newton, Connecticut and transferred to rail to the WCS disposal facility in Andrews, Texas. The total transport time for these low-level radioactive waste shipments were 21-22 days. HDI stated that these trace investigations identified that there were no significant or unusual transport delays encountered.

HDI explained that because there is not direct rail access at IPEC, the disposal of IPEC low-level radioactive waste utilizes road shipments to intermodal transfer terminals for transfer of containers onto rail as the primary transport method. In the future, HDI indicated that it may utilize other methods of transport such as barge. According to HDI, these truck-to-rail shipments may sit on the rail spur at a remote railyard (e.g., waiting for a train to depart or allowing for railcar repair), which may add to shipping delays. In addition, HDI states that administrative processes at the disposal facility and communication of receipt times could add several additional days.

Additionally, as indicated in the exemption request, for truck and rail shipments from IPEC, HDI will use a tracking system that allows daily monitoring of a shipment's progress to its destination, and IPEC shipping procedures prescribe the expectations for tracking and communications during transit. The NRC staff notes that this will allow for monitoring the progress of shipments on a daily basis, if needed, in lieu of the 20-day requirement, and will initiate an investigation as provided for by 10 CFR Part 20, Appendix G, Section III.E after 45 days. In addition, in its supplemental letter, HDI stated that it is contracted with WCS for transportation and disposal of all radioactive waste at IPEC, and that the agreement includes a WCS Shipping Services individual dedicated for onsite support to ensure packaging and shipment arrangements are made in accordance with state and federal guidelines. The online tracking portal is part of the service provided by WCS. Daily reports of railcar locations are sent to the HDI Waste Manager at IPEC with reporting starting the day the shipment leaves the IPEC.

Because of this oversight and the ability to monitor low-level radioactive waste shipments throughout the entire journey from IPEC to a disposal or processing facility, the staff concludes that it is unlikely that a shipment could be lost, misdirected, or diverted without the knowledge of the carrier or HDI and that, therefore, there is no

potential health or safety concern presented by the requested exemption. Furthermore, by extending the time for receipt acknowledgment to 45 days before requiring investigations, tracing, and reporting, a reasonable upper limit on shipment duration is maintained in the event that a breakdown of normal tracking systems were to occur.

Based on the above, the NRC staff finds that the requested exemption would not result in undue hazard to life or property.

### **C. Environmental Considerations**

With respect to compliance with section 102(2) of the National Environmental Policy Act of 1969, as amended (NEPA), the NRC staff has determined that the proposed action, the approval of the HDI exemption request, is within the scope of the categorical exclusion at 10 CFR Section 51.22(c)(25). The proposed granting of the exemption from certain requirements of the NRC's regulations at 10 CFR Part 20, Appendix G, Section III.E, would: (i) present no significant hazards consideration; (ii) not result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite; (iii) not result in a significant increase in individual or cumulative public or occupational radiation exposure; (iv) have no significant construction impact; and (v) not result in a significant increase in the potential for or consequences from radiological accidents. Additionally, the requirements from which the exemption is sought involve reporting requirements under 10 CFR Section 51.22(c)(25)(vi)(B) and inspection or surveillance requirements under 10 CFR Section 51.22(c)(25)(vi)(C). Given the applicability of a relevant categorical exclusion, no further analysis is required under NEPA.

### **IV. Conclusions**

Accordingly, the Commission has determined that, pursuant to 10 CFR Section 20.2301, the exemption is authorized by law and will not result in undue hazard to life or property. Therefore, effective immediately, the Commission hereby

grants HDI an exemption from 10 CFR Part 20, Appendix G, Section III.E, to extend the receipt of notification period from 20 days to 45 days after transfer for rail or mixed-mode shipments of low-level radioactive waste from IPEC to a licensed land disposal or processing facility.

Dated: February 11, 2022.

For the Nuclear Regulatory Commission.

A handwritten signature in dark ink, appearing to read 'J. Marshall', is positioned to the left of the typed name.

Signed by Marshall, Jane  
on 02/11/22

Jane E. Marshall, Director,  
Division of Decommissioning, Uranium Recovery  
and Waste Programs,  
Office of Nuclear Material Safety  
and Safeguards.