

NUCLEAR REGULATORY COMMISSION

Docket No. 50-255

Holtec Decommissioning International, LLC

Palisades Nuclear Plant

Exemption

I. Background.

The Palisades Nuclear Plant (PNP) is a pressurized-water reactor located in Van Buren County, Michigan. Entergy Nuclear Operations, Inc. (ENOI) and Entergy Nuclear Palisades, LLC (ENP) hold the U.S. Nuclear Regulatory Commission (NRC, the Commission) license for PNP, Renewed Facility Operating License No. DPR-20. This license is subject to the rules, regulations, and orders of the NRC. Operation of PNP is scheduled to permanently cease by May 31, 2022.

By application dated December 23, 2020 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML20358A075), ENOI, on behalf of itself, ENP, Holtec International (Holtec), and Holtec Decommissioning International, LLC (HDI), requested that the NRC consent to (1) the indirect transfer of control of Renewed Facility Operating License No. DPR-20 for PNP, the general license for the PNP Independent Spent Fuel Storage Installation (ISFSI), Facility Operating License No. DPR-6 for Big Rock Point Plant (Big Rock Point), and the general license for the Big Rock Point ISFSI (referred to collectively as the Sites and the licenses) to Holtec; and (2) the transfer of ENOI's operating authority (i.e., its authority to conduct licensed activities at the Sites) to HDI.

In support of the license transfer application, by letter dated December 23, 2020 (ADAMS Accession No. ML20358A232), HDI provided to the NRC a post-shutdown decommissioning activities report (PSDAR) and site-specific decommissioning cost estimate (SSCE) for PNP. These documents reflected HDI's proposal to decommission PNP over a

period (inclusive of 2022) of 20 years if the license transfer application is approved and the proposed license transfer transaction is consummated. Specifically, the decommissioning of PNP would begin following the permanent cessation of power operations in 2022 and the majority of license termination activities would be completed by 2040 (i.e., releasing for unrestricted use the entirety of the PNP site with the exception of the ISFSI). HDI would then remove the fuel and Greater than Class C waste from the site, decommission the ISFSI, terminate the NRC license, and release the remainder of the site for unrestricted use in 2041.

II. Request/Action.

In support of the license transfer application, in addition to providing a PSDAR and an SSCE, by letter dated December 23, 2020 (ADAMS Accession No. ML20358A239), HDI also submitted to the NRC a request for exemption from specific requirements of sections 50.82(a)(8)(i)(A) and 50.75(h)(1)(iv) of title 10 of the *Code of Federal Regulations* (10 CFR). The exemption from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) would permit HDI to make withdrawals from the PNP Decommissioning Trust Fund (DTF) for spent fuel management and site restoration activities at PNP, in accordance with the HDI SSCE. The exemption from 10 CFR 50.75(h)(1)(iv) would also permit HDI to make these withdrawals without prior notification to the NRC, similar to withdrawals for decommissioning activities made in accordance with 10 CFR 50.82(a)(8). The exemption would only apply to HDI if and when the proposed license transfer transaction is consummated.

As part of its exemption request, HDI provided Table 1, which shows the annual cash flows for the PNP DTF while conducting decommissioning activities under the proposal to decommission PNP discussed in the HDI PSDAR. The table contains the projected withdrawals from the PNP DTF needed to cover the estimated costs for PNP for radiological decommissioning, spent fuel management, and site restoration activities in accordance with the HDI SSCE. By letter dated March 25, 2021 (ADAMS Accession No. ML21084A811), pursuant to 10 CFR 50.75(f)(1), ENOI reported to the NRC the balance of the PNP DTF as of

December 31, 2020. The NRC staff considered all of this information in its review of the exemption request.

The requirements of 10 CFR 50.82(a)(8)(i)(A) restrict the use of DTF withdrawals to expenses related to legitimate decommissioning activities consistent with the definition of decommissioning that appears in 10 CFR 50.2, "Definitions." The definition of "decommission" in 10 CFR 50.2 is:

to remove a facility or site safely from service and reduce residual radioactivity to a level that permits—

- (1) Release of the property for unrestricted use and termination of the license;

or

- (2) Release of the property under restricted conditions and termination of the license.

This definition does not include activities associated with spent fuel management and site restoration activities. The requirements of 10 CFR 50.75(h)(1)(iv) also restrict the use of DTF disbursements (other than for ordinary administrative costs and other incidental expenses of the fund in connection with the operation of the fund) to decommissioning expenses until final radiological decommissioning is completed. Therefore, an exemption from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) is needed to allow HDI to use funds from the PNP DTF for spent fuel management and site restoration activities at PNP. The requirements of 10 CFR 50.75(h)(1)(iv) further provide that, except for withdrawals being made under 10 CFR 50.82(a)(8) or for payments of ordinary administrative costs and other incidental expenses of the fund in connection with the operation of the fund, no disbursement may be made from the DTF without written notice to the NRC at least 30 working days in advance. Therefore, an exemption from 10 CFR 50.75(h)(1)(iv) is also needed to allow HDI to use funds from the PNP DTF for spent fuel management and site restoration activities at PNP without prior NRC notification.

III. Discussion.

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 50 (1) when the exemptions are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security; and (2) when any of the special circumstances listed in 10 CFR 50.12(a)(2) are present. These special circumstances include, among others:

- (ii) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; and
- (iii) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated.

A. Authorized by Law

The requested exemption from 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) would allow HDI to use a portion of the funds from the PNP DTF for spent fuel management and site restoration activities at PNP without prior notice to the NRC in the same manner that withdrawals are made under 10 CFR 50.82(a)(8) for decommissioning activities. As stated above, 10 CFR 50.12 allows the NRC to grant exemptions from the requirements of 10 CFR Part 50 when the exemptions are authorized by law. The NRC staff has determined, as explained below, that granting HDI's proposed exemption will not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemption is authorized by law.

B. No Undue Risk to Public Health and Safety

The underlying purpose of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) is to provide reasonable assurance that adequate funds will be available for the radiological decommissioning of power reactors. Based on the HDI SSCE and the cash flow analyses, use

of a portion of the PNP DTF for spent fuel management and site restoration activities at PNP will not adversely impact HDI's ability to complete radiological decommissioning within 60 years and terminate the PNP license. Furthermore, an exemption from 10 CFR 50.75(h)(1)(iv) to allow HDI to make withdrawals from the PNP DTF for spent fuel management and site restoration activities at PNP without prior written notification to the NRC will not affect the sufficiency of funds in the DTF to accomplish radiological decommissioning, because such withdrawals are still constrained by the provisions of 10 CFR 50.82(a)(8)(i)(B) – (C) and are reviewable under the annual reporting requirements of 10 CFR 50.82(a)(8)(v) – (vii).

Based on the above, there are no new accident precursors created by using the PNP DTF in the proposed manner. Thus, the probability of postulated accidents is not increased. Also, based on the above, the consequences of postulated accidents are not increased. No changes are being made in the types or amounts of effluents that may be released offsite. There is no significant increase in occupational or public radiation exposure. Therefore, the requested exemption will not present an undue risk to public health and safety.

C. Consistent with the Common Defense and Security

The requested exemption would allow HDI to use funds from the PNP DTF for spent fuel management and site restoration activities at PNP. Spent fuel management under 10 CFR 50.54(bb) is an integral part of the planned HDI decommissioning and license termination process and will not adversely affect HDI's ability to physically secure the site or protect special nuclear material. This change to enable the use of a portion of the funds from the DTF for spent fuel management and site restoration activities has no relation to security

issues. Therefore, the common defense and security is not impacted by the requested exemption.

D. Special Circumstances

Special circumstances, in accordance with 10 CFR 50.12(a)(2)(ii), are present whenever application of the regulation in the particular circumstances is not necessary to achieve the underlying purpose of the regulation.

The underlying purpose of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv), which restrict withdrawals from DTFs to expenses for radiological decommissioning activities, is to provide reasonable assurance that adequate funds will be available for radiological decommissioning of power reactors and license termination. Strict application of these requirements would prohibit the withdrawal of funds from the PNP DTF for activities other than radiological decommissioning activities at PNP, such as for spent fuel management and site restoration activities, until final radiological decommissioning at PNP has been completed.

The PNP DTF contained \$553.84 million as of December 31, 2020. HDI's analyses project the total radiological decommissioning costs at PNP to be approximately \$443,215,000 (in 2020 dollars), including the costs for decommissioning the ISFSI. As required by 10 CFR 50.54(bb), HDI estimated the costs associated with spent fuel management at PNP to be approximately \$166,122,000 (in 2020 dollars).

The NRC staff performed independent cash flow analyses of the PNP DTF over the proposed 20-year decommissioning period (assuming an annual real rate of return of 2 percent, as allowed by 10 CFR 50.75(e)(1)(ii)) and determined the projected earnings of the DTF. The NRC staff confirmed that the current funds in the DTF and projected earnings provide reasonable assurance of adequate funding to complete all NRC-required radiological decommissioning activities at PNP and also to pay for spent fuel management and site restoration activities. Therefore, the NRC staff finds that HDI has provided reasonable assurance that adequate funds will be available for the radiological decommissioning of PNP,

even with the disbursement of funds from the DTF for spent fuel management and site restoration activities. Consequently, the NRC staff concludes that application of the requirements of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv), that funds from the DTF only be used for radiological decommissioning activities and not for spent fuel management and site restoration activities, is not necessary to achieve the underlying purpose of the rule. Thus, special circumstances are present supporting approval of the exemption request.

In its submittal, HDI also requested exemption from the requirement of 10 CFR 50.75(h)(1)(iv) concerning prior written notification to the NRC of withdrawals from DTFs for activities other than radiological decommissioning. The underlying purpose of notifying the NRC prior to such withdrawals of funds from DTFs is to provide an opportunity for NRC intervention, when deemed necessary, if the withdrawals are for expenses other than those authorized by 10 CFR 50.75(h)(1)(iv) and 10 CFR 50.82(a)(8) that could result in there being insufficient funds in the DTFs to accomplish radiological decommissioning.

By granting the exemption to 10 CFR 50.75(h)(1)(iv) and 10 CFR 50.82(a)(8)(i)(A), the NRC staff considers that withdrawals consistent with HDI's submittal dated December 23, 2020, are authorized. As stated previously, the NRC staff determined that there are sufficient funds in the DTF to complete radiological decommissioning activities, as well as to conduct spent fuel management and site restoration activities, consistent with HDI's PSDAR, SSCE, and December 23, 2020, exemption request. Pursuant to the requirements in 10 CFR 50.82(a)(8)(v) and (vii), licensees are required to monitor and annually report to the NRC the status of the DTF and the licensee's funding for spent fuel management. These reports provide the NRC staff with awareness of, and the ability to take action on, any actual or potential funding deficiencies. Additionally, 10 CFR 50.82(a)(8)(vi) requires that the annual financial assurance status report must include additional financial assurance to cover the estimated cost of completion if the sum of the balance of any remaining decommissioning funds, plus earnings on such funds calculated at not greater than a 2-percent real rate of return, together with the amount provided by other

financial assurance methods being relied upon, does not cover the estimated cost to complete the decommissioning. The requested exemption would not allow the withdrawal of funds from the DTF for any other purpose that is not currently authorized in the regulations without prior notification to the NRC. Therefore, the granting of the exemption to 10 CFR 50.75(h)(1)(iv) to allow HDI to make withdrawals from the PNP DTF to cover authorized expenses for spent fuel management and site restoration activities at PNP without prior written notification to the NRC will still meet the underlying purpose of the regulation.

Special circumstances, in accordance with 10 CFR 50.12(a)(2)(iii), are present whenever compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated. HDI states that the DTF contains funds in excess of the estimated costs of radiological decommissioning and that these excess funds are needed for spent fuel management and site restoration activities. The NRC does not preclude the use of funds from the DTF in excess of those needed for radiological decommissioning for other purposes, such as for spent fuel management or site restoration activities.

The NRC has stated that funding for spent fuel management and site restoration activities may be commingled in DTFs, provided that the licensee is able to identify and account for the radiological decommissioning funds separately from the funds set aside for spent fuel management and site restoration activities (see NRC Regulatory Issue Summary 2001-07, Rev. 1, "10 CFR 50.75 Reporting and Recordkeeping for Decommissioning Planning," dated January 8, 2009 (ADAMS Accession No. ML083440158), and Regulatory Guide 1.184, Revision 1, "Decommissioning of Nuclear Power Reactors," dated October 2013 (ADAMS Accession No. ML13144A840)). Preventing access to those excess funds in DTFs because spent fuel management and site restoration activities are not associated with radiological decommissioning would create an unnecessary financial burden without any corresponding safety benefit. The adequacy of the PNP DTF to cover the cost of activities associated with

spent fuel management and site restoration, in addition to radiological decommissioning, is supported by the HDI SSCE. If HDI cannot use the PNP DTF for spent fuel management and site restoration activities, it would need to obtain additional funding that would not be recoverable from the DTF, or it would have to modify its decommissioning approach and methods. The NRC staff concludes that either outcome would impose an unnecessary and undue burden significantly in excess of that contemplated when 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) were adopted.

The underlying purposes of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) would be achieved by allowing HDI to use a portion of the PNP DTF for spent fuel management and site restoration activities at PNP without prior NRC notification, and compliance with the regulations would result in an undue hardship or other costs that are significantly in excess of those contemplated when the regulations were adopted. Thus, the special circumstances in 10 CFR 50.12(a)(2)(ii) and 10 CFR 50.12(a)(2)(iii) exist and support the approval of the requested exemption.

E. Environmental Considerations

In accordance with 10 CFR 51.31(a), the Commission has determined that granting the exemption will not have a significant effect on the quality of the human environment (see Environmental Assessment and Finding of No Significant Impact published in the *Federal Register* on November 26, 2021 (86 FR 67503)).

IV. Conclusions.

In consideration of the above, the NRC staff finds that the proposed exemption confirms the adequacy of funding in the PNP DTF, considering growth, to complete radiological decommissioning of the site and to terminate the licenses and also to cover estimated spent fuel management and site restoration activities.

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not present an undue risk to public health and safety, and is

consistent with the common defense and security. Also, special circumstances are present. Therefore, the Commission hereby grants HDI an exemption from the requirements of 10 CFR 50.82(a)(8)(i)(A) and 10 CFR 50.75(h)(1)(iv) to allow the use of a portion of the funds from the PNP DTF for spent fuel management and site restoration activities at PNP in accordance with HDI's PSDAR and SSCE, dated December 23, 2020. Additionally, the Commission hereby grants HDI an exemption from the requirement of 10 CFR 50.75(h)(1)(iv) to allow such withdrawals without prior NRC notification.

This exemption is effective upon issuance.

Dated: December 13, 2021.

For the Nuclear Regulatory Commission.

Brian D. Wittick, Deputy Director,
Division of Operating Reactor Licensing,
Office of Nuclear Reactor Regulation.