## [6450-10-P]

## **DEPARTMENT OF ENERGY**

Record of Decision: Issuance of a Loan Guarantee to Holtec Palisades, LLC for general restoration and maintenance activities of the Palisades Nuclear Plant

AGENCY: Loan Programs Office (LPO), U.S. Department of Energy.

ACTION: Record of decision (ROD).

**SUMMARY:** The U.S. Department of Energy (DOE) announces its decision to issue a loan guarantee under the Energy Policy Act of 2005 (EPAct 2005), as amended, specifically the Energy Infrastructure Reinvestment Program, to Holtec Palisades, LLC., (Holtec) for general restoration and maintenance activities (Project), consistent with the Nuclear Regulatory Commission (NRC) Renewed Facility Operating License Number DPR-20. The general restoration and maintenance activities would support the potential future resumption of power generation activities at the Palisades Nuclear Plant (Palisades or PNP), an 800-MW electric nuclear generation station in Covert Township, Michigan. Holtec has initiated an exemption request, a license transfer request, and license amendment requests with NRC, that, if approved, would allow the resumption of power generation and operation until 2031, and Holtec intends to submit a subsequent license extension request to the NRC to allow power generation from 2031 to 2051.

**ADDRESSES:** Copies of this ROD and the Final EIS may be obtained by accessing these documents and additional information about DOE's Loan Programs website at *https://www.energy.gov/lpo/eis-0562-palisades-nuclear-restart-project-van-buren-county-michigan*, or LPO's NEPA Program website at *https://www.energy.gov/lpo/environmental-compliance-1*.

**FOR FURTHER INFORMATION CONTACT:** Alicia Williamson, NEPA Document Manager, Technical and Environmental Division, Loan Programs Office (LP-30), U.S. Department of Energy, 1000 Independence Ave SW., Washington, DC 20585, telephone (202)586-7272; e-mail *Alicia.Williamson@hq.doe.gov*.

## SUPPLEMENTARY INFORMATION:

The environmental impacts of general restoration and maintenance activities at PNP were analyzed pursuant to the National Environmental Policy Act (NEPA) in the *DOE/EIS-0562: Final Environmental Impact Statement, Proposed Palisades Nuclear Restart Project, Van Buren County, Michigan* (89 FR 53659, June 27, 2024).

The Project would entail general restoration and maintenance activities at PNP, consistent with the NRC Renewed Facility Operating License Number DPR-20. DOE LPO's review and adoption of the NRC NEPA documents covers only general restoration and maintenance activities, and the potential use of a DOE loan guarantee for PNP refueling, power ascension, and power generation would not occur until the completion of the NRC NEPA evaluation analyzing the same.

**NEPA Review:** Prior to DOE LPO consideration of a loan guarantee for the Project, PNP ceased operations, the nuclear fuel was removed, and PNP entered decommissioning mode in May 2022. The nuclear fuel was placed in the established onsite spent fuel pool, but no structural dismantling of PNP has occurred, and the equipment is still in place and intact. Palisades was acquired by Holtec in June 2022, who now intends to restore PNP and resume power generation activities. Holtec has initiated an exemption request, a license transfer request, and license amendment requests processes with the NRC, that if approved, would allow the reactor to be re-

fueled and the resumption of power generation and operation until 2031. In addition, Holtec intends to submit a Subsequent License Renewal (SLR) application to NRC, that if granted, would allow power generation until at least 2051.

Holtec is pursuing a reauthorization of power operations at PNP within the existing NRC regulatory framework, which would allow the reactor to be refueled and resume power generation operations through March 2031. In 2007, the NRC granted Palisades a 20-year Renewed Facility Operating License (No. DPR-20), which extended the period of PNP operations until March 2031. The NRC completed a safety analysis review and in compliance with NEPA, issued NUREG-1437, Supplement 27, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Regarding Palisades Nuclear Plant, Draft Report (SEIS) in February 2006 (71 FR 9541), followed by the Final SEIS in October 2006 (71 FR 61967). The SEIS analyzed the environmental impacts of PNP operations from March 2011 through March 2031. The NRC's Record of Decision (ROD) (72 FR 3168) and reactor facility operating license approval for the 20- year extended operations period was issued in January 2007.

DOE was not a cooperating agency in the development of the NRC SEIS. DOE LPO conducted a review of the NRC environmental documents related to the licensing of PNP, in accordance with 10 CFR 1021.200(d). DOE's proposed action of issuing a loan guarantee to support the general restoration and maintenance activities was analyzed in the NRC SEIS. Based on its independent evaluation of the NRC's 2006 SEIS, DOE has determined that the documentation satisfies DOE NEPA procedures for the general restoration and maintenance activities of PNP. Accordingly, DOE adopted and recirculated the 2006 NRC Final SEIS as a DOE Final EIS (DOE/EIS-0562). Activities associated with PNP refueling and repowering are not yet ripe and are the subject of an NRC environmental review, with DOE as a cooperating agency. Consequently, the potential use

of a DOE loan guarantee for PNP refueling, repowering, and power generation would not occur until the completion of the NRC NEPA evaluation analyzing the potential environmental impacts of refueling and repowering, and the associated NRC approvals of Holtec's exemption request from 10 CFR 50.82(a)(2), license transfer request, and license amendment requests.

DOE is a NEPA cooperating agency with the NRC on its environmental review for the exemption request, a license transfer request, and license amendment requests and will cooperate with the NRC on the subsequent license renewal process, thereby tiering its environmental review process to focus on the issues that are ripe for decision and inform future decisions regarding additional Federal financial assistance. At the conclusion of each NRC environmental review and approval processes, DOE would publish a Record of Decision in support of any future Federal financial assistance associated with resumption of power generation and operation extending beyond 2031.

Alternatives Considered: DOE's decision in this ROD is whether or not to issue a loan guarantee to Holtec for general restoration and maintenance activities in support of repowering PNP. Accordingly, DOE's alternatives are: (1) to issue a loan guarantee to Holtec for the Proposed Action, or (2) not issue a loan guarantee to Holtec (No-Action Alternative).

**Environmental Preferable Alternative:** DOE reviewed both alternatives to identify the environmentally preferable alternative and considers the issuance of a loan guarantee to Holtec for the Proposed Action as the environmentally preferable alternative. This alternative offers environmental benefits consistent with the statutory objectives of Section 1706 of EPAct 2005, as amended, specifically the Energy Infrastructure Reinvestment Program, which includes repowering of energy infrastructure that has ceased operations and reduces greenhouse gas emissions. Compared to fossil-fuel power sources producing the same amount of power, carbon

dioxide emission rates from the Project would be considerably less (see Section 8.2.1 of DOE/EIS-0562). This chosen alternative does not limit consideration of alternatives for future NEPA reviews related to the Proposed Action.

**Environmental Justice:** Updated guidance regarding environmental justice (*e.g.* Executive Order 14096, *Revitalizing Our Nations Commitment to Environmental Justice*) was not in place when NRC issued the Final SEIS. For the Palisades review, DOE/EIS-0562 examined the geographic distribution of minority and low-income populations within 50 miles of the site, using data from the 2000 U.S. Census Bureau. The analysis was supplemented by discussions with the local authorities from the Van Buren County planning department and social service agencies. The analysis concluded PNP does not disproportionately result in high and adverse human health or environmental impacts on minority or low-income populations. As a result, DOE concluded the analysis encompasses the scope of the DOE proposed action, as the current NRC license for PNP remains in effect through 2031. Nevertheless, future environmental analyses evaluating the refueling and repowering activities for the Palisades restart project will include an environmental justice review using the most up-to-date Federal guidelines.

**Floodplain Statement of Findings:** The DOE/EIS-0562 considered the relevant information for a floodplains and wetlands assessment pursuant to 10 CFR part 1022. The Proposed Action is not within a 100-year floodplain and because no major construction will take place, there would be no redirection or alteration in patterns of surrounding water, sediment transport or wetlands onsite. DOE/EIS-0562 Sections 2.2.6, 4.2, and 4.28 contain the relevant analyses on floodplains and wetlands. Furthermore, in 2019, the NRC conducted a Flooding Focused Evaluation at the Palisades plant which required the facility to reevaluate flood hazards for the site using more current methods and new regulatory guidance used by the NRC staff. This process concluded

that Palisades had demonstrated that effective flood protection exists in the event of a beyonddesign-basis external flooding event (Palisades Nuclear Plant-Staff Assessment of Flooding Focused Evaluation (EPID No. L-2018-JLD-0015, January 19, 2019).

The NRC's current licensing basis is designed to address the risks associated with natural hazards such as climate change. Additionally, as noted in the **Environmental Preferable Alternative** section of this document, the greenhouse gases emitted from the Project would be less than a reasonable alternative.

**Consultation Requirements:** DOE was not a cooperating agency with NRC during its development of the NRC SEIS; therefore, DOE completed its own environmental compliance reviews and consultations. Specifically, DOE consulted with the Michigan State Historical Preservation Office (SHPO) and the U.S. Fish and Wildlife Service (USFWS). Additionally, the DOE reviewed the NRC's Final SEIS and supporting documentation and related surveys, studies, and consultations.

By letter dated May 20, 2024, the Michigan SHPO concurred with DOE's finding of no historic properties effected within the area of potential effect associated with this undertaking pursuant to Section 106 of the National Historic Preservation Act. DOE also sent a NEPA notice regarding the proposed Federal financial assistance for the general restoration and maintenance activities at PNP to Federally recognized Native American Tribes in the area or with indigenous ties to the area to identify Tribal interest and provide an opportunity to make comments or express concerns. Additionally, each Tribe was contacted by telephone to ensure receipt and respond to any immediate questions or concerns. No immediate questions or concerns were relayed by the Tribes.

By letter dated, May 23, 2024, the US FWS confirmed consultation was not needed for the project based on the "no effect" and "not likely to adversely affect" (NLAA) determinations of the following threatened and endangered species located in the vicinity of PNP: Eastern Massasauga rattlesnake (*Sistrurus catenatus*)-NLAA; Indiana Bat (Myotis soldalis)-no effect; Mitchell's Satyr Butterfly (*Neonympha mitchellii mitchellii*)-no effect; Monarch Butterfly (*Danaus plexippus*)-no effect; Piping Plover (*Charadruis melodus*)-NLAA; Pitcher's Thistle (*Cirsium pitcher*)-NLAA; Rufa Red Know (*Calidris canutus rufa*)-NLAA; Tricolored Bat (*Perimyotis subflavus*)-no effect; and Whooping Crane (*Grus americana*)-no effect. Finally, through its review, DOE determined that NRC completed the Coastal Zone Management Act Federal Consistency Certification, which is documented in Appendix E of Final DOE/EIS-0562. Hence, DOE has fulfilled its consultation responsibilities under NHPA and ESA for restoration and maintenance activities related to the general restoration and maintenance activities of PNP.

**Final DOE/EIS-0562 Review Period**: The Notice of Availability of the Final DOE/EIS-0562 and the Adoption Notice were published in the *Federal Register* on March 1, 2024 (89 FR 15199). The review period of the EIS was from March 1 to April 1, 2024. DOE received one submittal from the public during the review period. The inquiry requested information regarding the LPO's NEPA process, a copy of project documentation, and a DOE point of contact for the project. DOE provided the requested information, and has concluded that no new information or circumstances has been submitted that would warrant preparation of a supplemental EIS, or show that the Project would affect the quality of the human environment not already encompassed by the analysis considered in the Final DOE/EIS-0562, or considered in the preparation of this ROD. **Decision**: DOE has decided to issue a loan guarantee to Holtec Palisades, LLC for the general restoration and maintenance activities in support of repowering PNP, an 800-MW electric nuclear generation station in Covert Township, Michigan. The Project would entail the general restoration and maintenance activities in support of repowering PNP in accordance with the existing NRC Renewed Facility Operating License Number DPR-20. Approval of the loan guarantee responds to the DOE purpose and need pursuant to Section 1706 of EPAct 2005, as amended, specifically the Energy Infrastructure Reinvestment Program. DOE's Proposed Action evaluated in this ROD supports the general restoration and maintenance activities at PNP analyzed within the Final DOE/EIS-0562. Activities associated with PNP refueling, repowering and operations to 2031, and operation from 2031-2051 (via SLR) are not yet ripe for environmental analysis or decisions, are not the subject of this ROD, and will be the subject of current and future NRC and DOE environmental reviews.

**Mitigation**: All DOE loan guarantee agreements require that the borrower comply with all applicable environmental laws and related requirements. For the Project, this would include conditions and requirements related to authorizations and approvals within the NRC's 2006 ROD, all permits and consultations identified in Appendix E of the Final DOE EIS-0562. A borrower's failure to comply with applicable laws, authorizations, and approvals may constitute a default, upon which DOE would have the right under the loan guarantee agreement to exercise usual and customary remedies. To ensure that the borrower complies with the requirements of the loan guarantee agreement, the Loan Programs Office proactively monitors and administers all operative loan guarantee transactions for the lifetime of the loan.

## **Signing Authority**

This document of the Department of Energy was signed on July 26, 2024 by Jigar Shah, Director, Loan Programs Office, pursuant to delegated authority from the Secretary of Energy. That document with the original signature and date is maintained by DOE. For administrative purposes only, and in compliance with requirements of the Office of the Federal Register, the undersigned DOE Federal Register Liaison Officer has been authorized to sign and submit the document in electronic format for publication, as an official document of the Department of Energy. This administrative process in no way alters the legal effect of this document upon publication in the *Federal Register*.

Signed in Washington, D.C., on July 26, 2024.

Jigar Shah Director, Loan Programs Office