

**Law Office of
TERRY J. LODGE**

316 N. Michigan Street, Suite 520
Toledo, OH 43604-5627

(419) 205-7084
tjlodge50@yahoo.com

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Office of Administration
ATTN: Program Management, Announcements
and Editing Staff
Mail Stop: TWFN-7-A60M
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Via submission to Regulations.gov and cc to
Stacy.Schumann@nrc.gov

RE: Palisades Nuclear Plant, Docket ID NRC-2022-0158 (Comments on post-shutdown decommissioning activities report (PSDAR))

Dear NRC Office of Administration:

I hereby submit comments on the PSDAR and associated concerns related to the Palisades Nuclear Plant on behalf of the organizations Beyond Nuclear of Takoma Park, Md; Nuclear Energy Information Service of Chicago, IL; Don't Waste Michigan of Holland, MI; and Michigan Safe Energy Future of Benton Harbor, MI.

**I. Immediate Steps Are Necessary to Curtail
Decommissioning Expenditures and Actions**

It is not true that Palisades is permanently shut down. During the summer months of 2022, after having removed fuel from the reactor, Holtec Decommissioning International (HDI) formally applied for an award of a billion or more taxpayer dollars from the federal Department of Energy (DOE) with the intention of restoring Palisades to the active generation of electricity. That funding request was denied by DOE, but on December 19, 2022, HDI again announced that it will seek funding via a second competitive round of DOE awards early in 2023.

Consequently, decommissioning activities are inappropriate at this time, should be suspended immediately, and these particular steps are indicated:

1) Immediate termination of HDI's expenditures from the Palisades decommissioning trust fund (DTF), including management of all spent nuclear fuel storage.

2) The prompt reimbursement to the DTF by HDI of all expenditures made from the DTF since the date when Holtec initially applied to DOE for bailout support. All expensed decommissioning work undertaken after that date was performed based on HDI's misleading and bad faith publicly-stated intentions of shutting down the plant permanently. Those DTF funds have been

wasted and if not reimbursed, are lost to the DTF when decommissioning actually takes place in the future.

3) The NRC must require HDI, as a condition of reopening for generation of electricity, to formally apply for a nuclear power plant operating license and to comply with the National Environmental Policy Act (NEPA) by providing a Supplemental Environmental Report. The NRC Staff must compile a Supplemental Environmental Impact Statement and Supplemental Safety Evaluation Report sufficiently broad in scope to encompass all aspects of reopening the plant, including refueling, performance of deferred maintenance, and necessary plant repairs to protect the environment, public health and safety, as well as various actions and activities associated with decommissioning of Palisades..

II. A Supplemental Environmental Impact Statement (SFEIS) that Contemplates Both a Return to Power Generation and Decommissioning Is Required

The decision to reopen the Palisades plant is a “major federal action” under NEPA. New and different licensing conditions must be developed to assure safety, and new and cumulative environmental impacts will occur from extending the plant’s operational life. A new safety evaluation will be required, as well as a Supplemental Environmental Impact Statement.

A. Palisades is not ‘permanently shut down’ and the public notice inviting PSDAR comments is defective

The formal public notice published August 26, 2022 which requested comments on the Palisades PSDAR states, “Palisades is a pressurized-water reactor located in Covert, Michigan, in Van Buren County, *that is permanently shut down.*” (Emphasis added).

It is not true that Palisades is permanently shut down. During the summer months of 2022, after Entergy removed the final fuel load from the reactor and sold Palisades to Holtec Decommissioning International (HDI), HDI formally applied for an award of hundreds of millions of taxpayer dollars from the U.S. Department of Energy (DOE) with the intention of restoring Palisades to the active generation of electricity. That funding request was denied by the DOE, but on December 19, 2022, HDI again announced that it will seek funding via a second competitive round of DOE awards early in 2023.

A plant is “decommissioned” when it is safely removed from service and residual radioactivity is reduced “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.” 10 CFR § 50.2. HDI’s quest for federal bailout money to reopen Palisades clearly ends decommissioning of the plant, but not the plunder of trust fund money set aside for that purpose.

The August 26 notice inviting comments on the PSDAR is significantly defective because it does not disclose the current HDI efforts to reopen the plant for power generation. Public notice must be reissued and a new comment period established. The defective notice will skew public comments toward decommissioning and effectively segments the current plan,

which is not solely limited to decommissioning, but envisions additional years of power generation only then followed by decommissioning. The August 26 public notice misleads members of the public into believing that decommissioning will proceed more or less immediately, without the occurrence of further power generation activities. Future power generation first must be accompanied by a review of the plant's safety features with replacements and upgrades of maintenance that has been deferred in some instances for decades. Reopening of Palisades will inevitably cause the accumulation of more liquid and airborne radioactivity onsite, including dispersal of more tritium. More irradiated nuclear fuel/highly radioactive waste will be generated too.

HDI must be barred from continuing to proceed under the aegis of the NRC-granted exemption dated December 13, 2021¹ that authorizes HDI to expend money from the Palisades Decommissioning Trust Fund (DTF) for spent nuclear fuel management and site restoration. The financed decommissioning of Palisades cannot be converted into a prelude for its reopening.

Since the shutdown and decommissioning of Palisades have been relegated to an option for the plant and are no longer binding, the exemption for spent fuel management to be paid from the DTF must be terminated immediately. DTF funds must not be used for storage and stabilization of the fuel while Palisades is moved toward reopening. Licensees shall not perform any decommissioning activities, as defined in 10 CFR § 50.2, that "(iii) Result in there no longer being reasonable assurance that adequate funds will be available for decommissioning." 10 CFR § 50.82(a)(6)(iii). The open-ended expenditure of DTF assets in these circumstances critically undermines the previous NRC findings of "reasonable assurance" of adequate funds availability.

B. Reopening Palisades would necessitate a Supplemental Environmental Impact Statement under NEPA

Palisades is a 51-year old atomic reactor that for more than a decade was rated by the NRC as the worst embrittled reactor pressure vessel in the U.S. and at increasing risk of catastrophic failure due to pressurized thermal shock. To accommodate Palisades' operation, the Nuclear Regulatory Commission (NRC) simply weakened and rolled back the safety standards multiple times over the years. Palisades also has a severely degraded reactor lid, and worn out steam generators that for at least 15 years have needed replacement for the second time in the reactor's history. The plant was permanently shut down in May 2022, 11 days ahead of schedule because of the recurrence of control rod drive seal leakage, which has happened dozens of times..

Reopening Palisades would be an unprecedented and complex process. The entire workforce has dissipated since the plant shutdown and would have to be almost completely restored. The time it would take to restaff to operations level, including training new workers such as reactor operators, will be lengthy. It is unclear whether HDI, which has no experience in operating nuclear power reactors, would undertake to operate the plant or develop a contract with another firm to do it. Resort to a contractor may not shorten the restart time nor reduce the cost. It will be difficult to arrange for a new staff complement in the highly competitive market of the

¹ ADAMS No. ML21286A506, p. 10.

nuclear industry, and it may cost a lot to hold people under contract while the time consuming unpredictable aspects of restart are addressed.

If there is no fresh nuclear fuel onsite, it may take a year or longer for delivery, an expense of \$50 million or more.

The question of NRC relicensing is a particularly difficult one to answer. There has not been a previous attempt to restore a closed plant to operability, and the requirements of the Atomic Energy Act and NEPA seem to militate in favor of requiring a full-blown reactor licensing proceeding, especially in light of the age and deteriorated state of the reactor.

HDI would have to establish a quality assurance/quality control program for reactor operations at Palisades, which it currently lacks.

There is finally the question of overall cost: how much would it cost, and who would pay, for retained staff to remain onsite while the reactor is unable to operate and generate electricity; to obtain fresh fuel; develop sufficient numbers of trained workers; to establish a quality assurance/control program; and to put in place needed major safety significant repairs and replacements?

The contemplated reopening of Palisades to generate power would constitute a “major federal action” under NEPA because it involves Federal regulation. 40 CFR §1508.1(q)(2). See also 40 CFR §1508.1(q)(3)(iv) (“Major federal action” includes actions approved by permit or other regulatory decision).

The NRC is obligated to undertake a supplemental EIS when presented, as here, with “substantial changes in the proposed action that are relevant to environmental concerns” or “new and significant circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts” after the EIS is assembled. 10 C.F.R. § 51.92(a)(1)-(2); see also 10 C.F.R. § 51.72(a)(1)-(2). “New and significant” information presents “a seriously different picture of the environmental impact of the proposed project from what was previously envisioned.” *Hydro Res., Inc.*, 50 N.R.C. 3, 14 (1999). *Blue Ridge Environmental Defense League v. Nuclear Regulatory Com'n*, 716 F.3d 183, 197 (D.C. Cir. 2013).

C. The Palisades PSDAR proposes activities never scrutinized under NEPA

Even if the plan to reopen Palisades is abandoned, the decommissioning activities enumerated in the PSDAR will impose important physical and management changes to the plant and its site. The NRC mandates at 10 CFR § 50.82(a)(4)(i) that the PSDAR must “contain a description of the planned decommissioning activities along with a schedule for their accomplishment, a discussion that provides the reasons for concluding that the environmental impacts associated with site-specific decommissioning activities will be bounded by appropriate previously issued environmental impact statements. . . .”

The activities identified below are not bounded by previously-issued environmental impact statements and have not been adequately subjected to NEPA scrutiny. Licensees are

forbidden from performing any decommissioning activities, as defined in 10 CFR § 50.2, that “(ii) Result in significant environmental impacts not previously reviewed;. . .” 10 CFR § 50.82(a)(6)(ii).

We are concerned that these planned changes have not been subjected previously to NEPA analysis:

- termination of the spent fuel pool within 6 years of shutting down the reactor, without replacing it with a hot cell or dry transfer system, which exposes the NRC's Continued Storage Rule assumption that such a facility would be present throughout the period of onsite storage as a farce;
- the notable lack of any arrangements to address the unloading or remediation of defective VSC-24 Cask No. 4, which was welded shut in a flawed manner and contains irradiated nuclear fuel which has displayed dangerous thermal characteristics since 1994 shortly being loaded. In a 1993 lawsuit over the utility's ability to manage spent fuel onsite, a Consumers Energy officer falsely told the federal court that plans existed to unload all dry storage casks, a proposition thoroughly debunked by more than 28 years of demonstrated inability to unload Cask No. 4;
- the anticipated repackaging of the spent fuel contained in VSC-24 dry storage casks into transport canisters, instead of repackaging that irradiated fuel as well as the remaining Palisades inventory into DOE-approved uniform TAD canisters;
- the lack of a means by which the Department of Energy would take title and assume liability for removing all spent fuel away from Palisades;
- Applicants' plan, disclosed for the first time ever in the December 2020 PSDAR, to dispose of radioactive steam generators via Great Lakes water transport, requiring construction of a dock at the Palisades site along with associated arrangements for loading and shipping them on a Great Lakes-capable freight vessel. Other large nuclear components, such as the reactor pressure vessel and the reactor lid, likely would also be transported on Lake Michigan. These components, would all be highly radioactive, even if classified as "low-level" radioactive waste;
- the planned transfer of the irradiated nuclear fuel casks from the older/western concrete pad to the newer/eastern/inland pad at Palisades, an unprecedented undertaking where neither pad complies with NRC seismic regulations;
- the planned transport of irradiated nuclear fuel on Lake Michigan, posing enormous risks in loading and shipment as well as the potential for inadvertent nuclear criticality events during accidental sinking and water infiltration, which would spark a chain reaction in the fissile U-235 and Pu-239 present in the waste;
- the lack of recognition and analysis of potential inadvertent criticality if a storage cask

falls in the Lake as from an earthquake, or high Lake water level flooding of the dry casks themselves; and

- analysis of how physical changes necessary to reopen the plant will be implemented while the plant is simultaneously being decommissioned; there are many possible conflicts in managing two opposing plans which will have implications for the required finding of reasonable assurance of safe plant operations and also, for conservation of DTF resources.

III. Conclusion

Regardless of whether Palisades is reopened for power generation, or HDI moves straight to decommissioning, the circumstances require considerably more information to be compiled and publicly disclosed about the anticipated activities toward those ends. There are many unanswered questions about a power plant restart, and even if that prospect is discarded by HDI, many other decommissioning events under 10 CFR § 50.82 to be addressed under NEPA and the Atomic Energy Act.

Thank you.

Sincerely,

/s/ Terry J. Lodge

Counsel for Beyond Nuclear, Nuclear
Energy Information Service, Don't
Waste Michigan and Michigan Safe
Energy Future

/s/ Alice Hirt

Don't Waste Michigan
Alice Hirt, Co-Chair
Holland, Michigan 49423
alicehirt@gmail.com

/s/ Michael J. Keegan

Coalition for a Nuclear Free Great Lakes
Michael J. Keegan, Chairperson
Monroe, Michigan 48161
mkeeganj@comcast.net

/s/ David Kraft

David Kraft, Executive Director
Nuclear Energy Information Service
3411 W. Diversey #13
Chicago, IL 60647
neis@neis.org

/s/ Bette Pierman

Bette Pierman, Convenor
Michigan Safe Energy Future
Benton Harbor, MI 49022
bette49022@gmail.com

/s/ Kevin Kamps

Kevin Kamps
Radioactive Waste Specialist
Beyond Nuclear
7304 Carroll Avenue, #182
Takoma Park, Maryland 20912
kevin@beyondnuclear.org