

PUBLIC SUBMISSION

SUNI Review Complete
Template=ADM-013
E-RIDS=ADM-03

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Comment (13)
Publication Date: 1/31/2025
Citation: 90 FR 8721

As of: 3/4/25, 3:07 PM
Received: March 03, 2025
Status: Pending_Post
Tracking No. m7t-n8mc-x4lk
Comments Due: March 03, 2025
Submission Type: Web

Docket: NRC-2024-0076

Holtec Decommissioning International, LLC and Holtec Palisades, LLC; Palisades Nuclear Plant; Draft Environmental Assessment and Draft Finding of No Significant Impact (retitled from Notice of Intent to Conduct Scoping Process and Prepare an Environmental Assessment Holtec Decommissioning International, LLC and Holtec Palisades, LLC; Palisades Nuclear Plant, Unit 1)

Comment On: NRC-2024-0076-0111

Holtec Decommissioning International, LLC and Holtec Palisades, LLC; Palisades Nuclear Plant; Draft Environmental Assessment and Draft Finding of No Significant Impact

Document: NRC-2024-0076-DRAFT-0122

Comment on FR Doc # 2025-01997

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General Comment

See attached file(s)

Attachments

ELPC.Comments.DraftEA.Palisadespdf



ENVIRONMENTAL LAW & POLICY CENTER

March 3, 2025

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Docket ID NRC-2024-0076

Submitted electronically at: <https://www.regulations.gov/commenton/NRC-2024-0076-0111>

Also submitted via email to: PalisadesRestartEnvironmental@nrc.gov

Comments to the Nuclear Regulatory Commission and Department of Energy:

Thank you for the opportunity to submit written comments on the Draft Environmental Assessment (“EA”) and Draft Finding of No Significant Impact (“FONSI”) for the Palisades Nuclear Plant Reauthorization of Power Operations Project. These comments respond to the request for comment on the Draft EA and FONSI published in the *Federal Register* on January 31, 2025, 90 Fed. Reg. 8721 – 8724 (Jan. 31, 2025). These comments apply to the actions proposed by both the Nuclear Regulatory Commission (NRC) as the lead agency, and the Department of Energy (DOE) as a cooperating agency, relating to the proposed restart of the Palisades Nuclear Plant (“Palisades”). These comments are submitted on behalf of the Environmental Law & Policy Center (ELPC), which works to protect the Great Lakes and the environment, and accelerate renewable energy solutions in Michigan and other Midwest States.

ELPC’s comments, described in more detail below, address several problems with the Draft EA and FONSI. As an overarching matter, the NRC issued the Draft EA and FONSI in a regulatory vacuum, with no existing framework for this unprecedented action, proposing a first-of-a-kind restart of a decommissioned nuclear plant that ceased operations three years ago due to its state of disrepair and the high costs required to make necessary upgrades to operate it safely. The NRC has no regulatory framework for addressing Palisades’ unique posture and all of the accompanying environmental and public health issues arising from it. ELPC has significant concerns with the lack of engagement on, and analysis of, safety issues in the Draft EA and FONSI, especially the degradation of steam generator tubes. This issue is particularly troubling given that Palisades’ new owner, Holtec, has never operated a nuclear plant before. Furthermore, the NRC has improperly based the Draft EA and FONSI on insufficient programmatic environmental documents and outdated site-specific environmental impact statements resulting in an inadequate analysis of the potential environmental and public health impacts of the proposed action. Lastly, the NRC has artificially narrowed the alternatives analyzed in the Draft EA by improperly restricting the purpose and need of the proposed action.

1. The NRC Must Initiate a New Rulemaking for Restarting a Previously Decommissioned Nuclear Plant.

There is currently no regulatory framework in place to restart operations at Palisades. This is exemplified by the makeshift definition of the proposed action in the EA Scoping Summary Report and the Draft EA. The Scoping Summary Report describes the proposed action as “a decision on whether to issue a set of LARs,” or license amendment requests,¹ and the Draft EA states the “proposed actions are decisions on whether to grant or deny Holtec’s interdependent, connected licensing and regulatory requests ... that if approved, *would collectively support* the reauthorizing of power operations at Palisades.”² An assortment of license amendment requests is an insufficient regulatory basis to justify Holtec’s unprecedented request to restart a previously decommissioned nuclear plant.

There is a unique and unprecedented legal and factual situation here that has not been adequately addressed by the NRC aside from the agency referring to the project as a “first of a kind effort to restart a shuttered plant.”³ As noted in the Draft EA and FONSI, “Palisades permanently ceased operations” on May 20, 2022 and there was a “*permanent* removal of fuel from the reactor vessel” on June 10, 2022.⁴ Procedurally, these actions were issued as amendments to the underlying Renewed Facility Operating License (RFOL).⁵ The NRC’s supposed regulatory basis for restarting Palisades is the existing RFOL, which reflects a permanently defueled status.⁶ The NRC, through its own regulatory action, previously placed Palisades in this permanent decommissioned state. It is now attempting to revert this action through a hodgepodge of license amendment requests, which do not provide the requisite level of review and analysis for this “first of a kind” project to restart an aged and previously decommissioned plant.

A core issue here, which makes the present situation such a matter of concern, is that the NRC has not adequately explained why Palisades was decommissioned and defueled in the first place. As the Environmental Protection Agency (EPA) pointed out in its comments during the NEPA scoping process, the NRC’s scoping assessment neglected to analyze the “structural integrity, refurbishment history ... [or] why [Palisades] was decommissioned” and further stated that the NRC should “discuss the rationale for decommissioning [Palisades].”⁷ The NRC has **not** done that in the Draft EA and FONSI. Although Holtec and the NRC have contended that Palisades was initially shuttered for economic reasons, that is an incomplete, and therefore inaccurate, characterization. It omits *the key reason why* the plant became uneconomical: its state of disrepair and the high costs required to make necessary upgrades and operate it safely. The existing RFOL

¹ NRC, Environmental Assessment Scoping Process Summary Report Palisades Nuclear Plant Potential Reauthorization of Power Operations Covert, Michigan, Accession No. ML24353A149, pg. 7 (Jan. 2025) (the “Scoping Summary Report”).

² NRC, Draft Environmental Assessment and Draft Finding of No Significant Impact for the Palisades Nuclear Plant Reauthorization of Power Operations Project, Accession No. ML24353A157, pgs. 1-3 (Jan. 31, 2025) (the “Draft EA and FONSI”).

³ NRC, Palisades Nuclear Plant – Potential Restart, available at <https://www.nrc.gov/info-finder/reactors/pali.html>.

⁴ Draft EA and FONSI, pg. iii.

⁵ *Id.*

⁶ *Id.*

⁷ Scoping Summary Report, pg. 160.

only authorizes plant decommissioning, not power operations.⁸ There is a reason why Palisades was placed in this decommissioned state: because it was unsafe to continue operating.

The NRC has no regulatory framework for this unprecedented situation. To overcome baseline safety and environmental risks and to provide regulatory certainty for the public, stakeholders, and other nuclear plants similarly situated, the NRC must engage in a new rulemaking to establish a formal procedure for thoroughly and transparently reviewing and evaluating safety and environmental impacts associated with previously decommissioned nuclear plants proposed for the return to power operations. The NRC currently has a petition for rulemaking before it to do just that but has taken no action as of yet.⁹ Prior to taking any further regulatory actions related to Palisades, the NRC should thoroughly consider the Petition before it and take the necessary steps to initiate the rulemaking and provide a safe path forward.

2. The NRC Must Prepare an Environmental Impact Statement or Supplemental Environmental Impact Statement to Comply with Its Own Regulations.

Throughout the NRC's consideration of Holtec's proposal to restart Palisades, the NRC has analogized this attempted restart of a decommissioned and defueled plant, for which there is no existing regulatory framework, to the NRC's regulations for renewal of an operating license for a plant that has remained in continuous operation. NRC staff compared the proposed Palisades restart to a license renewal process during both the April 17th and July 11th public meetings. The NRC also states in the Draft EA that "[t]he activities related to preparation for resumption of power operations are similar to activities associated with license renewal."¹⁰ Furthermore, in the Draft EA's cursory discussion of environmental impacts from the resumption of power operations, the NRC relies on the 2024 License Renewal Generic Environmental Impact Statement (GEIS).¹¹ This is the basis for which the NRC makes conclusions like "continued reactor operations and refurbishment activities at nuclear power plants have had little or no environmental effect."¹² There are numerous other examples of the NRC relying on license renewal documents and processes to support its conclusions with respect to the proposed Palisades restart in the Draft EA.¹³ Clearly the NRC places this restart in the regulatory framework of a license renewal.

If the NRC wishes to proceed under the regulatory framework of a license renewal, it must produce a full environmental impact statement (EIS) or at minimum a supplemental environmental impact statement (SEIS). Under the NRC's own regulations, "[i]ssuance or *renewal* of a full power or design capacity license to operate a nuclear power reactor ... or a combined license" requires an EIS or SEIS.¹⁴ In the absence of an existing regulatory framework for the restart of a

⁸ Draft EA and FONSI, pg. iii.

⁹ NRC, Petition for Rulemaking, Returning a Decommissioning Plant to Operating Status, Docket No. PRM-50-125; NRC-2024-0135, 89 Fed. Reg. 76750 – 76751 (Sep. 19, 2024) (the "Petition for Rulemaking").

¹⁰ Draft EA and FONSI, pg. 3-17 at 3.4.2.

¹¹ *Id.*, pg. 3-58 at 3.11.2.3.

¹² *Id.*

¹³ *See, e.g.*, Draft EA, pg. 3-18 at 3.4.3 (where the NRC refers to the 2024 LR GEIS (NRC 2024-TN10161) when determining that "impacts to surface water use from non-cooling systems during power operations" would be small); *id.*, pg. 3-12 at 3.3.3. (where the NRC used the 2024 LR GEIS (NRC 2024-TN10161) to determine that "there would be no anticipated additional impacts associated with cooling tower drift").

¹⁴ 10 C.F.R. § 51.20(b); 10 C.F.R. § 51.20(b)(2); *See also* 40 C.F.R. § 1502.9 (describing the requirements for a draft EIS and SEIS).

decommissioned nuclear power plant, the NRC has latched onto what it considers the nearest analog—its regulations for license renewal. But the NRC cannot draw that analogy selectively. It cannot arbitrarily cherry-pick certain elements from its regulatory framework for license renewals while ignoring other elements, like the environmental impact statement requirement. The NRC’s reliance on its license renewal regulations here means that, at a minimum, it must follow what those regulations require, including development of an EIS or SEIS. An EA is insufficient.

3. The NRC’s NEPA Scoping Artificially and Improperly Narrowed the Set of Issues Analyzed in the Draft EA and FONSI.

The NRC did not meaningfully engage with significant public commenters to the NEPA scoping process and failed to make in-scope determinations for pertinent issues related to environmental impacts. The Scoping Summary Report merely categorized and reproduced public comments made during scoping.¹⁵ The NRC ignored public comments raising concerns about Palisades’ age, needed repairs and upgrades, and lack of proper upkeep, including crucial issues such as “vessel embrittlement, age-degraded steam generators, and deferred maintenance due to planned plant decommissioning.”¹⁶ In a conclusory manner, the NRC categorized these concerns as outside the scope of the NRC’s review of environmental impacts, even though the safe operation of the plant directly relates to environmental impacts and the risk of an accident that would cause a catastrophic environmental disaster.¹⁷ As a threshold matter, safety issues must be considered when determining the appropriate level of NEPA review. As part of its intensity analysis, the NRC was required to consider “[t]he degree to which the action may adversely affect public health and *safety*.”¹⁸ By its own admission, the NRC did not consider these crucial plant safety issues, such as degradation of steam generator tubes, and instead excluded them from the scope of its NEPA review. This complete lack of engagement on a core issue is concerning and should be reconsidered. The NRC should conduct a more fulsome analysis of the impacts of plant safety on the environment and public health in a comprehensive environmental impact statement.

4. The NRC and the DOE Cannot Rely on Prior Environmental Assessments.

The Draft EA and FONSI repeatedly reference past environmental impact statements including the 2006 SEIS and the 2013 LR GEIS to make conclusory significance determinations.¹⁹ It is important to note that no site-specific EIS, in any form, has been done for Palisades since the 2006 SEIS. NEPA generally allows agencies to rely on existing programmatic environmental documents for five years and only allows this if there are no “substantial new circumstances or information.”²⁰ Agencies may rely on the earlier documents after five years “so long as the agency

¹⁵ See Scoping Summary Report, pgs. 5 – 7; *id.*, Apps. B & C.

¹⁶ Scoping Summary Report, pg. 29 at B.2.6.

¹⁷ *Id.*

¹⁸ 40 C.F.R. § 1501.3(d)(2)(i); *see also* 40 C.F.R. § 1501.3(d)(2) (where the regulation uses mandatory language: “[a]gencies *shall analyze* the intensity of effects considering the following factors ...”).

¹⁹ See, e.g., Draft EA and FONSI, pg. 3-66 (where the NRC states “the proposed Federal actions would not alter the previously determined impacts from decommissioning in the 2006 SEIS (NRC 2006-TN7346); and therefore the environmental impacts of decommissioning of the proposed Federal actions would be NOT SIGNIFICANT”).

²⁰ 42 U.S.C. § 4336b; *see also* 40 C.F.R. § 1508.1(ee), which shows that the 2013 LR GEIS would be categorized as a “programmatic document” because it is an “environmental impact statement or environmental assessment analyzing all or some of the environmental effects of a policy, program, plan, or group of related actions.” The group of related actions here are license renewals.

reevaluates the analysis in the programmatic environmental document and any underlying assumption to ensure reliance on the analysis remains valid.”²¹ Furthermore, the NRC has been directed by the Council on Environmental Quality (“CEQ”) to continue following these regulations despite CEQ’s own recent efforts to rescind its NEPA regulations.²²

Circumstances at Palisades have changed, by definition, as shown by the decision to shut down the plant in 2022, nearly a decade early. Palisades has undergone significant changes since 2006 and requires a new site-specific EIS that addresses the reality of the current status of the site. The 2006 SEIS, 2013 LR GEIS, and 2024 LR GEIS do not address the restarting of a decommissioned and defueled plant, they only address a license renewal. Again, if the NRC wishes to proceed under the guise of a license renewal, then it must produce, at minimum, a site-specific SEIS.²³ However, given that this is a novel and unprecedented situation where Holtec proposes to restart a decommissioned plant, which will have significant impacts on the environment, ELPC believes that the NRC must conduct a full EIS, not simply an SEIS, in order to account for all site-specific changed circumstances.

a. Physical degradation of the plant’s components have changed the baseline safety circumstance.

The physical components of the Palisades plant itself have aged significantly since 2006 without appropriate upgrades. For example, the NRC has identified a large number of steam generator tubes that are damaged and require “further analysis and/or repair.”²⁴ Holtec plans to repair these physical components instead of replacing them. This decision to repair instead of replace falls within this hodgepodge regulatory framework that the NRC is utilizing instead of an in-depth analysis of the potential environmental and public health impacts of replacing tubes instead of repairing them. This is exactly the type of unique problem one would expect to arise when attempting an unprecedented restart of an aged and decommissioned nuclear plant, and it requires a more thorough analysis than an assortment of license amendment requests.

This aging issue is non-trivial—indeed, it is significant—as there are currently at least 701 potential tubes that are candidates for plugging or repair.²⁵ The cracks in these tubes can have significant worst-case scenario outcomes, which are not being adequately studied, and which could have profound environmental and human health impacts. The NRC has noted in a past study that during main steam line break accidents “the presence of even one through-the-wall crack can cascade the accident, leading to a core melt.”²⁶ Given that there are 701 tubes with this potential issue, it only makes logical sense to consider the impacts if such an event were to occur. Considering that these issues are site-specific to Palisades, it is inadequate for the NRC simply to rely on general programmatic documents like the 2024 LR GEIS and make conclusory statements

²¹ 40 C.F.R. § 1502.11(C)(2).

²² See CEQ, Memorandum for Heads of Federal Departments and Agencies, Implementation of the National Environmental Policy Act, Sec. 1 (Feb. 19, 2025).

²³ 10 C.F.R. § 51.20(b)(2).

²⁴ NRC, Preliminary Notification – Region III, Preliminary Results of Steam Generator Inspections at Palisades Nuclear Plant, Accession No. ML24262A092 (Sep. 18, 2024).

²⁵ NRC, Palisades Nuclear Plant – Summary of Conference Call Regarding Steam Generator Tube Inspections, Accession No. ML24267A296 (Oct. 1, 2024).

²⁶ NRC, J. Hopfenfeld, Differing Professional Opinion Regarding NRC Approach to Steam Generator Aging, Accession No. ML003709102, pg. 8 (Sep. 25, 1998).

like, as “... long as a previous SAMA analysis has been performed, SAMAs do not warrant further plant-specific analysis.”²⁷ The last time the NRC conducted site-specific severe accident mitigation alternatives at Palisades was in the 2006 SEIS.²⁸ Considering these safety issues concerning the steam generator tubes have been discovered in the meantime and strongly implicate “substantial new circumstances or information,” the NRC’s NEPA implementing regulations require that it conduct a full EIS, or at minimum an SEIS, to study the potential environmental and public health impacts of a severe accident.

b. The shift in ownership of Palisades to an inexperienced company increases the risk of accident and constitutes a change in circumstance.

Another key change in circumstances at Palisades since 2006 is the shift in ownership of the plant. Entergy transferred its license to Holtec for the purpose of decommissioning the plant because Holtec specializes in decommissioning. Holtec has never operated a nuclear plant and that is beginning to show. For example, in the latest restart inspection report, the NRC identified five personnel incidents in July and August of 2024 that were part of “an adverse trend in human performance incidents.”²⁹ The nature and severity of these incidents are unknown and the NRC simply stated that “[t]he inspectors determined that the corrective actions were appropriate to the circumstances.”³⁰ This is another area in which a new set of regulations would smooth out this process to make it more detailed and transparent. The petition for rulemaking in front of the NRC specifically refers to personnel qualifications as a necessary component to consider when restarting a plant.³¹ If the owner of a site has changed, as is the case with Palisades, then the NRC should create a standardized system to ensure the new owner’s personnel are adequately prepared and qualified to operate a nuclear plant. This is especially true for a circumstance here, where the new owner, Holtec, has never operated a nuclear plant.

c. The altered physical environment surrounding Palisades and the increase in physical climate risks constitutes a change in circumstance.

There have also been major shifts in the surrounding physical environment and potential climate impacts at Palisades since the 2006 SEIS. Palisades sits right on the coast of Lake Michigan which presents unique physical climate risks that need to be studied in a full EIS. For example, recent climate data and studies show that, as climate change progresses, the water level in the Great Lakes will experience more extreme variation, thus resulting in times when lake levels are much higher than they are now.³² Multiple studies have shown that erosion, heavy precipitation events, flooding, and severe weather have increased over time and will continue to increase in and around Palisades on the Great Lakes.³³ Generally erosion along the coast of Lake Michigan is

²⁷ Draft EA and FONSI, pg. 3-64 at 3.14.

²⁸ *Id.*

²⁹ NRC, Palisades Nuclear Plant – Restart Inspection Report, pg. 5, Accession No. ML25024A083 (Jan. 24, 2025).

³⁰ *Id.*

³¹ Petition for Rulemaking, 89 Fed. Reg. at 76751.

³² Frank Seglenieks, André Temgoua, Future water levels of the Great Lakes under 1.5 °C to 3 °C warmer climates, *Journal of Great Lakes Research*, Vol. 48, Iss. 4, pgs. 865 – 875 (2022), ISSN 0380-1330, available at <https://doi.org/10.1016/j.jglr.2022.05.012>.

³³ Great Lakes Integrated Sciences and Assessment (GLISA), Climate Hazards and Impacts In The Great Lakes (Oct., 2023), available at <https://glisa.umich.edu/wp-content/uploads/2023/10/Climate-Hazards->

accelerating.³⁴ Specific to Palisades, the Michigan Department of Environment, Great Lakes, and Energy (EGLE) has identified the shoreline on which Palisades sits as being at a high risk of degradation.³⁵ The NRC must take this information into account and study how these physical climate risks, like soil erosion, serious floods, and severe weather, would impact an aging nuclear plant like Palisades located on the shoreline of Lake Michigan. EGLE recognizes the potential impacts of climate change on the coast of the Great Lakes and has resources dedicated to climate resilience and adaptation with tools specifically designed for climate hazard and mitigation planning.³⁶ The NRC already references EGLE resources throughout the Draft EA; for example, the NRC refers to the State of the Great Lakes 2021 Report when discussing the potential impacts of the project on aquatic ecology.³⁷ That report further discusses the potential dangers of climate-induced extreme weather and flooding while also advocating for robust investments in climate adaptation.³⁸ As the NRC recognizes, EGLE has relevant expertise; yet, the NRC has chosen not to consult with EGLE or to consider its resources on climate adaptation and the environmental impacts of climate change on Lake Michigan, the shoreline, and the Palisades site. Moving forward, the NRC should coordinate with EGLE in order to truly understand these impacts and put an adaptation plan in place.

These steps are even more pressing considering the tangible consequences that severe weather and flooding have had on nuclear plants recently. On August 10, 2020, “severe thunderstorms and high winds associated with a derecho caused a grid perturbation that resulted in an automatic start of both emergency diesel generators (EDGs) at the Duane Arnold Nuclear Power Plant operated by Duane Arnold Energy Center (DAEC).”³⁹ Fortunately, this event did not result in any major damage, but it did trigger a reactor trip which degraded the safety margin of the plant.⁴⁰ Another troubling event took place at an Arkansas plant where a firewater system leak exposed weaknesses in “flood barrier effectiveness.”⁴¹ The Arkansas Nuclear One plant where this event took place is also run by Entergy, the former company operating Palisades. It was also built

[Great_Lakes_GLISA_October_2023.pdf](#); see also GLISA, Fact Sheet: Climate Change in the Great Lakes Region (Feb. 2, 2019), available at <https://glisa.umich.edu/wp-content/uploads/2021/04/GLISA-2-Pager.pdf>.

³⁴ See Hazem U. Abdelhady, *et. al.*, Shoreline responses to rapid water level increases in Lake Michigan, *Geomorphology*, Vol. 475 (2025), 109639, ISSN 0169-555X, available at <https://doi.org/10.1016/j.geomorph.2025.109639>.

³⁵ EGLE, *Parcels in High Risk Erosion Areas of Covert Township, Van Buren County*, pg. 1 (Aug. 19, 1996), available at <https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Programs/WRD/Shoreland/HREA-Townships/Covert-Twp-HREA.pdf?rev=0ebe5e81e1744ac99bd06a1cf06167ce&hash=77DE2B98AD7911A4B70848D1F94F1040>.

³⁶ EGLE, *Climate Resilience and Adaptation*, available at <https://www.michigan.gov/egle/outreach/catalyst-communities/aa-resilience>.

³⁷ Draft EA and FONSI, pg. 3-36 at 3.7.1.2; see also pgs. 6-10,11 (where the NRC lists all of its references to EGLE documents.)

³⁸ EGLE, *Michigan State of the Great Lakes 2021 Report*, pg. 5, (2022) available at <https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Reports/OGL/State-of-the-Great-Lakes/Report-2021.pdf?rev=b5f23b9ec83c4fccbd0c74310922dc36>.

³⁹ NRC, *Determination of The Need For Prompt Regulatory Actions In Response To Insights Gleaned From Duane Arnold Nuclear Power Plant*, Accession No. ML20315A117 (Nov. 25, 2020).

⁴⁰ *Id.*, Sec. V(c).

⁴¹ NRC, *Arkansas Nuclear One – NRC Augmented Inspection Team Report*, Accession No. ML13158A242 (Jun. 7, 2013).

around the same time and was issued a license renewal in 2001, just a few years before Palisades.⁴² Studies specific to the Great Lakes region show that these types of severe weather and extenuating circumstances will become more common; for example, GLISA has found that “[w]armer temperatures and additional moisture increase the potential for severe weather (e.g., tornadoes and hail) and allow for a longer severe weather season [in the Great Lakes].”⁴³ Given the proximity to Lake Michigan and the increased risk of flooding as climate change progresses, the NRC should include an analysis of the potential environmental and public health impacts that would arise if a severe flooding or extreme weather event were to occur. This would provide the appropriate information for Holtec to make adaptive changes to Palisades.

d. Holtec’s recently announced plan to build small modular reactors on the Palisades site constitutes a change in circumstance.

Lastly, there have been significant changes in Holtec’s plans for the Palisades site, including very recently since the NRC’s issuance of the Draft EA and FONSI. On February 25, 2025, Holtec announced that it has signed a deal with Hyundai E&C to build small modular nuclear reactors (SMRs) at the Palisades site.⁴⁴ In the Draft EA, under the cumulative effects section, the NRC recognized that the planned onsite construction of multiple SMRs could have “the potential to impact nonradiological human health.”⁴⁵ The agency then made the conclusory statement that “the incremental effects of the proposed Federal actions related to nonradiological human health when added to the effects of other past, present, and reasonably foreseeable projects *would not have significant cumulative effects*.”⁴⁶ Given that this “reasonably foreseeable project” has now become more certain, with Holtec having inked this deal, the circumstances have changed once again. The NRC must study the associated environmental and public health impacts of the planned SMRs as it has become clear that such action will be taken by Holtec subsequent to a grant of an operating license for the existing Palisades plant.

5. The Purpose and Need of the Proposed Action Artificially Caps the Energy Production Goals to Baseload Power and Restricts the Range of Alternatives.

The Draft EA states that the purpose and need of the proposed action is to “provide an option that allows for *baseload* clean energy power generation capability within the term of the Palisades’ RFOI to meet current system generating needs.”⁴⁷ This characterization of the energy needed as baseload power creates the presumption that nuclear energy is the only viable path forward because renewable energy sources such as wind and solar are more intermittent than nuclear power. This, however, fails to consider the current technology landscape for renewable energy production. Resources like wind and solar are often combined with energy storage systems which effectively operationalize them as a form of baseload power. The DOE has already touted the excellent performance of these systems in the recent Solar and Wind Grid Services and

⁴² NRC, Landing Page: Arkansas Nuclear One, Unit 1, available at <https://www.nrc.gov/info-finder/reactors/ano1.html>.

⁴³ See footnote 33.

⁴⁴ See Holtec International, “Holtec Launches ‘Mission 2030’ to Deploy America’s First SMR-300s at the Palisades Site in Michigan” (Feb. 25, 2025), available at <https://holtecinternational.com/2025/02/25/hh-40-05/>.

⁴⁵ Draft EA and FONSI, pg. 3-59 at 3.11.2.4.

⁴⁶ *Id.*

⁴⁷ *Id.*, pg. 1-3.

Reliability Demonstration, which has shown “the reliable operation of power systems that have up to 100% of their power contribution coming from solar, wind, and battery storage resources.”⁴⁸ While nuclear power will likely form a portion of energy portfolios moving forward, it is necessary for the NRC and the DOE to consider the full range of alternatives to produce clean power in light of the current technological landscape.

The NRC further contends that building other forms of renewables would have greater environmental impacts related to land disturbance compared to restarting Palisades.⁴⁹ The NRC then makes another conclusory assertion, without analysis, that “[d]epending on the location or locations ultimately selected for the new facilities, the environmental impacts could potentially be SIGNIFICANT. In contrast, the potential environmental impacts from proposed Federal actions to resume operation of the existing Palisades reactor are known to be NOT SIGNIFICANT.”⁵⁰ This short statement does not address the future land disturbances associated with building out SMRs at the Palisades site, but it also fails to meet the regulatory standard required for an alternatives analysis.

ELPC believes that the NRC is required to conduct a full EIS, and a robust alternatives analysis is the core of that document.⁵¹ In the alternative however, an EA still requires a thorough alternatives analysis under the NRC’s NEPA regulations.⁵² The conclusory assertions made by the NRC, in a single paragraph in the Draft EA, even fall short of the “brief discussion” standard required for an EA.⁵³ An alternative is deemed to be reasonable if it is objectively feasible and reasonable in relation to the agency’s objective.⁵⁴ In deciding to issue an EA instead of an EIS the NRC was required to take a “hard look” at the project and provide “sufficient discussion of the relevant issues and opposing viewpoints [and make itself] fully informed”.⁵⁵ The NRC has not taken a hard look at the Palisades restart by failing to make itself fully informed of the full range of alternatives available to achieve the purpose of the project. Instead, the agency’s objective in the Draft EA has been cabined to producing traditional baseload power instead of renewable power in general. This, in turn, has allowed the NRC to argue that the only path forward which is reasonable in relation to that objective or purpose is nuclear generation. This is a false premise and contrary to the underlying statute that grants funding for this project.

In an environmental scoping meeting on July 11, 2024, members of the NRC and an environmental protection specialist from the DOE Loan Program Office (LPO) gave a presentation

⁴⁸ See DOE, Solar and Wind Grid Services and Reliability Demonstration, available at <https://www.energy.gov/eere/solar/solar-and-wind-grid-services-and-reliability-demonstration-funding-program>; see also Energy Information Administration (EIA), In-Brief Analysis: Solar, battery storage to lead new U.S. generating capacity additions in 2025, (Feb. 24, 2025) available at <https://www.eia.gov/todayinenergy/detail.php?id=64586> (detailing the demonstrated success and projected growth of solar combined with energy storage).

⁴⁹ Draft EA and FONSI, pg. 4-6.

⁵⁰ *Id.*

⁵¹ 40 C.F.R. § 1502.14.

⁵² 40 C.F.R. § 1501.5(c)(ii); see also 42 U.S.C. § 4332(H).

⁵³ See 40 C.F.R. § 1508.9(b).

⁵⁴ See *City of Alexandria v. Slater*, 198 F.3d 862, 867 (D.C. Cir. 1999); see also 43 C.F.R. § 46.420(b) defining “reasonable alternatives” as alternatives “that are technically and economically practical or feasible and meet the purpose and need of the proposed action.”

⁵⁵ *Myersville Citizens for a Rural Cmty., Inc. v. FERC*, 783 F.3d 1301, 1325 (D.C. Cir. 2015).

on the loan guarantee program.⁵⁶ The presentation explained that funding for this project would be coming from the Title 17 Clean Energy Financing Program.⁵⁷ This program was established pursuant to Title 17 of the Energy Policy Act of 2005.⁵⁸ That statute allows for funding of projects that “avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases.”⁵⁹ Amongst the categories, both “advanced nuclear energy facilities” and “renewable energy systems” are mentioned.⁶⁰ The purpose of the underlying statute, which provides the funding for projects, should guide the purpose of the proposed projects themselves. Palisades is an aging nuclear plant far past its time to be considered advanced and, at the same time, other forms of renewable energy systems fall within the categories presented by the underlying statute. Furthermore, the LPO stated in their presentation that Title 17 projects are meant to “retool, repower, repurpose, *or replace* Energy Infrastructure that has ceased operations.”⁶¹ Given the broad range of possibilities that these funds could be used for, including replacing the energy output with other forms of renewables, like solar and wind generation facilities, the NRC should realign the purpose and need of the project to more closely reflect the underlying statute that is providing the funding here. This approach will allow the NRC to analyze the full range of alternatives available to provide energy generation while reducing anthropogenic emissions.

Conclusion

This Draft EA and FONSI relies on an assortment of insufficient, outdated, and inapplicable environmental impact statements and therefore fails to meet the NRC’s own regulatory requirements and statutory directive pursuant to NEPA. The Draft EA and FONSI seeks to shoehorn a complex, unique, and unprecedented proposed action into an incompatible regulatory framework. The NRC should take a step back and begin a new rulemaking that can adequately account for the unique situation at hand. The agency should then conduct a full environmental impact statement to understand the potential environmental and public health impacts of restarting an aged and decommissioned nuclear plant. ELPC looks forward to reviewing and commenting on a full draft EIS.

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⁵⁶ NRC, Environmental Scoping Meeting: Potential Reauthorization of Power Operations – Palisades Nuclear Plant, Accession No. ML24193A025 (Jul. 11, 2024) (“Environmental Scoping Meeting”), available at <https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML24193A025>.

⁵⁷ *Id.*, slide 10.

⁵⁸ 42 U.S.C. § 16511.

⁵⁹ *Id.* at § 16513(a)(1).

⁶⁰ *Id.* at § 16513(b).

⁶¹ Environmental Scoping Meeting, slide 10.