

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD PANEL

Before the Licensing Board:

Stefan R. Wolfe, Chair
Dr. Sue H. Abreu
Dr. Gary S. Arnold

In the Matter of

NEXTERA ENERGY DUANE ARNOLD, LLC

(Duane Arnold Energy Center)

Docket No. 50-331-LA

ASLBP No. 26-994-02-LA-BD01

September 24, 2026

MEMORANDUM AND ORDER
(Denying Request for Hearing)

I. INTRODUCTION

In this proceeding concerning three license amendment requests (LARs) required to effectuate NextEra Energy Duane Arnold, LLC's (NextEra's or Applicant's) proposal to reverse the decommissioning of the Duane Arnold Energy Center (DAEC), Physicians for Social Responsibility Iowa (PSR or Petitioner) petitions for leave to intervene and requests an adjudicatory hearing.¹

In 2020, NextEra notified the NRC that DAEC had permanently ceased operations and later certified removal of fuel under 10 C.F.R. § 50.82.² NextEra now seeks NRC authorization to

¹ See Petition to Intervene and Request for Adjudicatory Hearing (Jun. 22, 2026) [Hereinafter Petition].

² See Letter from D. Curtland, NextEra, to NRC Document Control Desk, "Certification of Permanent Cessation of Power Operations" (Aug. 27, 2020) (ADAMS Accession No. ML20240A067); Letter from D. Curtland, NextEra, to NRC Document Control Desk, "Certification of Permanent Removal of Fuel from the Reactor Vessel for [DAEC]" (Oct. 12, 2020) (ADAMS Accession No. ML20286A317).

resume power operations at DAEC through four interconnected actions: three LARs and one exemption request.³ We will refer to this process as a whole as seeking a “restart” of DAEC.

PSR filed its Petition in response to a hearing opportunity notice that appeared in the Federal Register on April 22, 2026, and that defined the scope of this proceeding as “petitions for leave to intervene related to the three LARs.”⁴ The Petition presents five contentions, none of which raise radiological safety concerns associated with the restart.⁵ Rather, PSR raises four contentions based on alleged noncompliance with the National Environmental Policy Act (NEPA) and one contention that alleges the NRC’s proposed authorization of the restart is not authorized by law or NRC regulations. The NRC Staff (Staff) and NextEra both filed Answers to the Petition arguing that none of the contentions are admissible, to which PSR timely replied.⁶

³ See Letter from R. Coffey, NextEra, to NRC Document Control Desk, “[DAEC], Request for Exemption from Certain Termination of License Requirements of 10 C.F.R. § 50.82” (Jan. 23, 2025) (ADAMS Accession No. ML25023A270) [Hereinafter ER Letter]; Letter from K. Mack, NextEra, to NRC Document Control Desk (Nov. 20, 2025) (ADAMS Accession No. ML25324A300) [Hereinafter LAR #1]; Letter from K. Mack, NextEra, to NRC Document Control Desk (Dec. 17, 2025); (ADAMS Accession No. ML25363A083; Letter from K. Mack, NextEra, to NRC Document Control Desk (Feb. 11, 2026) (ADAMS Accession No. ML26048A349; Letter from K. Mack, NextEra, to NRC Document Control Desk (Jan. 30, 2026) (ADAMS Accession No. ML26033A048).

⁴ [NextEra]; [DAEC]; Applications for Amendments to Renewed Facility License Involving Proposed No Significant Hazards Consideration Determination and Containing Safeguards Information and Order Imposing Procedures for Access to Safeguards Information, 91 Fed. Reg. 21,514 (Apr. 22, 2026) [Hereinafter Hearing Opportunity Notice].

⁵ Nor does the Petition raise any contention regarding DAEC’s exemption request. In Entergy Nuclear Vt. Yankee, LLC and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), CLI-16-12, 83 NRC 542, 553 (2016), the Commission determined that an exemption request that is intertwined with a licensing amendment request may be subject to a hearing request. See also Beyond Nuclear et al. v. Holtec Decommissioning Int’l LLC, Case No. 25-cv-1463, Dkt No. 52, slip op. at 13 (W.D. Mich. June 26, 2026) (determining that the court lacked subject matter jurisdiction under the Hobbs Act because under Vermont Yankee petitioner could have challenged an exemption request at the administrative level).

⁶ [Staff] Answer Opposing [PSR’s] [Petition] (Jul. 17, 2026) [Hereinafter Staff Answer]; [NextEra’s] Answer to [PSR’s] [Petition] (Jul. 17, 2026) [Hereinafter NextEra Answer]; [PSR’s] Combined Reply in Support of [Petition] (Jul. 24, 2026) [Hereinafter Reply].

II. LEGAL STANDARDS

A successful hearing request requires a petitioner to demonstrate standing and to state one or more admissible contentions.

PSR bears the burden of providing facts sufficient to establish its standing.⁷ There are essentially two steps. First, PSR must meet the regulatory filing requirements for standing. Second, as an association, PSR must demonstrate compliance with the standards for organizational or representational standing, which for the latter requires showing that at least one of its individual members has standing.

The NRC's rules of practice establish the regulatory requirements for the Petition to establish standing:

- (i) The name, address and telephone number of the requestor or petitioner;
- (ii) The nature of the requestor's/petitioner's right under the [Atomic Energy] Act [(AEA)] to be made a party to the proceeding;
- (iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding; and
- (iv) The possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest.⁸

While the first requirement is relatively straightforward, the remaining three require the Board to assess whether the petitioner has an "interest [that] may be affected by the proceeding" allowing it to intervene under AEA section 189a.⁹ In this regard, the Commission requires petitioners to allege a particularized injury that is within the zone of interests protected

⁷ PPL Bell Bend, LLC (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 139 (2010). Even where uncontested, the Board has an obligation to ensure a petitioner has standing. See 10 C.F.R. § 2.309(d)(2) ("In ruling on a request for hearing or petition for leave to intervene, [the Board] must determine . . . whether the petitioner has an interest affected by the proceeding . . .").

⁸ 10 C.F.R. § 2.309(d)(1).

⁹ 42 U.S.C. § 2239(a)(1)(A).

by the statute governing the proceeding, fairly traceable to the challenged action, and likely to be redressed by a favorable decision.¹⁰

PSR must also demonstrate either representational or organizational standing.¹¹ Representational standing involves alleged harm to an organization's members. PSR may represent the interests of its members using representational standing if it can (1) show that the interests it seeks to protect are germane to its own purpose; (2) identify at least one member who qualifies for standing in his or her own right; (3) show that it is authorized by that member to request a hearing on his or her behalf; and (4) show that neither the claim asserted nor the relief requested requires an individual member's participation in the organization's legal action.¹²

While standing for an individual member may be determined on a case-by-case basis, "in certain circumstances . . . we presume that a petitioner has standing to intervene if the petitioner lives within, or otherwise has frequent contacts with, the zone of possible harm from the nuclear reactor."¹³ This "proximity presumption" rests on the Commission's finding "that persons living within the roughly 50-mile radius of the facility face a realistic threat of harm if a release from the facility of radioactive material were to occur."¹⁴

¹⁰ Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), CLI-98-21, 48 NRC 185, 195 (1998).

¹¹ Lujan v. Def. of Wildlife, 504 U.S. 555, 561 (1992). As we find PSR has representational standing, we do not address whether they would also have organizational standing.

¹² FirstEnergy Nuclear Operating Co. and FirstEnergy Nuclear Generation, LLC (Beaver Valley Power Station, Units 1 and 2; Davis-Besse Nuclear Power Station, Unit 1; Perry Nuclear Power Plant, Unit 1), CLI-20-5, 91 NRC 214, 219–220 (2020); see also Consumers Energy Co., Nuclear Management Co., LLC, Entergy Nuclear Palisades, LLC, and Entergy Nuclear Operations, Inc. (Palisades Nuclear Plant), CLI-07-18, 65 NRC 399, 409 (2007).

¹³ EI Paso Elec. Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-20-7, 92 NRC 225, 231 (2020) (citations omitted).

¹⁴ Id. at 231 n.27 (citation omitted).

To be admissible, a contention must meet the six-part test established in 10 C.F.R. § 2.309(f)(1). A petitioner must “provide a specific statement of the issue of law or fact to be raised or controverted” as well as a “brief explanation of the basis for the contention.”¹⁵ A petitioner is also required to demonstrate that the issue raised is “within the scope of the proceeding” and that it is “material to the findings the NRC must make to support the action that is involved in the proceeding.”¹⁶ Additionally, the claims must be supported with “a concise statement of . . . alleged facts or expert opinions” with references to sources and documents, as well as sufficient information “to show that a genuine dispute exists with the [applicant] on a material issue of law or fact.”¹⁷

III. STANDING

No participant contests PSR’s standing to participate in this proceeding.¹⁸ The Petition includes declarations from four of PSR’s members, all of whom live within 50 miles of DAEC, and all of whom authorized PSR to represent their interests. Applying the proximity presumption,¹⁹ we find that each of the individuals identified in the Petition has standing.

PSR states its purpose is “to protect human life from the gravest threats to health and survival[.]” and notes that nuclear power is dangerous to human health.²⁰ This adequately

¹⁵ 10 C.F.R. § 2.309(f)(1)(i)–(ii).

¹⁶ Id. § 2.309(f)(1)(iii)–(iv).

¹⁷ Id. § 2.309(f)(1)(v)–(vi).

¹⁸ The NRC Staff concluded that PSR has standing. Staff Answer at 6. NextEra noted that the proximity presumption “is Commission policy, not a statutory mandate” but ultimately took “no position” on whether, under the presumption, PSR has standing. NextEra Answer at n. 6.

¹⁹ Licensing Boards have recently been called to determine whether the proximity presumption should be applied in reactor restart proceedings. See Holtec Decommissioning Int’l, LLC and Holtec Palisades, LLC (Palisades Nuclear Plant), LBP-25-4, 101 NRC 133, 153–56 (2025). The Commission has not yet weighed in on the appropriateness of such an application.

²⁰ Petition at 3.

demonstrates that the interests PSR seeks to protect are germane to its own purpose. The Board further finds that PSR has established representational standing in this case.

IV. CONTENTION ADMISSIBILITY

A. Contention 3 fails to present a genuine dispute under 10 C.F.R. § 2.309(f)(1)(vi).

We begin by addressing Contention 3, Petitioner's only non-NEPA contention. PSR asserts that "there is no dedicated regulatory procedure for restarting a closed reactor[;] the NRC has no authority to approve the license amendments requested by NextEra."²¹ In their respective Answers, both NextEra and the Staff note that a recent decision by the Commission in the Palisades reactor restart proceeding presented an identical issue and decided this issue against that petitioner, and that decision is binding precedent that this Board is obligated to follow.²² In Reply and at oral argument, PSR concedes that this Board's hands are tied by the Commission's prior decision, but indicated that it nonetheless seeks to preserve the issue for appeal.²³

We agree with all participants that the admissibility of Contention 3 is foreclosed by Commission precedent. Accordingly, Contention 3 fails to present a genuine dispute and is therefore inadmissible.²⁴

B. PSR fails to show the remaining environmental contentions are admissible.

We next turn to PSR's four NEPA contentions. NEPA places an obligation on federal agencies to consider the environmental impact of certain federal actions. In the hearing

²¹ Id. at 25.

²² Staff Answer at 31–32 (citing Holtec Decommissioning International, LLC and Holtec Palisades, LLC (Palisades Nuclear Plant), CLI-26-7, 103 NRC __, __ (slip op. at 22)); NextEra Answer at 35 (same).

²³ Reply at 11; Tr. at 26.

²⁴ 10 C.F.R. § 2.309(f)(1)(iv).

opportunity notice the NRC stated that it would conduct an environmental review and document its findings in accordance with NEPA and the Commission's Part 51 environmental regulations.²⁵ Specifically the agency committed to performing an environmental assessment "to determine whether an environmental impact statement is necessary or if instead a finding of no significant impact is warranted" ²⁶

Under NEPA, federal agencies "shall" create procedures that allow the sponsor of a project to prepare an environmental document under the agency's supervision which the agency then independently reviews.²⁷ And, while the NRC has not enacted regulations specifically implementing a provision that would allow or require an applicant who seeks to restart a closed plant to submit an Environmental Report (ER),²⁸ that is nonetheless what broadly happened here. On November 10, 2025, NextEra submitted an ER on the proposed restart.²⁹ Then, over the next few months, NextEra submitted the three LARs that are before us. The first request was submitted on November 20, 2025. That LAR, which seeks to revise the facility license to support power operations, states that the ER was submitted to the NRC "to evaluate the

²⁵ See Hearing Opportunity Notice at 21,515.

²⁶ Id. After the Petition was filed and fully briefed, the NRC Staff publicly provided a copy of a draft environmental assessment that found no significant impact from the proposed restart. See NRC Staff Notification Regarding Issuance of Draft Environmental Assessment and Draft Finding of No Significant Impact (July 30, 2026); NRC, Draft Environmental Assessment and Finding of No Significant Impact for the [DAEC] Reauthorization of Power Operations Project, Draft Report for Comment (July 27, 2026) (ADAMS Accession No. ML26159A001).

²⁷ See 42 U.S.C. § 4336a(f).

²⁸ Compare 10 C.F.R. § 51.41 (allowing the Commission to seek environmental review information in conjunction with a license amendment application), with id. § 51.45(a) (listing Part 51 provisions requiring an ER to be provided for particular types of licensing applications and excluding licensing applications associated with restarting a closed power reactor facility).

²⁹ Letter from K. Mack, NextEra, to NRC Document Control Desk, encl. (Nov. 10, 2025) (ADAMS Accession No. ML25315A003) [Hereinafter ER]. NextEra states that it prepared the ER at the request of the NRC. NextEra Answer at 7. PSR disputes that claim. Reply at 4–5. It is not necessary for this Board to resolve that dispute.

potential environmental effects of restart activities, including this proposed license amendment.”³⁰

Of course, an applicant-prepared ER is not an agency-prepared environmental document. However, the Commission’s contention admissibility rules are structured so that potential contentions are identified and addressed at the earliest opportunity. Accordingly, section 2.309(f) requires a petitioner to raise NEPA contentions in response to the applicant’s ER rather than waiting until the Staff issues its environmental document (i.e., an environmental assessment (EA) or environmental impact statement (EIS)). This process allows licensing boards and the Staff to consider the issues presented by a petitioner’s NEPA contention at the earliest opportunity (and if the Staff chooses, to remedy them in its EA or EIS).

We begin our analysis of PSR’s remaining contentions by addressing some issues that cut across all four NEPA contentions before turning to each individual contention.

1. Whether Petitioner has met its obligation to demonstrate that its NEPA contentions are material.

We begin by considering whether PSR’s NEPA contentions are material to the proceeding.³¹ The ER considers numerous possible environmental impacts from the restart of DAEC: from human health and socioeconomic concerns to air and water quality.³² For each, the ER concludes that the restart would not have a significant impact on the environment.³³ PSR does not challenge any of these specific impact findings. Thus, while the Petitioner’s four contentions take issue with the ER as discussed below, the Petition never asserts that, had these issues been addressed differently, the findings of the ER would change.

³⁰ LAR #1, encl. 1, at 64.

³¹ See 10 C.F.R. § 2.309(f)(1)(iv).

³² ER § 5.3.

³³ Id.

This is problematic. As part of contention admissibility, PSR must demonstrate that its contentions are “material to the findings the NRC must make to support the action that is involved in the proceeding.”³⁴ An alleged error that does not arguably affect the agency’s findings is an error that is not material.³⁵ “NEPA requires consideration of environmental impacts only if such consideration would result in information on which the agency could act.”³⁶

In support of its claim that its NEPA contentions are material, for each of its contentions PSR argues that the ER does not meet one or more standards under NEPA.³⁷ This, however, confuses the alleged *existence* of the alleged error with the *gravity* of that error.³⁸ Errors which will not plausibly affect the NRC findings are definitionally not material.³⁹ Were it otherwise we

³⁴ 10 C.F.R. § 2.309(f)(1)(iv).

³⁵ Id.; Powertech (USA) Inc. (Dewey-Burdock In Situ Uranium Recovery Facility), LBP-26-8, 103 NRC __, __ (slip op. at 44) (Sep. 10, 2026) (Petitioner’s NEPA contention must show that “the additional [analysis] has the possibility of changing the [NRC’s] analysis or ultimate conclusion.”); United States v. Coal. for Buzzards Bay, 644 F.3d 26, 37 (1st Cir. 2011) (“Assuredly, NEPA violations are subject to harmless error review.”). Contentions of omission, which necessarily state that *required* material is missing, are likely to be material because they allege that the document at issue is incomplete, thus raising whether the agency’s findings are erroneous. Pa’ina Hawaii, LLC (Material License Application), LBP-06-12, 63 NRC 403, 414 (2006) (“[A] contention of omission . . . necessarily presents a genuine dispute . . . on a material issue in compliance with 10 C.F.R. § 2.309(f)(1)(vi).”).

³⁶ Seven Cnty. Infrastructure Coal. v. Eagle Cnty., 605 U.S. 168, 200 (Sotomayor, J., concurring).

³⁷ See, e.g., Petition at 17 (“Pursuant to its NEPA obligation the NRC must determine if the purpose and need statement [in the ER] complies with NEPA requirements . . .”).

³⁸ See 10 C.F.R. § 2.309(f)(1)(iv).

³⁹ The Supreme Court recently stated that even when an environmental review does “fall[] short in some respects, that deficiency may not necessarily require” vacatur of an agency’s approval of a project “absent reason to believe that the agency might disapprove the project if it added more.” Seven Cnty., 605 U.S. at 185. While at the agency level, the question is one of materiality, upon judicial review, the question is more one of harmless error. See Oglala Sioux Tribe v. NRC, 45 F.4th 291, 299–300 (D.C. Cir. 2022) (“We need not decide the merits of this claim, however, because even assuming the Commission erred in omitting a formal scoping analysis, such error was harmless.”).

would be ordering hearings to engage in the “Kafkaesque” task of correcting non-material discrepancies.⁴⁰

For example, Contention 2 seeks to require the NRC to consider additional alternatives to the proposed agency action.⁴¹ However, the ER finds that the proposed agency action will result in no significant environmental impacts,⁴² and NEPA only requires an agency to consider alternatives to federal projects which “significantly affect[] the quality of the human environment[.]”⁴³ This requirement for alternatives presupposes that there is some environmental impact that can be avoided or mitigated by the consideration of alternatives.⁴⁴

Here, because the Petition never disputes any of the proposed findings of no significant impact, nor does Petitioner adequately allege that the ER is missing required information, we are left with contentions that allege process errors, but without alleging that correcting the errors could plausibly alter either (a) the NRC’s findings of no significant impact; or (b) the NRC’s proposed agency action. Accordingly, Petitioner has not met its obligation to demonstrate that its NEPA contentions are material. Thus contentions 1, 2, 4 and 5 cannot be admitted due to their failure to satisfy section 2.309(f)(1)(iv). Nonetheless, we consider these contentions individually after first addressing one additional cross-cutting issue.

⁴⁰ Seven Cnty., 605 U.S. at 184 (NEPA’s expansion “has led to more agency analysis of separate projects, more consideration of attenuated effects, more exploration of alternatives to proposed agency action, more speculation and consultation and estimation and litigation. Delay upon delay, so much so that the process sometimes seems to border on the Kafkaesque.”).

⁴¹ Petition at 20.

⁴² ER at Table 5.0-1.

⁴³ 42 U.S.C. § 4332(C).

⁴⁴ Id.

2. Whether Petitioner's NEPA contentions are within scope.

In 2010, the NRC issued a renewed facility operating license for DAEC, which extended the license until February 21, 2034.⁴⁵ That renewed license cabins the Petitioner's contentions, as the LARs that are the subject of this proceeding would amend DAEC's license only through its expiration in 2034. Accordingly, contentions that raise concerns that will only transpire if the license is renewed beyond 2034 (such as climate change in the 2040s-2060s) are not within the scope of this proceeding.⁴⁶

Petitioner proffers that NextEra has publicly stated it intends to seek a renewal of DAEC's license at some point.⁴⁷ Should NextEra seek to extend DAEC's license beyond 2034, that request would be the subject of a different proceeding for which there would be a separate hearing opportunity.⁴⁸ Accordingly, those parts of Petitioner's contentions that allege problems beyond the expiration of DAEC's current license in 2034 are outside the scope of this proceeding and are inadmissible.⁴⁹

For those parts of Petitioner's NEPA contentions that raise concerns about the current licensing period, except as specifically stated otherwise, we find the contentions to be within scope. However, the path to that determination is unusual.

In its Petition, PSR argued that each of its NEPA contentions were properly within the scope of the proceeding.⁵⁰ In answering that Petition, NextEra noted that no specific regulation

⁴⁵ Letter from Brian K. Harris, NRC, to Christopher Costanzo, NEDA, (Dec. 16, 2010) (ADAMS Accession No. ML102930524).

⁴⁶ See 10 C.F.R. § 2.309(f)(1)(iii).

⁴⁷ Petition at 38.

⁴⁸ 42 U.S.C. § 2239(a)(1)(A).

⁴⁹ See, e.g., Petition at 37–38 (raising changes in the climate between 2036 and 2065).

⁵⁰ Id. at 16, 20, 32, 41.

required it to submit an ER in this case and at least implied that the regulatory requirements for an ER were therefore not directly applicable.⁵¹ At oral argument, based on how it understood the Answers, PSR reversed course and argued instead that it believed its NEPA contentions were not within the scope of the proceeding.⁵² NextEra and the Staff then removed any ambiguity in their positions and firmly stated that they each believed the Petitioner's NEPA contentions were properly within the scope of the proceeding (but inadmissible for other reasons).⁵³

For most NRC permitting and licensing decisions, the NRC's rules require an applicant to submit an ER as part of the application process.⁵⁴ However, no prescribed procedure for restarting a defueled reactor exists in NRC regulations, and no specific regulation requires an applicant in such a case to prepare an ER.⁵⁵ Nonetheless, NextEra prepared and submitted an ER to the NRC. The ER covers DAEC's restart as a whole, to include the three LARs.⁵⁶ Indeed, the first LAR submitted by NextEra references the ER and states that the ER was submitted to the NRC "to evaluate the potential environmental effects of restart activities, including this proposed license amendment."⁵⁷

⁵¹ See, e.g., NextEra Answer at 14.

⁵² Tr. at 11, 86–87.

⁵³ Id. at 11–15.

⁵⁴ See 10 C.F.R. § 51.41.

⁵⁵ At oral argument, the Staff noted that NRC regulations require all license amendment requests to address the environmental impact of the request. Tr. at 19 (citing 10 C.F.R. § 51.41). Thus, the Staff argued, the ER was the method by which NextEra complied with that requirement.

⁵⁶ See ER Letter at 1. Preparing the ER to cover the restart as a whole potentially avoids improper segmentation. See City of Rochester v. USPS, 541 F.2d 967, 972 (2d Cir. 1976).

⁵⁷ LAR #1, encl. 1, at 64.

Except as otherwise specifically noted, we find Petitioner's contentions to be within scope. The scope of this proceeding is defined by the Federal Register notice that provided the public with a hearing opportunity. That notice stated that the scope of the proceeding "is limited to . . . requests for hearing, and petitions for leave to intervene related to the three LARs" ⁵⁸ We find the ER is "related" to the first LAR. Indeed, that LAR specifically states that an ER has been provided to the NRC to evaluate the potential environmental effects of restart activities, including the proposed license amendment.

3. Contentions 1 & 2: Whether the Purpose and Need Statement in the ER is too narrow and whether the ER contains sufficient consideration of reasonable alternatives.

The ER states that the purpose and need behind restarting DAEC is to "provide an option" for baseload clean electricity production of approximately 610 MWe by the end of 2028. ⁵⁹ PSR alleges this formulation is too narrow as it is exactly the amount of electricity that would be provided by the restart of DAEC. PSR further argues that the ER considers only two options: the proposed restart of DAEC and the alternative option of not restarting DAEC, but does not consider "any [other] alternative . . . such as renewable energy." ⁶⁰

PSR asserts in Contention 1 that an applicant violates NEPA when it draws a "purpose and need statement . . . so narrow[ly] as to only have one alternative that would satisfy it." ⁶¹ Petitioner's second contention follows from the first. Petitioner contends that, except for the option of not restarting DAEC, the ER does not consider any other alternatives. The two contentions are obviously linked. The alleged lack of reasonable alternatives to restarting DAEC

⁵⁸ See Hearing Opportunity Notice, 91 Fed. Reg. at 21,515.

⁵⁹ ER at 1-1.

⁶⁰ Petition at 18.

⁶¹ Id. at 16.

(Contention 2) stems from Petitioner's claim that the project's purpose and need statement was too narrowly drawn (Contention 1).

As explained below, we find both contentions inadmissible as they conflate the NRC's role with that of the Applicant, which leads the Petition to approach the issue from the wrong direction. As NEPA requires the NRC to consider the environmental impact of its actions, we begin with a discussion of the "agency action" at issue. Properly defining the agency action allows an analysis of the "purpose and need" behind that action. The reasonable alternatives that the NRC must consider then flow from a properly stated purpose and need statement.

a. The "agency action" at issue in this proceeding

The Federal Register notice identified the three LARs that the NRC is considering.⁶² The NRC may reject the LARs or grant the LARs (with or without conditions). From the agency's point of view, rejecting the LARs maintains the status quo and is the "no action alternative." Approving NextEra's plan for a restart (i.e., granting the LARs) is the proposed agency action for which NEPA would require the agency to consider the environmental effects of that decision.⁶³ In other words, the agency action at issue is the authorization for NextEra to restart DAEC by approving the proposed plan for the restart as described in the LARs.

Importantly, however, approving *the plan* for restarting DAEC as described in the LARs is not a determination *to* restart DAEC. While NextEra may not restart DAEC without NRC

⁶² Hearing Opportunity Notice, 91 Fed. Reg. at 21,514.

⁶³ ER at § 1.1; Hearing Opportunity Notice, 91 Fed. Reg. at 21,514. A major federal action which is subject to NEPA definitionally does not include "non-discretionary" "activities or decisions" that "are made in accordance with the agency's statutory authority." 42 U.S.C. § 4336e(10). As no party raised this issue, we assume for purposes of this decision that the NRC has the discretion to reject an application based on environmental impacts. See, e.g., NUREG-1437, Supplement 42, Generic [EIS] for License Renewal of Nuclear Plants Regarding [DAEC], Final Report, at A-19 (Oct. 2010) (ADAMS Accession No. ML102790308) [Hereinafter NUREG-1437, Supplement 42] (responding to a comment submitted by counsel in a separate DAEC licensing action that it is the Commissions' view that it has discretion to reject an application based solely on environmental impacts if they are "so great" as to be "unreasonable.").

authorization, once authorized, the decision to restart DAEC remains with NextEra. Indeed, the NRC could approve every LAR that NextEra submits, and NextEra could still elect to abandon its efforts to restart DAEC entirely.

b. The “Purpose and Need” underlying the agency action

The current requirement for a purpose and need statement in an environmental document can be found at 42 U.S.C. § 4336a(d). That provision, which was added in 2023, requires every environmental document to include a statement that “summarizes the underlying purpose and need for the proposed agency action.”⁶⁴ The key phrase here is “agency action.”⁶⁵ Prior to that 2023 amendment, the origin of the requirement for a purpose and need statement came from (now rescinded) regulations issued by the Council on Environmental Quality (CEQ).⁶⁶ Those earlier CEQ regulations purported to require the purpose and need statement to focus on the purpose and need of the action “*to which the agency is responding.*”⁶⁷

⁶⁴ 42 U.S.C. § 4336a(d).

⁶⁵ See id. The 2023 amendments to NEPA generally added the word “agency” in front of the word “action” to clarify that the actions NEPA is concerned with are the actions by the federal agency at issue. The Commission has been engaged in rulemaking to update its regulations to implement the 2023 amendments. See SECY-24-0046: Implementation of the Fiscal Responsibility Act of 2023 National Environmental Policy Act Amendments (May 30, 2024) (ADAMS Package Accession No. ML24078A013).

⁶⁶ Compare 42 U.S.C. § 4336a(d) (“Each environmental document shall include a statement of purpose and need that briefly summarizes the underlying purpose and need *for the proposed agency action.*”) with 40 C.F.R. § 1502.13 (2019) (“The statement shall briefly specify the underlying purpose and need *to which the agency is responding* in proposing the alternatives including the proposed action”) (emphasis added). In the last six years, CEQ regulations had seesawing amendments regarding the contents of the purpose and need statement before being ultimately rescinded in 2025. See 40 C.F.R. § 1502.13 (2020); 40 C.F.R. § 1508.1 (2022); 40 C.F.R. § 1508.1 (2024); 90 Fed. Reg. 10,610 (Feb. 2, 2025).

In the end, it would be difficult to give any force or persuasive effect to decisions about purpose and need statements from case law or other authority that relied on or interpreted CEQ-derived regulations which the NRC never considered binding (see 10 C.F.R. 51.10(a)), that are no longer extant, and which have in any event been supplanted by changes to the statute.

⁶⁷ Thus, Petitioner’s reliance on cases interpreting the CEQ standards is misplaced. See, e.g., Petition at 17 (citing Carmel-by-the-Sea v. U.S. Dep’t of Transp., 123 F.3d 1142, 1155 (9th Cir.

Contention 1 therefore errs by conflating NextEra's business decision for seeking to restart DAEC with the NRC's proposed agency action. This in turn causes Petitioner to misunderstand the underlying purpose behind the agency action. By focusing on NextEra's decision to restart DAEC, the Petition questions whether there is demand for the power that DAEC will produce and whether alternative methods of producing that power (e.g., a solar farm) would be preferable. As this starts from the wrong premise, its reasoning does not follow.

Here, the ER stated that the "purpose and need" of the NRC's action in this case is to "preserve the option" for electrical generation from a restarted DAEC. This phrasing is consistent with the NRC's recognition that it does not determine power generation needs. State, utility, and federal agencies other than the NRC weigh the need for electricity.⁶⁸ The NRC's action in approving the method of DAEC's restart creates an *option* to restart DAEC, but it is not a decision to restart DAEC.⁶⁹

1997)). The defunct CEQ regulations, and decades of caselaw interpreting them, may explain why Petitioner, and to some extent the other participants, focus on NextEra's business case for seeking a restart.

⁶⁸ See NUREG-1437, Vol. 1, Generic [EIS] for License Renewal of Nuclear Plants, Main Report, Final Report, at 1-4 (rev. 2 Aug. 2024) (ADAMS Accession No. ML24086A526).

⁶⁹ Petitioner argues that the purpose and need statement is too narrow because the need is framed as requiring the exact amount of power that DAEC produces, thus appearing to create a need that only the restart of DAEC would fulfill. But this misunderstands the ER. The purpose as stated in the ER is to preserve *the option* of restarting DAEC, which will always produce the exact amount of electricity that DAEC produces. The 2010 EIS explained this distinction through the lens of renewing the DAEC license as follows:

The purpose and need for the proposed action (issuance of a renewed license) is to provide an option that allows for power generation capability beyond the term of a current nuclear power plant operating license to meet future system generating needs, as such needs may be determined by State, utility, and, where authorized, Federal (other than NRC) decision-makers. This definition of purpose and need reflects the Commission's recognition that, unless there are findings in the safety review required by the Atomic Energy Act of 1954 (AEA) or findings in the NEPA environmental analysis that would lead the NRC to not grant a license renewal, the NRC does not have a role in the energy-planning decisions as to whether a particular nuclear power plant should continue to operate.

Nor does NextEra's business case for seeking to restart DAEC affect whether the NRC will approve the plan for restart. The NRC's purpose is tied to safety; the focus of the NRC's organic statute.⁷⁰ Thus, restated, the NRC's purpose in considering whether to approve the method of restarting DAEC is to provide an option for NextEra to safely restart Duane Arnold.⁷¹

This approach is in contrast to some agencies that are the sponsors of their own projects. For those agencies, the purpose of the agency action may entirely overlay the business case for the underlying project, such as when the United States Air Force seeks to extend one of its runways. The NRC's actions that are subject to NEPA, however, generally consist of the NRC's responses to submissions (e.g., requests for licenses and permits) by outside parties. In such cases, the underlying purpose of the applicant's project and the underlying purpose of the agency action approving or disapproving that project will often diverge.⁷²

If the renewed license is issued, State regulatory agencies and [NextEra] will ultimately decide whether or not the plant will continue to operate based on factors such as the need for power or other matters within the State's jurisdiction or the purview of the owners. If the operating license is not renewed, then the facility must be shut down on or before the expiration date of the current operating license, February 21, 2014.

NUREG-1437, Supplement 42 at xiv.

⁷⁰ See 42 U.S.C. § 2013(e).

⁷¹ See infra Section IV.3.d.

⁷² In a case cited at length by Petitioner, the United States Court of Appeals for the District of Columbia Circuit favorably quoted the Federal Aviation Administration's (FAA) effort to distinguish between instances when the agency is acting as the sponsor of the project, and when the agency is merely permitting or regulating a project consistent with its statutory mission:

The scope of alternatives considered by the sponsoring Federal agency, where the Federal government acts as a proprietor, is wide ranging and comprehensive. Where the Federal government acts, not as a proprietor, but to approve and support a project being sponsored by a local government or private applicant, the Federal agency is necessarily more limited.

c. Consideration of alternatives to the agency action

NEPA requires agencies to consider “a reasonable range of alternatives to the proposed *agency* action . . . that are technically and economically feasible, and meet the purpose and need of the proposal.”⁷³ Accordingly, the purpose behind an agency action determines the scope of the alternatives the NRC must consider. And just as Petitioner’s misunderstanding of the agency action at issue leads to an incorrect analysis of the purpose behind that action (Contention 1), it also leads the Petition to suggest implausible alternatives (Contention 2).

The Petition explains at some length that the ER should have considered alternative forms of electricity generation in lieu of restarting DAEC, including wind but especially solar.⁷⁴ The Petition notes that NextEra had planned a solar farm at the DAEC site but abandoned that project after it decided to restart DAEC.⁷⁵ But the alternatives to the NRC’s actions that are subject to NEPA, at least when it concerns permitting and licensing power reactors, are generally limited to approving, conditioning, or rejecting an applicant’s permit or license (along with considering exemptions and amendments to such licenses and permits). The NRC does

. . .

In the present system of federalism, the FAA does not determine where to build and develop civilian airports, as an owner/operator. Rather, the FAA facilitates airport development by providing Federal financial assistance, and reviews and approves or disapproves revisions to Airport Layout Plans at Federally funded airports. . . . Similarly, under the Airline Deregulation Act of 1978, the FAA does not regulate rates, routes, and services of air carriers or cargo operators. Airline managements are free to decide which cities to serve based on market forces.

Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 197 (D.C. Cir. 1991).

⁷³ 42 U.S.C. § 4332(2)(C)(iii) (emphasis added); see also Sierra Club v. Fed. Energy Reg. Comm., 145 F. 4th 79 (2025).

⁷⁴ Petition at 20; 22–24.

⁷⁵ Id. at 20.

not build power plants, nuclear or otherwise. Nor does the NRC make the initial determination of power generation requirements.⁷⁶

A contention challenging an environmental document's consideration of alternatives must put at issue alternatives to the "proposed agency action," rather than alternatives that the applicant could have considered.⁷⁷ "NEPA does not require [the NRC] to consider . . . alternatives that are outside of [the NRC's] jurisdiction and would fail to serve the purpose of the Project."⁷⁸ NEPA only requires federal agencies to consider "feasible" alternatives to its proposed action, and an alternative that exceeds the agency's authority to implement will never be feasible.⁷⁹

Put another way, this Licensing Board cannot hold a hearing on whether the NRC must consider if NextEra should build a solar farm in lieu of restarting DAEC because this is an alternative that the NRC lacks the authority to direct.⁸⁰ "If [an agency's] organic statute precludes consideration of a particular issue, the agency may set it aside for purposes of its NEPA review as well."⁸¹ And as the NRC cannot choose to build a solar farm in lieu of approving the plan to restart for DAEC, the NRC does not violate NEPA when it does not consider a solar

⁷⁶ Vermont Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc., 435 U.S. 519, 550 (1978) ("There is little doubt that under the Atomic Energy Act of 1954, state public utility commissions or similar bodies are empowered to make the initial decision regarding the need for power.").

⁷⁷ 42 U.S.C. § 4332(C)(iii).

⁷⁸ See Citizens Action Coal. of Indiana, Inc. v. Fed. Energy Reg. Comm., 125 F.4th 229, 237 (D.C. Cir. 2025).

⁷⁹ 42 U.S.C. § 4332(2)(C)(i)–(ii); Seven Cnty., 605 U.S. at 188 ("[A]gencies are not required to analyze the effects of projects over which they do not exercise regulatory authority.").

⁸⁰ Petition at 20; 10 C.F.R. § 2.309(f)(1)(iv).

⁸¹ Seven Cnty., 605 U.S. at 200.

farm as an alternative. Again, the purpose of NEPA is to inform agency decision making, and it does not require the NRC to study a range of alternatives that the NRC cannot implement.

Thus, in addition to the no action alternative (i.e., denying the LARs and not authorizing a restart), the range of alternatives to the NRC's action of approving the plan for a restart consists of *alternative means* of achieving the restart, not *alternatives to* the restart. Had the proposed plan for restarting DAEC identified one or more undesirable environmental or safety effects, there may have been alternative means of approving a restart of DAEC that the NRC may have considered that could have mitigated those effects.⁸² As Petitioner does not put at issue that technically and economically feasible reasonable alternative methods exist for restarting DAEC, Contention 2 is inadmissible.⁸³

d. Shoreham

In a mirror image case to the present proceeding, the Commission addressed a nearly identical issue.⁸⁴ In Shoreham, the plant's owner had determined to permanently shutter the plant.⁸⁵ A petitioner sought to require the NRC to conduct an EIS to consider the "resumed full-power operation of Shoreham as an alternative to decommissioning."⁸⁶ In considering the

⁸² At oral argument, the Staff suggested that at least for safety issues, alternatives are considered in an iterative process in which the applicant responds to requests for information, such that the application is altered over time to address concerns. Absent license conditions, this process results in a binary choice in which the NRC either grants or denies the license at issue. Tr. at 58. Our description of the process for considering alternatives is not intended to be inconsistent with that view. The Staff declined to speculate as to whether, had the ER found a significant environmental impact, the Staff would consider an alternative other than denying the license at issue. Tr. at 55.

⁸³ 10 C.F.R. § 2.309(f)(1)(iv).

⁸⁴ Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), CLI-90-8, 32 NRC 201 (1990).

⁸⁵ Id. at 203.

⁸⁶ Id.

petition, the Commission readily identified the agency action at issue, its purpose, and the range of possible alternatives the NRC must consider.

In defining the agency action at issue, the Commission distinguished the plant owner's decision (to decommission the plant) from the NRC's decision (approving the plan for decommissioning). "The decision on a method for decommissioning a facility—as opposed to the decision whether to decommission a facility—is a decision that requires NRC review and approval."⁸⁷

With the agency action defined as approving the means of decommissioning, the Commission then identified the purpose underlying the action and the scope of alternatives it had to consider:

Once a licensee decides to seek NRC approval of a plan to decommission a facility, our function is to review the plan to ensure that it provides for safe and environmentally sound decommissioning. The "purpose" of such a project, i.e., the purpose of decommissioning, would be to return the facility to a condition that "permits release of the property for unrestricted use" 10 C.F.R. § 50.2 (1990). This purpose determines the scope of the alternatives the NRC must consider. Thus, in considering a proposed decommissioning plan, the NRC need only consider alternatives to the method of decommissioning that the plan proposes.⁸⁸

Here, as in Shoreham, the NRC action at issue is not whether to decommission or restart a plant, but whether to approve the proposed plan as submitted in an application. The NRC's purpose is to ensure that the applicant's project safely meets the requirements of the Atomic Energy Act and NRC regulations. The alternatives to the proposed action, in addition to a no action alternative, are alternative means of achieving the licensing action.

⁸⁷ Id. at 207.

⁸⁸ Id. at 207–08 (internal quotations and citations omitted).

Because Contentions 1 and 2 fail to correctly address the NEPA requirements for need, purpose, and alternatives consideration, Petitioner has failed to establish a genuine dispute on a material issue. Failing to satisfy section 2.309(f)(1)(vi), these contentions are not admissible.

4. Contention 4: Inadequate consideration of the effect of climate change on DAEC; Inadequate consideration of the restart of DAEC on climate change; Inadequate consideration of the effect of restarting the plant on the eastern Iowa environment.

Petitioner's fourth contention is mainly focused on climate change. Petitioner questions whether the ER adequately addresses (a) the effect of climate change on the plant; (b) the effect of the plant on climate change; and (c) the effect of the plant on the "physical environment and creatures of eastern Iowa."⁸⁹ As the contention admissibility analysis for each is somewhat different, we take them in turn.

Before doing so, however, we briefly address the Commission's guidance on how to determine whether a NEPA contention is properly framed. A contention generally is insufficient if it states only that the environmental document could have done more or that an analysis could have been done differently.⁹⁰ An admissible contention of adequacy must put at issue that the NEPA analysis is erroneous or unreasonable.⁹¹ As the Commission has stated:

[I]t may always be possible to conceive of alternative and more conservative inputs [to a NEPA analysis] . . . [b]ut the proper question is not whether there are plausible alternative choices for use in [an] analysis, but whether the analysis that was done is reasonable under NEPA. We have long held that contentions

⁸⁹ Petition at 31.

⁹⁰ NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 323–24 (2012).

⁹¹ Id. Petitioner at times also alleges that Contention 4 is a contention of omission. As a contention of omission, Contention 4 fails when it does not cite an applicable regulatory requirement that mandates the allegedly missing information. For example, Petitioner cites 10 C.F.R. § 51.53(c)(3)(ii)(Q) for the proposition that an ER must include "an assessment of the effects of . . . changes in the climate on environmental resource areas that are affected by a license renewal." Petition at 31–32. But this proceeding is not a license renewal proceeding and therefore, by its own terms, that provision is not applicable. The same fault lies with the petition's reliance on Table B-1 of Appendix B to Subpart A of Part 51, which again addresses license renewals.

admitted for litigation must point to a deficiency in the application, and not merely “suggestions” of other ways an analysis could have been done, or other details that could have been included[A]djudications would prove endless if hearings were triggered merely by suggested alternative inputs and methodologies that conceivably could alter the cost-benefit conclusions. A contention proposing alternative inputs or methodologies must present some factual or expert basis for why the proposed changes in the analysis are warranted Otherwise, there is no genuine material dispute . . . only a proposal for an alternative NEPA analysis that may be no more accurate or meaningful.⁹²

Thus, Contention 4 falls short when it raises concerns about alternative methods of analysis but fails to provide support for those concerns.⁹³ Licensing boards conduct evidentiary hearings to resolve genuine factual (and sometimes legal) disputes, but not to determine, at that stage, if a dispute exists.⁹⁴

So, for example, Petitioner claims that, for the purpose of assessing climate change impacts, the ER improperly relies on a gauge that is 60 miles from DAEC to assess changes in monthly water temperature averages for the Cedar River.⁹⁵ But PSR does not propose that there is a better gauge to use for measurements or that using a closer gauge would lead to a different result.⁹⁶ Nor does PSR explain why readings taken from a gauge 60 miles from DAEC would be an unreasonable method of detecting climate change-related water temperature trends in the Cedar River.

⁹² Seabrook, CLI-12-5, 75 NRC at 323–24.

⁹³ Petition at 31–39.

⁹⁴ See generally 10 C.F.R. § 2.309(f)(1); Changes to Adjudicatory Process, 69 Fed. Reg. 2,182, 2,202 (Jan. 14, 2004) (“The Commission seeks to ensure that the adjudicatory process is used to address real, concrete, specific issues that are appropriate for litigation The Commission should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing.”).

⁹⁵ Petition at 35.

⁹⁶ Tr. at 40.

As is the case with the example above, because Contention 4 generally contains no expert opinions in support of its allegations,⁹⁷ it fails to establish the requisite genuine factual or legal dispute meriting resolution at an adjudicatory hearing.⁹⁸

a. Inadequate consideration of climate change on DAEC

Turning to a more specific look at the claims in Contention 4, Petitioner first argues that “missing from the [ER]” are the “[i]dentification and disclosure of the effects of climate change upon prospective operations at Duane Arnold”⁹⁹ Climate, weather, and other natural events can of course affect a nuclear plant, as can changes in the frequency or severity of weather events. But, as the Government Accountability Office report relied on by Petitioner states, changes caused by climate change are not uniform and the effects of a changing climate will vary depending on geography.¹⁰⁰ Climate change may cause increases or decreases in both precipitation and temperature, with associated changes to the risk of forest fire, flooding, drought, and heat extremes.¹⁰¹ The actual challenges a specific plant may face will be specific to its location.

Of course, “the talismanic invocation of ‘climate change’ is insufficient to meet [a petitioner’s] burden to show a genuine dispute”¹⁰² Accordingly, a contention alleging that

⁹⁷ Petition at 31–39.

⁹⁸ See 10 C.F.R. § 2.309(f)(1)(vi), (v).

⁹⁹ Petition at 34.

¹⁰⁰ Id. at 37 (citing U.S. Gov’t Accountability Off., GAO-24-106326, Nuclear Power Plants: NRC Should Take Actions to Fully Consider the Potential Effects of Climate Change (2024) [Hereinafter GAO Report]); GAO Report at 1.

¹⁰¹ GAO Report at 1.

¹⁰² Long Mott Energy, LLC (Long Mott Generating Station), LBP-26-1, 103 NRC ___, ___ (slip op. at 46) (Jan. 22, 2026).

climate will affect the plant must put at issue the specific weather-related danger in question and the broad mechanism by which the petitioner contends the plant will be adversely affected.¹⁰³

Here, Petitioner does not raise climate change as a safety issue but rather as a stand-alone NEPA contention. And NEPA asks the NRC to consider the effect of the facilities it is asked to license on the environment, not the effect of the environment on those facilities. While the climate's effect on the plant is certainly an environmental issue in the broad sense, absent putting at issue a mechanism whereby the climate affects the plant, and *the plant then affects the environment*, Petitioner's claim strays far from what NEPA commands.¹⁰⁴

For example, Petitioner asserts that climate change may reduce water levels in the Cedar River and that a significant decrease in water levels would cause DAEC to temporarily cease power generation.¹⁰⁵ But Petitioner does not explain why DAEC temporarily ceasing power generation is an effect on the environment that the NRC must consider under NEPA.

Petitioner cites three cases for the proposition that a federal agency must consider the effect of climate change on the project at issue.¹⁰⁶ However the three cases cited as authority for the requirement to consider the effect of climate change on the federal action (rather than the effect of the federal action on the environment) are distinguishable because they involve other federal agencies subject to entirely different regulatory schemes.¹⁰⁷ Further, a close review

¹⁰³ Id. at 45–47.

¹⁰⁴ See Beyond Nuclear, Inc. v. NRC, 184 F.4th 977, 983 (D.C. Cir. 2026) (“[N]either the effects of aging on components nor the effects of climate change on external hazards are themselves environmental impacts that NEPA required the Commission to address. The environmental impacts at issue are those from severe accidents . . .”).

¹⁰⁵ Petition at 36.

¹⁰⁶ Id. at 33–34.

¹⁰⁷ Id. at 33.

of the cases demonstrates that in each decision the NEPA question actually turned on the effect of the agency action on the environment.¹⁰⁸

We thus find no basis for Petitioner's assertion that the ER must consider the effect of climate change on the plant when Petitioner's claim is unaccompanied by an assertion that the effect on the plant would, in turn, affect the environment.¹⁰⁹ Accordingly, this aspect of the contention is inadmissible as there is no genuine dispute on a material issue of fact, thus failing to satisfy section 2.309(f)(1)(vi).

¹⁰⁸ The first is Cent. Oregon Landwatch v. Connaughton, 696 F.App'x 816, 819–20 (9th Cir. 2017) which is cited for the proposition that the Forest Service took a "hard look" when evaluating the effect of climate change on a proposal to allow a local municipality to increase the amount of water taken from a river. The court addressed the issue summarily. Citing now-rescinded CEQ regulations, the court determined that a brief, qualitative analysis that lacked any quantitative data was sufficient because it was in proportion to the significance of any impact. Id. More importantly, a look at the underlying briefs in that case demonstrates that the issue was whether, in light of climate change, the project's plan to allow increased use of river water would affect the environment by leaving too little remaining river flow. See Brief for Plaintiffs-Appellants, Cent. Oregon Landwatch v. Connaughton, 696 F.App'x 816, 2015 WL 8988476, at *9. The Forest Service determined that the new uptake facility would have the same impact as the old facility.

The second is AquAlliance v. U.S. Bureau of Reclamation, 287 F. Supp. 3d 969, 1028 (E.D. Cal. 2018). However, that court stated, without deciding, that "the parties appear to be in agreement that NEPA requires an evaluation of the impact of climate change on a project, at least under certain circumstances." Id. The case, which involved a Bureau of Reclamation plan for water transfers, concerned whether climate change would affect the agency's assumptions about the amount of water available for transfer. Thus, although the case described the issue as the effect of climate change on the project, the NEPA issue remained clearly rooted in the project's effect on the environment.

The third case cited by Petitioner, Ctr. for Biological Diversity v. Kempthorne, 588 F.3d 701, 711–12 (9th Cir. 2009), centered on "the impacts to polar bears from disturbance by oil and gas activities in the context of a warming climate" not the effect of climate change (or polar bears) on oil and gas drilling. Id.

¹⁰⁹ As a possible contention of omission, this claim likewise does not frame an admissible contention. Under NRC practice, for a contention of omission a petitioner must show both that (1) there is a legal requirement to provide the allegedly omitted information, and (2) that such information is absent. See, e.g., Fla. Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 6 & 7), LBP-11-6, 73 NRC 149, 234–35 (2011) (citing USEC, Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 456 (2006)).

b. Inadequate consideration of restarting DAEC on climate change

The Petition next argues that under NEPA “the NRC must consider reasonably foreseeable impacts of the proposed project on climate change.”¹¹⁰ The problem with the contention as framed, however, is that the Petition never puts at issue what the “reasonably foreseeable impacts” of restarting DAEC on climate change might be. Nor is it facially obvious that restarting an already constructed nuclear power plant would have any significant effect on global climate change.

Additionally, the cases cited by Petitioner for support are not comparable to this proceeding. One involves the fuel economy standards for motor vehicles, the second considers an agency’s approval of a natural gas pipeline, and the third involves the approval of four leases for coal mining.¹¹¹ In those cases, the climate change effects of the proposed agency action were actually raised by the participants and were facially obvious in any event. Here, the ER includes a table that states that about 1.3 thousand tons of greenhouse gas emissions (in carbon dioxide equivalents) were emitted from DAEC the last year it was in operation. By comparison, in the motor vehicle fuel economy case cited by Petitioner, the court considered policy questions that involved billions of tons of carbon dioxide, with alternatives that would avoid hundreds of millions of tons of greenhouse gases.¹¹²

¹¹⁰ Petition at 33.

¹¹¹ Id. (citing Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin., 538 F.3d 1172, 1216–17 (9th Cir. 2008) (not only must an agency “quantif[y] the expected amount of [carbon dioxide] emitted,” but it further must “evaluate the incremental impact that these emissions will have on climate change or on the environment more generally”) (internal quotation marks omitted); Sierra Club v. Fed. Energy Reg. Comm., 867 F.3d 1357, 1374 (D.C. Cir. 2017) (“[G]reenhouse-gas emissions are an indirect effect of authorizing [a natural gas pipeline] project, which FERC . . . has legal authority to mitigate” and thus must reasonably assess under NEPA); WildEarth Guardians v. Bureau of Land Mgmt., 870 F.3d 1222, 1236 (10th Cir. 2017) (rejecting BLM’s analysis for having an unreasonable assessment of greenhouse gas impacts)).

¹¹² See Ctr. for Biological Diversity v. Nat’l Highway Traffic Safety Admin., 538 F.3d at 1216–17.

Moreover, the ER specifically considers the effects of climate change that would result from restarting DAEC, stating that “[t]he operation of DAEC is expected to avoid thousands of tons of potential [G[reen] H[ouse] G[as] (GHG)] . . . emissions compared to a fossil fuel-fired alternative[s] . . . , and continued operation is anticipated to result in only negligible emissions of criteria air pollutants and GHGs from insignificant sources.”¹¹³ Thus, the ER did consider the plant’s effect on climate change,¹¹⁴ and concluded that it was broadly neutral to positive.

Accordingly, Petitioner does not proffer a litigable claim that restarting DAEC will have any effect on climate change, let alone an adverse effect. As such, Petitioner has failed to establish a genuine dispute on a material issue.¹¹⁵ This aspect of the contention is also not admissible.

c. Inadequate consideration of the effect of restarting DAEC on the environment of eastern Iowa

PSR lastly contests whether the ER adequately addresses the effect of restarting DAEC on the “physical environment and creatures of eastern Iowa.”¹¹⁶ While the “physical environment and creatures of eastern Iowa” are mentioned in the contention statement itself, when PSR frames its contention it focuses on climate change and omits any mention of the local environment. That is, when PSR explains the contention’s basis, scope, and materiality, the Petition only addresses climate change and neglects any mention of the local environment. Accordingly, the local environment aspect of Contention 4 is inadmissible as Petitioner has not

¹¹³ See ER at 4-16 to 4-17.

¹¹⁴ Thus, to the extent Petitioner intended to raise a contention of omission, it fails. See Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 NRC 27, 37 (2010).

¹¹⁵ See 10 C.F.R. § 2.309(f)(1)(iv).

¹¹⁶ Petition at 31.

met its obligation for explaining the basis of Contention 4 and why it is within scope and material.¹¹⁷

That said, however, Petitioner includes information about the local environment in a list of facts upon which Petitioner intends to rely. Although these facts are untethered to the contention as framed, we nonetheless briefly address them.

The Petition states that the ER does not contain an “analysis of the heat island effects and local climate impacts of heating some 34,452,000 gallons daily from the nearby Cedar River.”¹¹⁸ The ER does consider these effects and concludes they will be similar to when the plant was operational and will in any event not be significant.¹¹⁹ Petitioner does not allege that additional analysis would alter this result.

The Petition states that DAEC may need to suspend operations if there is insufficient river water for cooling.¹²⁰ But as discussed above, Petitioner does not offer a connection as to how this impact on the plant might in turn cause an impact on the environment and therefore does not provide an admissible basis for the contention.

Next, Petitioner claims the plant will use up to 14,150,000,000 gallons of water annually for cooling the fission process.¹²¹ This reflects DAEC’s permitted withdrawal amount.¹²² Absent an adequately supported allegation that this amount of water withdrawal will have some type of adverse environmental effect, it does not amount to an admissible contention.

¹¹⁷ 10 C.F.R. § 2.309(f)(1)(ii)–(iv).

¹¹⁸ Petition at 36.

¹¹⁹ ER at 4-2; 4-4.

¹²⁰ Petition at 36.

¹²¹ Id. at 36.

¹²² ER at § 4.2.2.2.

Lastly, Contention 4 raises a concern that the combination of DAEC with a nearby data center will affect the environment adversely. As we discuss next in connection with Contention 5, Petitioner has not demonstrated that the NRC must consider the combined environmental effects of a separate action involving DAEC's potential customer.

5. Contention 5: Whether the ER improperly segments the restart of DAEC and a planned data center and therefore does not consider the combined environmental impact of both projects.

In its last contention, Petitioner argues that the ER was required to consider the combined effects of the restart of DAEC and the proposed construction and operation of a nearby data center.¹²³ In support of its contention, Petitioner claims that the data center will, alone or in combination with DAEC, create a heat island and draw too much water from the Cedar River.¹²⁴ We find the contention inadmissible.

The key case driving our conclusion is the Supreme Court's recent decision in Seven County.¹²⁵ In that case, the Court was considering whether NEPA required a regulating agency to consider the environmental impact from increased oil drilling and oil refining that would likely follow from the regulatory approval of a new railroad spur line.¹²⁶

The Court first considered that any increase in oil drilling and oil refining would result from different projects that, while perhaps a foreseeable consequence from the spur line, were separate in time and geography.¹²⁷ This geographic and temporal separation led the Court to conclude that NEPA's requirements do not extend to considering the environmental impact of

¹²³ Id. at 39.

¹²⁴ Id.

¹²⁵ See Seven Cnty., 605 U.S. at 168.

¹²⁶ Id. at 174.

¹²⁷ Id. at 190.

such second order projects. This part of the Court's analysis is not applicable here, however, as Petitioner has put forth sufficient facts to establish a basis for the geographic and temporal proximity of the data center to DAEC, which would be built near the facility and roughly contemporaneously with the DAEC restart.¹²⁸

Yet, even when a project is "interrelated and close in time and place to the project at hand" the Supreme Court laid out a second inquiry that must be answered.¹²⁹ "The question then is whether that is a single project within the authority of the agency in question."¹³⁰ Here, the answer is clearly "No." Petitioner points to no NRC authority allowing the NRC to regulate the environmental impact of data centers, and we are aware of none. We therefore must conclude that the construction and operation of a data center, even one that intends to purchase nearly all of a plant's electrical generation, is a separate project for purposes of NEPA. Accordingly, Contention 5 is not admissible. And there are a number of additional considerations that support this conclusion.

First, the Supreme Court has made clear that a "'but for' causal relationship" between two projects "is insufficient to make an agency responsible for a particular effect."¹³¹ Thus, even if we assume that Petitioner has adequately pled that the data center would not be constructed without the restart of DAEC, that alone is insufficient to make the environmental impacts of the data center fall within the ambit of the NRC's NEPA review of the DAEC restart.

¹²⁸ For purposes of contention admissibility, PSR has adequately put the following facts at issue: (1) that Google (or an affiliated company) intends to build a data center close to DAEC; (2) that the data center, perhaps in combination with another data center in Cedar Rapids, will use nearly all of the planned electrical generation of DAEC; (3) that NextEra has signed a contract in which Google has agreed to purchase the power for a period of 25 years; and (4) that the two projects will proceed closely in time. See Petition at 43–45.

¹²⁹ Seven Cnty., 605 U.S. at 190.

¹³⁰ Id.

¹³¹ Id. at 189 (quoting Dep't of Transp. v. Pub. Citizen, 541 U.S. 752, 767 (2004)).

Second, the prohibition on segmentation arises when an agency breaks a single federal project into two or more parts so as to appear to disperse the environmental effects among different projects.¹³² The Petitioner has not asserted that the proposed data center combined with the DAEC restart is a single federal project.

Third, the NRC would have no ability to mitigate or otherwise alter the environmental effects of the data center.¹³³ So, even if the NRC conducted a detailed study and determined that the data center would draw excessive water from the Cedar River, the NRC lacks authority to limit the data center's size or to take other actions to address the issue.¹³⁴ Indeed, the NRC could deny every LAR at issue but that would not prohibit Google from proceeding to build and operate its data center if it could obtain the necessary electrical power from another source.

Fourth, to the extent that Petitioner suggests the NRC should disapprove the DAEC license amendment, not because there is a problem with the plant, but because the NRC disapproved of a DAEC customer, this is problematic.¹³⁵ Again, Petitioner points to no NRC authority for such an action.

¹³² Sierra Club v. U.S. Army Corps of Eng'rs, 803 F.3d 31, 49–50 (D.C. Cir. 2015) ("The point of the connected actions doctrine is to prevent the government from segmenting its own federal actions into separate projects and thereby failing to address the true scope and impact of the activities that should be under consideration.") (cleaned up).

¹³³ Nor is it obvious how the NRC would be able to obtain environmental information from Google about the data center, which is not licensed by the NRC.

¹³⁴ Which is not to say that environmental harms are unimportant, but rather that responsibility for regulating such harms is distributed among numerous state and federal entities. "Even a foreseeable environmental effect is outside of NEPA's scope if the agency could not lawfully decide to modify or reject the proposed action on account of it." Seven Cnty., 605 U.S. at 202 (Sotomayor, J., concurring).

¹³⁵ Consider that if DAEC had never ceased operations but had nonetheless signed an identical agreement to sell nearly all its electrical generation to a data center, no NRC action would be triggered so long as there was no attempt to transfer operating authority of the facility.

Fifth, and relatedly, “inherent in NEPA . . . is a ‘rule of reason,’ which ensures that agencies determine whether and to what extent to prepare an EIS based on the usefulness of any new potential information to the decision making process.”¹³⁶ Absent Petitioners putting at issue that studying the environmental effects of constructing the planned data center would be useful to the NRC’s decision on whether to approve the LARs at issue, which it did not, NEPA does not require such a study.¹³⁷

Petitioner has failed to demonstrate that the issue raised in the contention is “material to the findings the NRC must make” and thus this contention does not satisfy 2.309(f)(1)(iv) and is not admissible.

¹³⁶ Dep’t of Transp. v. Pub. Citizen, 541 U.S. at 767.

¹³⁷ See Seven Cnty., 605 U.S. at 188–89 (“[N]o rule of reason worthy of that title would require an agency to prepare an EIS addressing effects from another project . . . particularly when it would require the agency to speculate about the effects of a separate project that is outside its regulatory jurisdiction.”) (cleaned up); see also id. at 198 (Sotomayor, J., concurring) (“An agency is not responsible for environmental impacts it could not lawfully have acted to avoid, either through mitigation or by disapproving the federal action.”); Dep’t of Transp. v. Pub. Citizen, 541 U.S. at 770 (“[W]here an agency has no ability to prevent a certain effect due to its limited statutory authority over the relevant actions, the agency cannot be considered a legally relevant ‘cause’ of the effect. Hence, under NEPA . . . the agency need not consider these effects in its EA when determining whether its action is a ‘major Federal action.’”).

V. CONCLUSION

For the reasons above, we find that while Petitioner PSR has standing, it has failed to provide an admissible contention, and so we deny PSR's hearing request and terminate this proceeding. Any appeals from this memorandum and order must be filed in accordance with 10 C.F.R. § 2.311.

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD

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Stefan R. Wolfe, Chair
ADMINISTRATIVE JUDGE

/RA/

Dr. Sue H. Abreu
ADMINISTRATIVE JUDGE

/RA/

Dr. Gary S. Arnold
ADMINISTRATIVE JUDGE

Rockville, Maryland
September 24, 2026

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
NEXTERA ENERGY DUANE ARNOLD, LLC.	)	Docket No. 50-331-LA
	)	
(Duane Arnold Energy Center)	)	
	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing **MEMORANDUM AND ORDER (Denying Request for Hearing (LBP-26-9))** have been served upon the following by Electronic Information Exchange.

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MEMORANDUM AND ORDER (Denying Request for Hearing (LBP-26-9))

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Dated at Rockville, Maryland,
this 24th day of September 2026.