

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

In the Matter of)	Docket Nos. 50-266 & 50-301-SLR
NextEra Energy Point Beach, LLC)	August 20, 2021
(Point Beach Nuclear Plant, Units 1 and 2, Subsequent License Renewal Application))	
)	

* * * * *

**NOTICE OF APPEAL OF LBP-21-05 BY PETITIONER PHYSICIANS FOR SOCIAL
RESPONSIBILITY WISCONSIN AND BRIEF IN SUPPORT OF APPEAL**

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NOTICE OF APPEAL

Petitioner Physicians for Social Responsibility Wisconsin (“PSR WI”), by and through counsel, pursuant to 10 C.F.R. § 2.311(c), hereby give notice of their appeal to the U.S. Nuclear Regulatory Commission (“Commission”) from the Atomic Safety and Licensing Board’s (“ASLB”) July 26, 2021 ruling, LBP 21-05, “Memorandum and Order (Denying Physicians for Social Responsibility Wisconsin’s Request for Hearing.” (ML19235A165) (“Memorandum and Order”).

PSR WI appeals the ASLB’s denial of intervenor legal standing and further seeks reversal of the ASLB’s decisions by which it denied admission of the group’s four proffered contentions for adjudication.

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BRIEF IN SUPPORT OF APPEAL

I. INTRODUCTION

NextEra Energy Point Beach, LLC (“NEPB,” “NextEra”) filed an application seeking a twenty-year subsequent (second) license renewal (“SLR”) of its Renewed Facility Operating Licenses Nos. DPR–24 and DPR–27 to operate its Point Beach Nuclear Plant, Units 1 and 2 (“PBNP”). Physicians for Social Responsibility Wisconsin, the Petitioner here (“PSR WI”), filed a hearing request on March 23, 2021, proffering four contentions challenging NextEra’s application. NextEra and the NRC Staff opposed Petitioner’s hearing request.

On July 26, 2021, the ASLB issued its ruling, LBP 21-05, “Memorandum and Order (Denying Physicians for Social Responsibility Wisconsin’s Request for Hearing,” (ML21207A075) in which it held that Petitioner had established representational standing to intervene, but that the Petitioner had alleged no admissible contention, and terminated the case. Petitioner challenges ASLB rulings that denied admissibility of each contention. The specific grounds for the appeal are that the ASLB erred in rejecting all four of Petitioner’s proffered Contentions.

The portion of an order which grants or wholly denies a petition for leave to intervene is appealable under 10 C.F.R. § 2.311 (formerly § 2.714a). *Mississippi Power & Light Co.* (Grand Gulf Nuclear Station, Units 1 & 2), ALAB-130, 6 AEC 423, 424 (1973). A petitioner may appeal an order under 10 C.F.R. § 2.311 if the effect thereof is to deny a petition to intervene, in its entirety – *i.e.*, to refuse petitioner entry into the case, and only if the Board rejects all of the intervenor’s proposed contentions. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-07-2, 65 NRC 10, 11 (2007).

Here, the ASLB granted Petitioner standing, but rejected all four of PSR WI's proffered contentions in its July 26, 2021 Memorandum and Order. Accordingly, that order is appealable to the full Commission as a matter of right under § 2.311.

II. BACKGROUND

On November 16, 2020, NextEra submitted an SLR application to renew the Point Beach operating licenses for an additional 20 years, which would extend the Unit 1 license to October 5, 2050 and the Unit 2 license to March 8, 2053. On January 22, 2021, the Nuclear Regulatory Commission (NRC) published a Federal Register notice of opportunity to request a hearing and to petition for leave to intervene, inviting any person whose interest may be affected to file a request for hearing and petition for leave to intervene within 60 days.

On 23, 2021, PSR WI filed its petition seeking to intervene in this proceeding,¹ pleading legal standing, proffering four proposed contentions and requesting a hearing. On April 19, 2021, NEPB and the NRC Staff filed answers opposing the hearing request.² NextEra and the NRC Staff did not challenge Petitioner's claims of standing, but argued Petitioner failed to proffer an admissible contention.

On April 26, 2021, Petitioner filed a reply and a motion to amend its proposed Contention 2.³ On May 21, 2021, NEPB filed an answer opposing the motion to amend.⁴ On the same day,

¹"Petition of Physicians for Social Responsibility Wisconsin for Leave to Intervene in Point Beach Nuclear Plant, Units 1 and 2 Subsequent License Renewal Proceeding, and Requesting an Adjudicatory Hearing ("Petition") (ML21082A529).

²"NextEra Energy Point Beach, LLC's Answer Opposing the Physicians for Social Responsibility Wisconsin's Petition for Leave to Intervene and Request for Hearing" (ML21109A133); "NRC Staff's Answer Opposing Physicians for Social Responsibility Wisconsin's Petition to Intervene" (ML21109A387).

³"Physicians for Social Responsibility, Wisconsin, Reply in Support of Petition for Leave to Intervene in Point Beach Plant Subsequent License Renewal Proceeding, and Requesting an

the NRC Staff filed an answer that did not oppose the motion to amend, but argued the amended contention is inadmissible.⁵ On May 28, 2021, Petitioner replied to those answers.⁶ On June 22, 2021 oral argument was held on the four proposed contentions and Petitioner's motion to amend Contention 2.⁷

The ASLB ruled on all pending matters on July 26, 2021.⁸ The Board ruled that Petitioner had demonstrated representational standing,⁹ and denied each of PSR WI's four contentions.

III. THE ASLB IMPROPERLY REJECTED ALL OF PETITIONER'S PROFFERED CONTENTIONS FOR ADJUDICATION

The ASLB improperly and unlawfully rejected all four of Petitioner PSR WI's proffered contentions.

The burden on a petitioner asserting contention admissibility is not supposed to be heavy.¹⁰ But as discussed below, the ASLB turned the admissibility requirements into "a fortress to deny intervention" to the Petitioner, something forbidden by the principles expressed in *Power Authority of the State of New York, et al.* (James Fitzpatrick Nuclear Power Plant; Indian Point

Adjudicatory Hearing" (ML21116A578); "Physicians for Social Responsibility, Wisconsin, Motion to Amend Contention 2 (Inadequately Tested Reactor Coolant Pressure Boundary)" (ML21116A577).

⁴"NextEra Energy Point Beach, LLC's Answer Opposing the Physicians for Social Responsibility Wisconsin's Amendment of Contention 2" (ML21141A097).

⁵"NRC Staff's Answer to Physicians for Social Responsibility Wisconsin's Motion for Leave to File Amended Proposed Contention 2" (ML21141A042).

⁶"Physicians for Social Responsibility Wisconsin's Combined Reply in Support of Motion to Amend Contention 2 (Inadequately Tested Reactor Coolant Pressure Boundary)" (ML21148A310).

⁷See Tr. at 1-142 (ML21176A136).

⁸"Memorandum and Order (Denying Physicians for Social Responsibility Wisconsin's Request for Hearing," LBP 21-05, (ML19235A165) ("Memorandum and Order").

⁹*Id.* at 15-16.

¹⁰*Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 359 (petitioners required only to "articulate at the outset the specific issues they wish to litigate.").

Nuclear Generating Unit 3), CLI-00-22, 52 NRC 266, 295 (2000).

Contention 1: Mitigation Of Thermal Pollution, Biotic Impingement And Entrainment

PSR WI's Contention 1 alleges that "the Environmental Report [(ER)] fails to consider a reasonable range of alternatives to the proposed action because of a failure to analyze thermal pollution mitigation as a means of reducing aquatic biota and migratory bird impingement, entrainment and damage from thermal pollution as required by NEPA and the NRC."

Labeling PBNP a "super predator," PSR WI argued that "[t]he Environmental Report unlawfully fails to consider replacement of the once-through cooling system with cooling towers as a reasonable alternative that would 'reduc[e] or avoid[] adverse environmental effects' relating to [certain] Category 2 issues,"¹¹ such as the thermal impacts and impacts of impingement and entrainment of aquatic organisms associated with once-through cooling systems.¹² Petitioner contended the analysis included in the ER, which discussed only two alternatives, license renewal without mitigation, and the no-action alternative, is insufficient.¹³ PSR WI also contended that cooling tower systems would sharply reduce the thermal pollution discharges to Lake Michigan," and may reduce water withdrawal "by about 95%" and result in "far fewer animals and plants . . . sacrificed for the generation of electricity."¹⁴ Petitioner criticized that fact that the "ER provides very limited historical data on the plant's aquatic and wildlife killing in Lake Michigan as a result of impingement and entrainment at the plant intakes."¹⁵

PSR WI also contended that NextEra failed to consider the cumulative impacts of thermal

¹¹PSR WI Petition at 18 (quoting 10 C.F.R. § 51.45©).

¹²*Id.* at 19.

¹³*Id.* at 19-20.

¹⁴*Id.*

¹⁵*Id.* at 20-21.

pollution,¹⁶ incorrectly considered impacts to all of Lake Michigan from plant operations, instead of “localized site conditions,”¹⁷ and relied on “ancient [] data.”¹⁸ PSR WI also referenced several nuclear reactors, that were required to switch to closed-cycle cooling from a once-through cooling system.¹⁹

The ASLB ruled that Contention 1 was “inadmissible as it constitutes a collateral attack upon an NRC rule and because the NRC’s consideration of alternative cooling system impacts after an applicant has satisfied 10 C.F.R. § 51.53(c)(3)(ii)(B) is contrary to CWA section 511(c)(2)²⁰ and Commission precedent. Contention 1 is inadmissible because it impermissibly challenges NRC rules, is not within the scope of the proceeding, does not raise an issue that is material to the findings the NRC must make, and fails to demonstrate a genuine dispute with the applicant in contravention of 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).”²¹ The ASLB also held that the expiration of PBNP’s most recent WPDES permit as of June 30, 2021 and the now-pending WPDES renewal proceeding before the Wisconsin Department of Environmental Protection are “irrelevant” facts to its ruling, in light of the timely renewal doctrine.²²

¹⁶*Id.* at 24.

¹⁷*Id.* at 24–25; Tr. at 16 (Lodge).

¹⁸PSR WI Petition at 25.

¹⁹*Id.* at 26-27.

²⁰Section 511 of the Clean Water Act [33 U.S.C. § 1371(c)(2)] states:

“© (2) Nothing in the National Environmental Policy Act of 1969 (83 Stat. 852) shall be deemed to--

(A) authorize any Federal agency authorized to license or permit the conduct of any activity which may result in the discharge of a pollutant into the navigable waters to review any effluent limitation or other requirement established pursuant to this Act or the adequacy of any certification under section 401 of this Act; or

(B) authorize any such agency to impose, as a condition precedent to the issuance of any license or permit, any effluent limitation other than any such limitation established pursuant to this Act.”

²¹Memorandum and Order, LBP-21-05 at pp. 19-20.

²²*Id.* at 21, fn. 121.

NextEra had concluded in the ER that “[b]ecause there are no planned operational changes during the proposed SLR operating term that would increase the temperature of PBN’s existing thermal discharge, impacts are anticipated to be SMALL and mitigation measures are not warranted.”²³ Despite the 10 CFR 51.53(c)(3)(iii) mandate that the ER “*must* contain a consideration of alternatives for reducing adverse impacts, as required by 51.45(c) for all Category 2 license renewal issues,” NextEra asserts there are “no significant adverse effects that would require consideration of additional alternatives. Therefore, NEPB concludes that the impacts associated with renewal of the PBN OLS would not require consideration of alternatives for reducing adverse impacts. . . .”²⁴

Of ironic note is that the three alternatives postulated by NextEra to the continued operation of PBNP include: (1) an Advanced Light Water Reactor (“ALWR”) “with mechanical draft cooling towers” located at the PBN site; (2) a cluster of small modular reactors (“SMRs”) “with mechanical draft cooling towers” located at the PBN site; and (3) a “Combination Alternative” involving natural gas combined cycle units “with mechanical draft cooling towers” located at the PBN site along with an expanded photovoltaic installation there.²⁵ Yet NextEra does not compare its preferred alternative of continued operations without closed-cycle cooling tower systems against an alternative where operations continue with such a cooling system.

PBNP’s impacts on aquatic life in Lake Michigan are asserted by NextEra to be “small” simply because there are no further temperature uprates planned for the 2030-2050 period. But the fish killed at Point Beach in 2011 in the course of normal operations, to cite one example,

²³ER at 4-26.

²⁴ER at 7-39.

²⁵ER at 7-3 - 7-4.

were calculated to reduce the yield of Lake Michigan's fisheries by an estimated 10,625 pounds a year, or about 4.5 percent of the annual commercial fishing catch by weight.²⁶ It is absurd to treat massive, recurring and predictable future impacts from once-through cooling at PBNP as “small.”

The NRC’s NEPA regulations require a plant-specific assessment of cumulative impacts in the applicant’s Environmental Report.²⁷ The NRC recognizes that “impacts from individually minor actions may be significant when considered collectively over time”²⁸ and that, according to the 2013 GEIS;

Impacts typically result from activities (*e.g.*, water withdrawal, effluent discharges . . .) . . . associated with . . . industrial and commercial development. . . . *Perhaps the most important source of surface water impacts is the withdrawal of water for plant cooling systems* (both once-through and closed-cycle). These impacts relate to water use conflicts with other users.²⁹ (Emphasis added).

In other words, NextEra *must* analyze mitigation in the ER, and the NRC must do so in its Environmental Impact Statement. According to 10 C.F.R. § 51.53(c)(3)(iii), the environmental report must contain “consideration of *alternatives for reducing adverse impacts*, as required by § 51.45(c),” for all Category 2 license renewal issues in Appendix B to subpart A Part 51. And 10 CFR § 51.45(c) commands that “The environmental report must include an analysis that considers and balances . . . alternatives available for reducing or avoiding adverse environmental effects.” (Emphasis added). The recurring mass killing of aquatic biota and birds is an “adverse environmental impact” that must be accounted for and analyzed under NEPA. Mitigating

²⁶<https://www.chicagotribune.com/news/ct-met-great-lakes-fish-kills-20110614-story.html>

²⁷10 CFR Part 51, Subpt. A, App. B.

²⁸ER at 4-49 (referencing 2013 GEIS § 4.13).

²⁹§ 4.13.4 of the 2013 GEIS.

thermal pollution would draw enormously less water from Lake Michigan and will kill fewer creatures drawn into the PBNP intakes. The NRC’s mitigation discussion and disclosure obligations are underscored by the obligations expressed in 10 C.F.R. §§ 51.53(c)(1) and (2) that the environmental report “discuss in this report the environmental impacts of alternatives and any other matters described in § 51.45,” bringing into play § 51.45(c)’s command that there be “alternatives available for reducing or avoiding adverse environmental effects.”

The ASLB insisted that it was compelled to follow the Commission’s order in *Vermont Yankee*³⁰ that ““In future cases where EPA [or, as here, a state permitting agency] has made the necessary factual findings for approval of a specific once-through cooling system for a facility after full administrative proceedings, we expect our adjudicatory boards to do as we have done today,’ *i.e.*, defer to the agency that issued the section 316(a) permit.”³¹

The ASLB’s rejection of Contention 1 ignores that it is possible to comply with both NEPA and the Clean Water Act here. The Commission’s responsibility is to read different statutory enactments in harmony with one another. “When confronted with two Acts of Congress allegedly touching on the same topic, this Court is not at liberty to ‘pick and choose among congressional enactments’ and must instead strive ‘to give effect to both.’”³² “If an apparent conflict exists. . . , then the courts must strive to harmonize the two laws, giving effect to both laws if possible.”³³ “A party seeking to suggest that two statutes cannot be harmonized, and that

³⁰*Entergy Nuclear Vermont Yankee, LLC, and Energy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-07-16, 65 NRC 371, 389 (2007) (“*Vermont Yankee*”).

³¹Citing *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 28 n. 42 (1978).

³²*Epic Sys. Corp. v. Lewis*, ___ U.S. ___, 138 S.Ct. 1612, 1624, 200 L.Ed.2d 889 (2018) (citation omitted).

³³*Assoc. of Am. R.R. v. S. Coast Air Quality Mgmt. Dist.*, 622 F.3d 1094, 1097 (9th Cir. 2010).

one displaces the other, bears the heavy burden of showing ‘a clearly expressed congressional intention’ that such a result should follow. The intention must be ‘clear and manifest.’”³⁴

Petitioner is not asking the NRC to decline to follow the *Vermont Yankee* judicial policy to “defer to the agency that issued the section 316a permit.” Rather, PSR WI asserts that the Commission must discharge its responsibility under NEPA to identify in a publicly-accessible subsequent license renewal SEIS all adverse environmental impacts, reasonable alternatives to the project, and means of mitigation of the identified impacts. This may be done without any undermining of the State of Wisconsin’s CWA § 316a permitting relative to PBNP.

An important purpose of NEPA is to lay all facts about adverse environmental effects out for the public to understand. The purpose of NEPA is twofold: “‘ensure[] that the agency . . . will have available, and will carefully consider, detailed information concerning significant environmental impacts[, and] guarantee[] that the relevant information will be made available to the larger [public] audience;”³⁵ see also 40 C.F.R. § 1500.1(b) (stating that environmental information must be provided “before decisions are made and before actions are taken.”). “NEPA expresses a Congressional determination that procrastination on environmental concerns is no longer acceptable.”³⁶

The NRC must comply with NEPA “to the fullest extent, unless there is a clear conflict of statutory authority.”³⁷ The Wisconsin DEP has not at this point made, as mentioned in *Vermont*

³⁴*Epic Sys.*, 138 S.Ct. at 1624 (citations omitted).

³⁵*Idaho Sporting Cong. v. Thomas*, 137 F.3d 1146, 1149 (9th Cir. 1998) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349, 109 S.Ct. 1835, 104 L.Ed.2d 351 (1989)).

³⁶*Found. for N. Am. Wild Sheep v. U.S. Dep’t of Agric.*, 681 F.2d 1172, 1181 (9th Cir. 1982).

³⁷*Calvert Cliffs’ Coordinating Comm. v. U.S. Atomic Energy Comm.*, 449 F.2d 1109, 1115 (D.C. Cir. 1971). See also *Limerick Ecology Action v. NRC*, 869 F.2d 719, 729 (3rd Cir. 1989) (holding that the Atomic Energy Act does not preclude NEPA compliance).

Yankee,³⁸ “the necessary factual findings for approval of a specific once-through cooling system for a facility after full administrative proceedings.”

PSR WI recognizes that § 511(c)(2) of the Clean Water Act [33 U.S.C. § 1371(c)(2)] makes clear that “(n)othing in the National Environmental Policy Act ... shall be deemed to authorize any Federal agency ... to review any effluent limitation or other requirement established pursuant to this Act or the adequacy of any certification under section 401 of this Act.” But PSR WI is not seeking the NRC to intrude on the State of Wisconsin’s superior authority here; rather, Petitioner advocates for the disclosure of the present status of thermal pollution, impingement and entrainment at PBNP within the NEPA document. Depending on the information that would appear in the SEIS, the public might be moved to formally act within the State process to attempt to cause change to Wisconsin’s “best technology available” (“BTA”) standard such that modern cooling tower technology would be installed at Point Beach. Similarly, the Council on Environmental Quality stresses that “Alternatives that are outside the scope of what Congress has approved or funded must still be evaluated in the EIS if they are reasonable, because the EIS may serve as the basis for modifying the Congressional approval or funding in light of NEPA's goals and policies. Section 1500.1(a).”³⁹ Analogously, even if the Commission or the Clean Water Act bar the NRC from ordering close-cycle cooling tower options as a means of mitigating thermal pollution, impingement and entrainment because the relevant state environmental agency does not consider such to be BTA, the evaluation under NEPA still must take place because the state

³⁸See fn. 30 *supra*.

³⁹“Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations (CEQ, 1986),” <https://www.energy.gov/nepa/downloads/forty-most-asked-questions-concerning-ceqs-national-environmental-policy-act>

agency may regard the EIS as the basis for modifying its CWA responsibilities, in light of NEPA's goals and policies.

**Contention 2: Point Beach reactor coolant pressure boundary
inadequately tested and no reasonable assurance**

As amended, PSR WI's Contention 2 states:

Point Beach's continued operation violates 10 CFR Part 50, Appendix A, Criterion 14 because the reactor coolant pressure boundary has not been tested so as to have an extremely low probability of abnormal leakage, of rapidly propagating failure, and of gross rupture, and the aging management plan does not provide the requisite reasonable assurance. The Electric Power Research Institute has recently admitted that its computer software for predicting embrittlement in boiling water reactors is "nonconservative." Physical specimens and coupons at Point Beach may indeed prove that embrittlement calculations made at Point Beach are not conservative. Without testing the physical specimens and coupons at Point Beach, NextEra is severely risking public safety.

Amendment of the original contention by adding the final three sentences, was allowed by the Atomic Safety and Licensing Board based on Petitioner's demonstration of good cause in light of the factors in 10 C.F.R. § 2.309(c).⁴⁰

The heart of Contention 2 is that PBNP has inadequate physical samples (metal capsules/coupons from inside the reactor vessels of the two units) to enable metallurgical testing to understand the extent of embrittlement of the vessels and related components in order to assure the reactors will last through the requested 80 years of operation. The Point Beach units were originally constructed and outfitted with samples to last only 40 years. The failure to have designed and constructed the reactors and associated structural testing methodology for 80 years of operations supports PSR WI's contention that PBNP is violating the general design criterion at 10 CFR Part 50, Appendix A, Criterion 14 because the reactor coolant pressure boundary cannot

⁴⁰Memorandum and Order, LBP 21-05 at 31.

be shown to have an extremely low probability of abnormal leakage, of rapidly propagating failure, and of gross rupture.⁴¹

PSR-WI asserts that “in recent years, the NRC has systematically removed conservative calculational aspects of the embrittlement process to allow continued operation.”⁴² Petitioner further alleges that “the NRC has allowed Point Beach and its cohorts to use analytical techniques that ignore the data from sample coupons it could readily test,” and that consequently “[t]here is no scientific basis by which the Point Beach reactors should continue operating without a complete physical analysis of the coupons from its reactors”⁴³ Petitioner further contends that Point Beach is one of “the remaining five worst embrittled atomic power reactors in the country,” allegedly (at least in part) due to the removal of conservatisms from the neutron embrittlement monitoring process.⁴⁴ Petitioner claims that Point Beach does not contain enough coupons to test for neutron embrittlement throughout the SLR operating period.⁴⁵ Therefore, to compensate for the alleged lack of coupons, Petitioner alleges “the NRC has instead modified its calculations to allow aging, embrittled nuclear power reactors to continue to operate well past their lifespans and certainly into risky uncharted territory.”⁴⁶ These calculations, according to Petitioner, are “error-prone” and are used by the NRC “to avoid testing [] actual embrittlement through the measurement of [] actual metallurgical coupons.”⁴⁷ The lack of capsules and “error-

⁴¹PSR WI Petition at 31-32.

⁴²*Id.* at 31.

⁴³*Id.* at 32.

⁴⁴*Id.* at 31–32; Tr. at 17 (Lodge).

⁴⁵Petition at 35 (citing Gundersen Decl. ¶ 7.4.6).

⁴⁶*Id.* at 37 (citing Gundersen Decl. ¶ 7.7.3).

⁴⁷*Id.*; Gundersen Decl. ¶ 7.8.2 (“Instead of evaluating Point Beach’s specific metallurgy, the NRC has allowed Point Beach and its cohorts to use analytical techniques that ignore the data from sample coupons it could readily test.”).

prone analytical calculations” are concerning, PSR WI maintains, because in a “seriously embrittled reactor” there is the risk of pressurized thermal shock, that could cause the reactor vessel to “break open and release massive radioactivity into the surrounding area and the environment.”⁴⁸

Further, Petitioner’s expert, Arnold Gundersen, states that “there is no scientific basis by which the Point Beach reactors should continue operating unless there is a complete physical analysis of the coupons from its reactors and the five other reactors that are its embrittled cohorts.”⁴⁹ Mr. Gundersen states that Point Beach, “[d]uring the last 50 years of operation . . . has been violating [General Design Criterion] 14 by not testing coupons”⁵⁰ As such, Petitioner contends this aging-related issue is not “adequately dealt with by regulatory processes” and warrants denial of the SLR application.⁵¹ Mr. Gundersen noted that “[t]he NRC’s approach to increasing neutron embrittlement has been to develop new operator administrative controls. These administrative controls are requirements that the atomic reactor operators at Point Beach must implement during a reactor emergency to avoid cracking the 8” thick steel atomic power reactor vessel.⁵² These administrative controls require the reactor operators to raise the reactor’s temperature before increasing the pressure, and *unless the operators implement these controls*

⁴⁸Petition at 35 (citing Gundersen Decl. ¶ 7.4.5). Pressurized thermal shock is an event or transient that causes “severe overcooling (thermal shock) concurrent with or followed by significant pressure in the reactor vessel.” 10 C.F.R. § 50.61(a)(2).

⁴⁹Gundersen Decl. ¶ 7.8.2.

⁵⁰Gundersen Decl. ¶ 7.8.4; Tr. at 84 (Lodge). General Design Criterion 14 requires that “[t]he reactor coolant pressure boundary shall be designed, fabricated, erected, and tested so as to have an extremely low probability of abnormal leakage, of rapidly propagating failure, and of gross rupture.” 10 C.F.R. Part 50, subpt. A, app. A, § II, Criterion 14.

⁵¹Petition at 38 (quoting *PPL Susquehanna, LLC* (Susquehanna Steam Electric Station, Units 1 & 2), LBP-07-4, 65 NRC 281, 309 (2007)).

⁵²Gunderson Decl. at 7.6.1.

perfectly, the reactor vessel will experience cracking.⁵³

PSR WI's basis for the amendment request was the public release of an Electric Power Research Institute letter (EPRI letter)⁵⁴ to its membership that stated that its software for monitoring neutron embrittlement in Boiling Water Reactors (BWRs) is "non-conservative" in a specific fluence range.⁵⁵

Atomic Energy Act regulations at 10 CFR § 54.29(a) allow issuance of a renewed license if "[a]ctions have been identified and have been or will be taken . . . that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB [current licensing basis]," including "managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under § 54.21(a)(1). . . ." PSR WI maintains that the required reasonable assurance is lacking and that there is a "significant link between the claimed deficiency and either the health and safety of the public or the environment"⁵⁶ because a pressurized thermal shock failure at PBNP could result in a Class 9 accident.

Mr. Gundersen conducted a review of the publicly available files in the NRC's ADAMS database and determined that the NRC has granted waivers for each of the five most embrittled reactors still operating – including Point Beach Unit 2⁵⁷ – which has barred assessment of their

⁵³*Id.* at 7.6.1.1.

⁵⁴"Potential Non-Conservatism in EPRI Report, BWRVIP-100, Rev. 1-A, 3002008388 and Impacted BWRVIP Reports" (ADAMS ML21084A164) (April 2, 2021) ("EPRI letter").

⁵⁵EPRI letter attach. 1, at 1.

⁵⁶*Vermont Yankee*, 60 NRC 548, 557 (2004).

⁵⁷Giessner, J., U.S. Nuclear Regulatory Commission, letter to Entergy Nuclear Operations, Inc., "Summary of the March 19, 2013, Public Meeting Webinar Regarding Palisades Nuclear Plant," April 18, 2013 (ADAMS Accession No. ML13108A336) (point #4 at p. 5/15 of .pdf).

actual embrittlement through the measurement of their actual metallurgical coupons. The NRC's refusal to require examination of available coupons/capsules has deprived the NRC and the public of significant scientific data on which to justify continued reactor operations – or their termination. At Diablo Canyon Nuclear Plant, for example, the NRC has allowed avoidance of testing any coupon samples for almost two decades, and at Palisades, Indian Point, and Point Beach, There is no record of coupon samples being tested for at least ten years.⁵⁸ When the Yankee Rowe reactor was completely dismantled in 1992, the reactor vessel was not required by the NRC to be tested to determine how significant its embrittlement was.⁵⁹

The ASLB ruled that “In the Point Beach SLR application, NEPB addressed the requirements in 10 C.F.R. § 54.21(c)(1) for each TLAA [time-limited aging analysis], and that “in accordance with 10 C.F.R. § 54.3, all TLAA from the initial license renewal have been incorporated into the CLB, so only if a TLAA were being created or revised during SLR would a petitioner be able to challenge it.”⁶⁰ Since PSR WI did not identify any new or revised TLAA, the ASLB held, “Petitioner’s suggestion that the existing analysis is inadequate, is ‘error-prone,’ or may not be used challenges the requirements set forth in section 54.21(c)(1), and thus constitutes a collateral attack on NRC rules regarding neutron embrittlement calculations.”⁶¹

The ASLB further rejected Contention 2 because it challenges Point Beach’s compliance with General Design Criterion (GDC) 14, which sets forth requirements for the plant’s design. According to the Board, this “constitutes an impermissible challenge to Point Beach’s current

⁵⁸Gundersen Decl. at ¶ 7.8.1.

⁵⁹*Id.*

⁶⁰Memorandum and Order, LBP 21-05 at 32.

⁶¹*Id.*

operation and its CLB [current licensing basis],” and since the Commission has held that the adequacy of the CLB is not an issue within the scope of a license renewal proceeding, PSR WI’s “assertions regarding the CLB and GDC 14 are beyond the scope of this proceeding, not material to the decision the NRC must make, and fail to demonstrate a genuine dispute with the applicant.”⁶²

The ASLB misread the thrust of amended Contention 2. PSR WI was not challenging the current licensing basis, but instead, the basis for the agency’s refusal to resort to physical evidence and data on the status of metallurgical embrittlement of the reactor vessel and its components for the 20 year subsequent licensing period beginning in 2030.

NRC regulations at 10 CFR § 54.29(a) allow issuance of a renewed license if “[a]ctions have been identified and have been or will be taken . . . that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB [current licensing basis],” including “managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require review under § 54.21(a)(1). . . .”⁶³ PSR WI maintains that the requisite reasonable assurance is lacking here, and there is a “significant link between the claimed deficiency and either the health and safety of the public or the environment.”⁶⁴

Mr. Gundersen’s opinion expressed as of March 2021 was that the lack of scientific data from metallurgical analysis of capsules/coupons harvested from embrittled nuclear reactor vessels, including both Point Beach units, coupled with the use of computerized modeling for

⁶²*Id.*

⁶³10 CFR § 54.29(a).

⁶⁴*Vermont Yankee*, 60 NRC 548, 557 (2004).

embrittlement analysis has deprived the NRC of a scientific basis to justify the continued operations of the Point Beach reactors for the subsequent, and possibly even the current, license term.⁶⁵ Mr. Gundersen concluded that Point Beach’s continued operation violates 10 CFR Part 50 Appendix A, Criterion 14,⁶⁶ which requires that “[t]he reactor coolant pressure boundary shall be designed, fabricated, erected, and tested so as to have an extremely low probability of abnormal leakage, of rapidly propagating failure, and of gross rupture.” The EPRI disclosure admits errors in the computer codes its members use to predict the neutron embrittlement of components inside US nuclear reactors and that their use causes under-prediction – because the calculations are no longer deemed to be conservative – of the extent of embrittlement damage to reactor components within the atomic reactor cores. PSR WI’s expert consequently opined that “Mathematical modeling of neutron embrittlement is prone to errors and is frequently incorrect, creating unsafe conditions,” that “there is no substitute for using frequent real-world material samples to determine the actual degraded condition of a reactor’s internals subject to high neutron fluence levels,” and that “Point Beach does not have an adequate number of physical samples for NextEra to periodically sample to determine if its core internal structures will remain safe in the extended license period of 60 to 80 years.”

The EPRI letter exposes possible problems with the existing and projected conditions of the internal core structures at Point Beach. Mr. Gundersen concluded that “It is imperative and prudent for public safety with such an old and degraded reactor that NextEra determines through the physical sampling and testing of coupons if Point Beach may operate safely for the proposed

⁶⁵Declaration of Arnold Gundersen (March 23, 2021) at ¶ 7.8.2.

⁶⁶*Id.* at ¶ 7.8.3.

extension.”

The ASLB effectvely required PSR WI to completely litigate its contention on its merits at the Petition to Intervene stage. Coupon testing is a means of addressing a known serious aging-related problem. The ASLB conducted the inquiry into admissibility of Contention 2 as substitute for trial on the merits, on paper, without the due process guarantees attendant to a live adversarial hearing. The ASLB sifted through NextEra’s and the NRC Staff’s versions of the facts or allegations passed off as fact, conducted weighing, and denied admission of the contention on the merits as determined by the Board. But that’s not how it’s supposed to work.

At its essence, an acceptable contention need only be specific and have a basis. The standard for admitting a contention is not meant to be equivalent to the standard of evidence at a trial on the merits; the truth or falsity of the contention is reserved for adjudication.⁶⁷ Arguments over the interpretation of the evidence are “inappropriate in the context of a contention admissibility ruling, where we do not decide the merits or draw factual inferences in favor of the party opposing the admission of a contention.”⁶⁸

The factual support necessary to show that a genuine dispute exists need not be in formal evidentiary form, nor be as strong as that necessary to withstand a summary disposition motion. What is required is “a minimal showing that material facts are in dispute, thereby demonstrating that an ‘inquiry in depth’ is appropriate.”⁶⁹

⁶⁷*Washington Public Power Supply System* (WPPSS Nuclear Project No. 2), ALAB-722, 17 NRC 546, 551 n. 5 (1983).

⁶⁸*Detroit Edison Company* (Fermi Nuclear Power Plant, Unit 3), ASLBP No. 09-880 05-BD01, LBP 10-09 (June 15, 2010) (slip op.).

⁶⁹*Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994) (citing Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989), quoting *Connecticut Bankers Association v. Board*

NextEra has squandered opportunities to test coupons in the past. The NRC has failed to require timely destructive testing of capsules/coupons from PBNP for years; while there apparently is one remaining sample in Unit 2, it will not be tested until 2024, and then there will be no more available samples in either reactor.⁷⁰ The complete absence beyond 2024 of any means of physically measuring and analyzing embrittlement for the ensuing 36+ years of operations of both PBNP units is of grave concern. The reactor coolant pressure boundary has not been tested in Unit 1, and will not be tested, and so there is no reasonable assurance of an extremely low probability of abnormal leakage, rapidly propagating failure, and of gross rupture of the reactor vessel and internals as Criterion 14 requires. The issue of embrittlement will not be “adequately dealt with by regulatory processes” as time passes, and so it warrants review in this license renewal application proceeding.⁷¹ The scope of safety review for license renewal is limited to managing the effects of aging of certain systems, structures, and components (“SSCs”)⁷² with the aim being to provide “reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the CLB.”⁷³ The assurance

of Governors, 627 F.2d 245 (D.C. Cir. 1980).

⁷⁰From p. 1358/1528 of .pdf (p. B-150) of the “Point Beach Nuclear Plant Units 1 and 2 Subsequent License Renewal Application” (ML20329A247): “The PBN standby capsules (in both Units 1 and 2) do not contain the most limiting material and there are no plans to withdraw these capsules. The current approved withdrawal of capsule is scheduled for Fall of 2024 at a fluence of 1019 n/cm², for the 60-year license renewal period.”

The referenced capsule is in Unit 2. There are no remaining capsules whatsoever to test in Unit 1, from now until the permanent termination of operations in the 2050s, *see* Tables 1 and 2 at p. 1208/1528 of .pdf (p. A-158).

⁷¹*PPL Susquehanna, LLC* (Susquehanna Steam Electric Station, Units 1 & 2), LBP-07-4, 65 NRC 281, 307-09 (2007).

⁷²10 CFR § 54.29(a)(1).

⁷³10 CFR § 54.3(a) defines “current licensing basis (CLB)” as “the set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and in

for continued operations in accordance with the Point Beach CLBs is unreasonable at this point.

Contention 3: The PBNP Environmental Report failed to adequately evaluate the full potential for renewable energy sources, such as solar electric power (photovoltaics) to offset the loss of energy production from PBNP, and to make the requested license renewal action from 2030 to 2053 unnecessary

Contention 3 alleges that “[t]he . . . Environmental Report fails to adequately evaluate the full potential for renewable energy sources, such as solar electric power (photovoltaics) to offset the loss of energy production from [Point Beach and, therefore,] the requested license renewal action from 2030 to 2053 [is] unnecessary.”⁷⁴ Petitioner’s expert, Dr. Alvin Compaan, contended that the SLR application should be denied because NEPB “fail[ed] to adequately assess the solar option.”⁷⁵ Dr. Compaan stated that the declining cost of solar will make the power generated at Point Beach “superfluous,”⁷⁶ and that solar plus storage is a viable alternative to replace Point Beach Units 1 and 2.⁷⁷ Dr. Compaan provided several options on how solar plus storage could be installed on residential, commercial, and federal conservation land at a sufficient volume to replace the baseload power of Point Beach.⁷⁸

Petitioner’s other expert, Dr. Mark Cooper, asserted that “[n]uclear power is far too costly,”⁷⁹ and concluded that the SLR application should be denied for economic reasons⁸⁰ and that nuclear energy should be discarded in favor of “distributed and renewable resources.”⁸¹

effect.”

⁷⁴Petition at 41.

⁷⁵Compaan Decl. ¶ 5.

⁷⁶*Id.* ¶ 33.

⁷⁷See *id.* ¶¶ 5-37.

⁷⁸*Id.* ¶¶ 20-24.

⁷⁹Cooper Decl. at 2.

⁸⁰*Id.* at 8-9.

⁸¹*Id.* at 2; Compaan Decl. ¶ 37.

Petitioner further contends that solar is technically feasible on a commercial scale, and therefore must be reviewed as a reasonable alternative in the ER.⁸² Petitioner asserts that solar generation is preferable to SLR due to the “harsh economic realities”⁸³ of nuclear power, the “dramatically-changing circumstances in the regional energy mix,”⁸⁴ and the associated low greenhouse gas emissions and environmental impacts from solar energy generation.⁸⁵

The Licensing Board ruled that “Petitioner’s assertion that the solar plus storage alternative should have been considered as a reasonable alternative in the ER lacks adequate support and fails to demonstrate a genuine dispute with NEPB’s conclusion that solar plus storage would not be commercially viable on a utility scale and operational prior to expiration of the current Point Beach licenses.”⁸⁶

The ASLB embraced NextEra’s calculation that it would take 6,780 acres, plus additional acreage for energy storage, to match the current generating capacity of the Point Beach units,⁸⁷ agreeing that “solar plus storage ‘could be a reasonable alternative’ but ‘its generation capacity is far less than nuclear generation’ and is not a commercially viable alternative ‘due to the acreage requirements.’”⁸⁸

The ASLB apparently could not recover from learning the surface area requirements for photovoltaic solar in order to understand that there are thousands of available rooftops which are oriented properly and free of obstructions which could serve as suitable locations for solar

⁸²Petition at 55; see Compaan Decl. ¶¶ 32–24, 37.

⁸³Petition at 53.

⁸⁴Compaan Decl. ¶ 3.

⁸⁵Petition at 48–49; Compaan Decl. ¶¶ 35–37.

⁸⁶Memorandum and Order, LBP 21-05 at 42.

⁸⁷ER at 7-8.

⁸⁸*Id.* at 7-9.

rooftop installations and having suitable space for more capacity than Point Beach generates.⁸⁹ Dr. Compaan identified commercial rooftop space suitable for solar panels that could deliver average generation of 1760 MW – again, far more than Point Beach.⁹⁰ Dr. Compaan showed that the federal farmland Conservation Reserve Program has nearly 100,000 enrolled acres with a potential for allowing more than 18,000 MW of solar generation power – three (3) times the annual energy output of PBNP.⁹¹ He noted that solar will be deployed in many other places, from conventional solar farms to power line transmission easements, on awnings, parking lot canopies, in landfills and brownfields, and on highway rights-of-way.⁹² But the ASLB weighed the evidence and adjudicated whether photovoltaic solar was worthy of undergoing adjudication on the issue of whether it is a “reasonable alternative” in 2021.

Respecting the intermittency of solar, Dr. Compaan attested that the technology of large-scale batteries for electricity energy storage has been improving rapidly and the costs have been dropping quickly. He pointed out the brand-new Florida Power & Light solar-charged battery storage project, believed to be the world’s biggest. FPL is a subsidiary of NextEra Energy; the plant will be 409MW /900MWh in Manatee County, Florida.⁹³

Despite citation to NextEra’s world’s largest Manatee County solar-charged battery storage project, the ASLB determined that PSR WI did not show that solar plus storage technology “is under development for large-scale use . . .”⁹⁴ That is the supposed expectation of

⁸⁹*Id.* at 21.

⁹⁰*Id.*

⁹¹*Id.* at ¶ 22.

⁹²*Id.* at ¶ 24.

⁹³*Id.* at ¶ 29.

⁹⁴Memorandum and Order, LBP-21-05 at 46.

NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 315 (2012).

Dr. Compaan found that with “recent advances in battery storage technology, increasing manufacturing scale, and reductions in costs, battery energy storage is a very viable option to combine with solar to provide a durable and reliable solution to the limited capacity factor of solar.”⁹⁵ It wasn’t enough; the ASLB faulted PSR WI for not stating in so many words that a solar technology obviously is under development for large-scale use was not described as “likely to’ be available during the period of extended operation.” Here’s what Dr. Compaan said about solar plus storage in his declaration:

28. One example of the complementarity between large-scale battery storage and large-scale solar is the power plant now under construction by Florida Power and Light, which is a subsidiary of NextEra Energy, the owner of Point Beach Nuclear. This FPL project now under construction was highlighted recently by Energy Storage News. [<https://www.energy-storage.news/news/work-begins-on-409mw-900mwh-florida-batteryproject-to-ease-natural-gas-pla>]

29. An excerpt from the February 2, 2021, article follows:

Construction work has begun in the US on what is claimed to be the world’s biggest solar-charged battery storage project, by utility company Florida Power & Light (FPL). FPL, which is a subsidiary of major US power producer NextEra Energy, announced its plans for the 409MW / 900MWh project, FPL Manatee Energy Storage Center in Manatee County, Florida, back in March 2019. The battery energy storage system (BESS) is colocated with FPL’s existing Manatee Solar Energy Center ground-mounted solar PV plant and is expected to be up and running towards the end of this year.

The BESS is being deployed by the utility along with a number of smaller solar and energy storage projects nearby to enable to retirement of two ageing natural gas plants built in the 1970s, which have a combined generation capacity of over 1,600MW.

FPL said that in addition to resulting in carbon dioxide emissions reductions, the Manatee battery project will also save its customers some US \$100 million over the lifetime of the project by offsetting fuel costs and running on sunshine.

⁹⁵*Id.* at ¶ 30.

30. The worldwide numbers for battery energy storage deployed in 2020 show 3500 MWh of batteries installed usually with solar or wind. This report is from Wood MacKenzie and the U.S. Energy Storage Association (ESA). We quote from the article: [<https://www.renewableenergyworld.com/storage/new-energy-storage-deployment-topped-record-3500-mwh-in-2020-esa-report-shows/>]

“2020 is the first year that advanced energy storage deployments surpassed gigawatt scale—a tremendous milestone on the path to our aspiration of 100 GW by 2030,” said Jason Burwen, U.S. Energy Storage Association Interim CEO. “With continuing storage cost declines and growing policy support and regulatory reform in states and the federal government, energy storage is on an accelerating trajectory to enable a resilient, decarbonized, and affordable electric grid for all.”

31. In conclusion, it should be clear that with recent advances in battery storage technology, increasing manufacturing scale, and reductions in costs, battery energy storage is a very viable option to combine with solar to provide a durable and reliable solution to the limited capacity factor of solar.⁹⁶

PSR WI submits that it is difficult not to interpret this portion of Dr. Compaan’s declaration as suggesting that solar + storage is “‘likely to’ be available during the period of extended operation.”⁹⁷ The Licensing Board said, to the contrary, that “Petitioner does not make this showing, and thus *Seabrook* does not support its position.”

Dr. Compaan further explained that the solar + storage approach is scalable and adaptable because the delivery of solar power closely follows the time-of-day demand curve, which can mitigate some of the need for baseload power. Nuclear plants are unable to follow the demand curve of usage which typically peaks in the daytime and is very low at night,⁹⁸ and the inclusion of large scale wind and solar power in the California grid tends to offset the need for large baseload plants to provide peak power at the highest-demand times of day.⁹⁹ He predicted that by

⁹⁶Compaan Decl. ¶¶ 28-31.

⁹⁷*NextEra Energy Seabrook*, LLC (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 315 (2012) and *FirstEnergy Nuclear Operating Co.* (Davis-Besse Nuclear Power Station, Unit 1), CLI-12-8, 75 NRC 393, 402 (2012).

⁹⁸*Id.* at 31.

⁹⁹*Id.* at 33 (discussing Compaan Exh. 6).

2030 – the commencement of the 20 year subsequent license extension – “a 1200 MW supply of baseload power to replace PB Nuclear may be entirely superfluous.”¹⁰⁰

Despite PSR WI’s expert testimony presentation, the ASLB disregarded the standards for assessing the admissibility of contentions, weighed the evidence, imposed its own subjective values, and declared photovoltaic solar in 2021 not to be a reasonable alternative.

The Council on Environmental Quality defines “reasonable alternatives” as “a reasonable range of alternatives that are technically and economically feasible, meet the purpose and need for the proposed action, and, where applicable, meet the goals of the applicant.” 40 CFR § 1508.1(z). PSR WI’s Contention 3 detailed photovoltaic as being technically and economically feasible, that it meets the purpose and need of providing baseload power to replace Point Beach Units 1 and 2, and that it could meet the goals of an applicant uniquely invested elsewhere (and even at the Point Beach site) in industrial solar energy production. The ASLB credited NextEra’s “moderate to high” impacts assessment against all evidence, and against all possible explanations and details that PSR WI might have adduced at hearing to come up with a conclusion of “not a reasonable alternative.”

The Licensing Board abandoned the cardinal rules for evaluating contentions. An acceptable contention need only be specific and have a basis. The standard for admitting a contention is not meant to be equivalent to the standard of evidence at a trial on the merits; the truth or falsity of the contention is reserved for adjudication.¹⁰¹ Arguments over the interpretation of the evidence are “inappropriate in the context of a contention admissibility ruling, where we

¹⁰⁰*Id.*

¹⁰¹*Washington Public Power Supply System* (WPPSS Nuclear Project No. 2), ALAB-722, 17 NRC 546, 551 n. 5 (1983).

do not decide the merits or draw factual inferences in favor of the party opposing the admission of a contention.”¹⁰² Yet evidentiary weighing and interpretation is what the ASLB performed.

The factual support necessary to show that a genuine dispute exists need not be in formal evidentiary form, nor be as strong as that necessary to withstand a summary disposition motion. What is required is “a minimal showing that material facts are in dispute, thereby demonstrating that an ‘inquiry in depth’ is appropriate.”¹⁰³ PSR WI exceeded the “minimal showing” hurdle with considerable evidence disputing the Environmental Report, and the rejection of Contention 3 must be reversed.

Contention 4: PBNP has an elevated risk of a turbine missile accident owing to the poor alignment of its major buildings and structures

PSR WI concedes the rejection of Contention 4.

IV. CONCLUSION

Physicians for Social Responsibility Wisconsin “articulate[d] at the outset the specific issues they wish to litigate,”¹⁰⁴ but the ASLB turned the contention admissibility standards into “a fortress to deny intervention.” *Northeast Nuclear Energy Company*, 53 NRC 27. PSR WI requests the Commission to reverse the Memorandum and Order of the Atomic Safety and Licensing Board and to restore Contentions 1, 2 and 3 to the ASLB for adjudication.

August 20, 2021

/s/ Terry J. Lodge
Terry J. Lodge, Esq.

¹⁰²*Detroit Edison Company* (Fermi Nuclear Power Plant, Unit 3), ASLBP No. 09-880 05-BD01, LBP 10-09 (June 15, 2010) (slip op.).

¹⁰³*Gulf States Utilities Co.* (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994) (citing Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989), quoting *Connecticut Bankers Association v. Board of Governors*, 627 F.2d 245 (D.C. Cir. 1980).

¹⁰⁴*Dominion Nuclear Conn., Inc.*, CLI-01-24, 54 NRC 359.

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CERTIFICATE OF SERVICE

I hereby certify that on August 20, 2021, I deposited the foregoing “NOTICE OF APPEAL OF LBP-21-05 BY PETITIONER PHYSICIANS FOR SOCIAL RESPONSIBILITY WISCONSIN AND BRIEF IN SUPPORT OF APPEAL” in the NRC’s electronic docket of this proceeding and that according to the protocols of that system, it was to be automatically transmitted to all parties of record registered to receive electronic service.

/s/ Terry J. Lodge
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