# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Christopher T. Hanson, Chairman Jeff Baran David A. Wright

In the Matter of

NEXTERA ENERGY POINT BEACH, LLC

(Point Beach Nuclear Plant, Units 1 and 2)

Docket Nos. 50-266-SLR 50-301-SLR

## CLI-22-05

### MEMORANDUM AND ORDER

Today we address the appeal of Physicians for Social Responsibility Wisconsin (PSR)

from the Board's denial of PSR's petition for leave to intervene and request for a hearing. For

the reasons below, we affirm the Board's determination that Contentions 1 and 2 are

inadmissible.<sup>1</sup> We dismissed Contention 3 in our recent order providing generic direction for all

subsequent license renewal proceedings pending before the agency.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> See LBP-21-5, 94 NRC 1 (2021).

<sup>&</sup>lt;sup>2</sup> *Duke Energy Carolinas, LLC* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-22-3, 95 NRC \_\_\_\_\_(Feb. 24, 2022) (slip op.) (dismissing pending environmental contentions and stating that the NRC will provide a new hearing opportunity on updated environmental information).

### I. <u>BACKGROUND</u>

On November 16, 2020, NextEra Energy Point Beach, LLC (NextEra) applied for a second (or subsequent) renewal of the operating licenses for the Point Beach Nuclear Plant for an additional twenty years.<sup>3</sup> The NRC published notice of the opportunity to petition for leave to intervene and request a hearing regarding NextEra's application.<sup>4</sup> PSR timely filed a petition and requested a hearing on four contentions.<sup>5</sup>

The NRC staff and NextEra opposed PSR's petition on the grounds that none of the four contentions PSR submitted were admissible under our hearing standards.<sup>6</sup> After oral argument, the Board agreed that PSR had not submitted an admissible contention and therefore denied

<sup>&</sup>lt;sup>3</sup> The Point Beach license renewal application consists of a cover letter and five enclosures. See Letter from Michael Strope, NextEra, to NRC Document Control Desk (Nov. 16, 2020) (ADAMS accession no. ML20329A292 (package)). Enclosure 3 to the cover letter includes a publicly available version of the license renewal application and an environmental report. See Point Beach Nuclear Plant Units 1 and 2 Subsequent License Renewal Application (Public Version) (ML20329A247) (Application); Appendix E Applicant's Environmental Report Subsequent Operating License Renewal Point Beach Nuclear Plant Units 1 and 2 (ML20329A248) (Environmental Report).

<sup>&</sup>lt;sup>4</sup> NextEra Energy Point Beach, LLC; Point Beach Nuclear Plant, Units 1 and 2, 86 Fed. Reg. 6,684 (Jan. 22, 2021).

<sup>&</sup>lt;sup>5</sup> 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 (Mar. 23, 2021) (Petition). PSR later moved to amend the second of its four contentions. See Physicians for Social Responsibility Wisconsin's Motion to Amend Contention 2 (Inadequately Tested Reactor Coolant Pressure Boundary) (Apr. 26, 2021) (Motion to Amend). The Board found that PSR timely moved to amend its second contention based upon the availability of new and materially different information. See LBP-21-5, 94 NRC at 37-40. Neither the Staff nor NextEra have appealed the Board's ruling on this point, therefore, we consider Contention 2 as amended.

<sup>&</sup>lt;sup>6</sup> See NRC Staff's Answer Opposing Physicians for Social Responsibility Wisconsin's Petition to Intervene (Apr. 19, 2021) (Staff Answer); NextEra Energy Point Beach, LLC's Answer Opposing the Physicians for Social Responsibility Wisconsin's Petition for Leave to Intervene and Request for Hearing (Apr. 19, 2021) (NextEra Answer).

PSR's hearing request.<sup>7</sup> PSR appealed the Board's denial of three of its four contentions.<sup>8</sup> The Staff and NextEra oppose PSR's appeal.<sup>9</sup>

While PSR's appeal was pending, we issued a decision in a separate subsequent license renewal proceeding, *Turkey Point*. In *Turkey Point*, we found that 10 C.F.R. § 51.53(c)(3), which allows applicants for "initial" license renewal to rely on the Generic Environmental Impact Statement for License Renewal (GEIS) in their environmental reports, does not apply to applications for subsequent license renewal.<sup>10</sup> We further found that the GEIS itself does not describe the environmental impacts of operation during the period of subsequent license renewal. In a separate but related order, we therefore directed that the Staff revise the GEIS.<sup>11</sup> We also dismissed environmental contentions and motions pending in subsequent license renewal cases that challenged the contents of the GEIS or site-specific environmental impact statement and provided that the public would have an opportunity to file contentions based on new information in the revised site-specific environmental impact statements.<sup>12</sup>

<sup>12</sup> *Id*.

<sup>&</sup>lt;sup>7</sup> See LBP-21-5, 94 NRC at 16-18.

<sup>&</sup>lt;sup>8</sup> PSR did not appeal the Board's denial of Contention 4. *See Notice of Appeal of LBP-21-05 by Petitioner Physicians for Social Responsibility Wisconsin and Brief in Support of Appeal (Refiled)* (Aug. 20, 2021), at 26 (Appeal).

<sup>&</sup>lt;sup>9</sup> See NRC Staff's Brief in Opposition to Physicians for Social Responsibility Wisconsin's Appeal of LBP-21-5 (Corrected) (Sept. 14, 2021); NextEra Energy Point Beach, LLC's Brief in Opposition to Physicians for Social Responsibility Wisconsin's Appeal of LBP-21-05 (Sept. 14, 2021) (NextEra Answer to Appeal).

<sup>&</sup>lt;sup>10</sup> *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), CLI-22-2, 95 NRC \_\_ (Feb. 24, 2022) (slip op.).

<sup>&</sup>lt;sup>11</sup> Oconee, CLI-22-3, 95 NRC at \_\_ (slip op. at 2-3) (citing Staff Requirements—SECY-21-0066—Rulemaking Plan for Renewing Nuclear Power Plant Operating Licenses – Environmental Review (RIN 3150-AK32; NRC-2018-0296) (Feb. 24, 2022) (ML22053A308)).

#### II. DISCUSSION

## A. Legal Standards

Our regulations allow a petitioner whose hearing request has been wholly denied to appeal as of right.<sup>13</sup> Unless an appeal demonstrates an error of law or abuse of discretion, we will not disturb a licensing board's ruling on threshold decisions such as whether to grant a hearing request.<sup>14</sup>

# 1. Standards Governing Hearing Requests

To be granted a hearing, a petitioner must demonstrate standing and propose at least one admissible contention.<sup>15</sup> A contention is admissible if it meets the standards in 10 C.F.R. § 2.309(f)(1). These standards require that a contention state a genuine dispute with the application that is supported by specific facts or expert opinion.<sup>16</sup> The dispute raised must also be material to the findings the NRC must make regarding the underlying licensing action.<sup>17</sup> A contention that challenges or seeks to impose requirements stricter than an agency regulation is inadmissible unless the Commission grants a waiver of that regulation.<sup>18</sup>

## 2. Standards Governing Subsequent License Renewal

The NRC's review of a license renewal application (including subsequent license renewal) consists of a safety review and an environmental review. The NRC's safety review is focused on the applicant's programs for managing the effects of aging during the period of

<sup>15</sup> 10 C.F.R. § 2.309(d)(1), (f)(1).

<sup>16</sup> *Id.* § 2.309(f)(1)(v)-(vi).

<sup>17</sup> Id. § 2.309(f)(1)(iv).

<sup>18</sup> See id. §§ 2.309(f)(iii), 2.335(a), (b).

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<sup>&</sup>lt;sup>13</sup> 10 C.F.R. § 2.311(c).

<sup>&</sup>lt;sup>14</sup> See, e.g., Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-15-21, 82 NRC 295, 301 (2015).

extended operation for specified plant structures, systems, and components that the current licensing basis of the plant may not be sufficient to address.<sup>19</sup> This includes a review of programs to manage the effects of aging on long-lived, passive structures and components.<sup>20</sup> For those structures and components, a license renewal applicant must demonstrate that the effects of aging will be adequately managed so that the intended functions will be maintained for the period of extended operation.<sup>21</sup>

The NRC's safety review of a license renewal application does not entail a full reassessment of safety issues previously addressed in the licensing of a plant, nor is it designed to review current operations; rather, it "focuses on those potential detrimental effects of aging that are not routinely addressed by ongoing regulatory oversight programs" and the applicant's plans for managing those effects during the period of extended operation.<sup>22</sup> Ongoing operational issues are not reviewed because such issues are "effectively addressed . . . by ongoing agency oversight, review, and enforcement."<sup>23</sup>

The NRC's environmental review is based in part on the license renewal applicant's environmental report. The environmental report must describe the impacts of the proposed action on the environment and discuss potential alternatives to the proposed action sufficient to

<sup>23</sup> *Id.* at 9.

<sup>&</sup>lt;sup>19</sup> See Nuclear Power Plant License Renewal; Revisions; Final Rule, 60 Fed. Reg. 22,461, 22,469 (May 8, 1995).

<sup>&</sup>lt;sup>20</sup> See Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 456 (2010) (citing 10 C.F.R. § 54.21(a)(1)-(2)).

<sup>&</sup>lt;sup>21</sup> See id.; 10 C.F.R. § 54.21(a)(3).

<sup>&</sup>lt;sup>22</sup> *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 NRC 3, 7 (2001).

enable the NRC to meet its statutory obligations under the National Environmental Policy Act (NEPA).<sup>24</sup>

#### B. Analysis

PSR claims that the Board erred in finding three of PSR's contentions inadmissible. Briefly summarized, these contentions are: 1) NextEra's environmental report is inadequate because it does not evaluate the alternative of replacing the once-through cooling system at Point Beach with cooling towers "as a means of reducing aquatic biota and migratory bird impingement, entrainment, and damage from thermal pollution;"<sup>25</sup> 2) NextEra's use of calculations rather than metallurgical testing of physical samples (called capsules or coupons) to monitor embrittlement of the reactor pressure vessel during the period of extended operation is inadequate to protect against vessel rupture due to pressurized thermal shock;<sup>26</sup> and 3) NextEra's environmental report does not adequately evaluate distributed solar generation coupled with battery storage as a reasonable alternative to license renewal.<sup>27</sup> As explained below, we affirm the Board's determination that the first two contentions are inadmissible and dismissed the third contention in CLI-22-3.

### 1. Contention 1: Environmental Analysis of Cooling Towers

In Contention 1, PSR asserts that NextEra's environmental report is deficient because it does not consider replacement of the once-through cooling system at Point Beach with cooling towers as a means of mitigating environmental impacts.<sup>28</sup> PSR claims that consideration of

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<sup>&</sup>lt;sup>24</sup> See 10 C.F.R. §§ 51.45, 51.53(c), 54.23; National Environmental Policy Act of 1969 § 102, 42 U.S.C. § 4332.

<sup>&</sup>lt;sup>25</sup> Appeal at 4.

<sup>&</sup>lt;sup>26</sup> *Id.* at 11-15.

<sup>&</sup>lt;sup>27</sup> *Id.* at 20-21.

<sup>&</sup>lt;sup>28</sup> See Petition at 17-18. A once-through cooling system draws water from a river, lake, or other large water body through intake structures designed to screen out aquatic biota. The water is

cooling towers is necessary because the once-through cooling system has "recurring effects of killing aquatic organisms and occasional birds" that could be mitigated by the installation of cooling towers.<sup>29</sup>

The Board found Contention 1 inadmissible because NextEra provided evidence that the once-through cooling system at Point Beach has been properly permitted under the Federal Water Pollution Control Act (also known as the Clean Water Act) in lieu of an environmental analysis of the cooling system's thermal, impingement, and entrainment impacts.<sup>30</sup> Citing our decision in *Vermont Yankee*, which addressed the NRC's duty to conduct an environmental review of cooling water systems in light of the statutory scheme imposed by the Clean Water Act, the Board found that a license renewal applicant with a permitted once-through cooling system is not required to further evaluate the environmental impacts of that system or potential alternatives.<sup>31</sup> This evaluation is not required because the Clean Water Act deprives the NRC of authority to "consider alternative cooling systems as that would improperly 'second-guess[]' the cooling system approved by the permitting agency."<sup>32</sup> The Board further found that NextEra had provided current determinations by the Wisconsin Department of Natural Resources (WDNR)—the Clean Water Act permitting authority in this case—that the once-through cooling system in use at Point Beach "represents interim [best technology available] for minimizing

then used to cool reactor systems before being discharged back to the water body, typically at an elevated temperature. By contrast, mechanical draft cooling towers are typically part of a closed cooling system that does not draw from large bodies of water and instead relies on evaporation to remove heat.

<sup>&</sup>lt;sup>29</sup> *Id.* at 20.

<sup>&</sup>lt;sup>30</sup> LBP-21-5, 94 NRC at 31-32 (citing Federal Water Pollution Control Act § 316(a), (b); 33 U.S.C. § 1326(a), (b)).

<sup>&</sup>lt;sup>31</sup> *Id.* at 31-33 (quoting *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-07-16, 65 NRC 371, 377 (2007)).

adverse environmental impact" and that the maximum heat load to be discharged by Point Beach using its once-through cooling system "is protective of the balanced, indigenous community of shellfish, fish and wildlife in and on Lake Michigan."<sup>33</sup> Therefore, given WDNR's determination that the once-through cooling system at Point Beach is permissible and the Commission's decision in *Vermont Yankee*, the Board concluded that "further assessment of entrainment, impingement, or thermal impacts is not required."<sup>34</sup>

On appeal, PSR does not argue that we overturn *Vermont Yankee* or suggest that the NRC has authority to require a modification of the permitted once-through cooling system based upon an environmental analysis of cooling tower impacts. Rather, PSR argues that the NRC has an independent duty under NEPA "to lay all facts about adverse environmental effects out for the public to understand."<sup>35</sup> PSR argues that the Board should have recognized this duty and admitted Contention 1 to require that NextEra provide a public analysis of cooling tower impacts, which in turn might move Wisconsin to "formally act within the State process" for issuing permits under the Clean Water Act "such that modern cooling tower technology would be installed at Point Beach."<sup>36</sup> PSR argues that because the State could consider an analysis of cooling tower impacts as "the basis for modifying its [Clean Water Act] responsibilities, in light of NEPA's goals and policies," Contention 1 must be admitted.<sup>37</sup>

We are unpersuaded by PSR's argument. As we explained in *Vermont Yankee*, the NRC's environmental review "rests on the presumption that we need not—indeed *cannot*—

<sup>37</sup> *Id.* at 10-11.

<sup>&</sup>lt;sup>33</sup> *Id.* at 32 (quoting Environmental Report, Attach. B, WPDES Permit No. WI-0000957-080-0 § 1.3 (July 2016); Environmental Report, Attach. B, Letter from Amanda Minks, WDNR, to Steve Jaeger, WDNR (Aug. 29, 2012), at 3).

<sup>&</sup>lt;sup>34</sup> Id.

<sup>&</sup>lt;sup>35</sup> Appeal at 9.

<sup>&</sup>lt;sup>36</sup> *Id.* at 10.

review and judge environmental permits issued under the Clean Water Act by the [Environmental Protection Agency] or an authorized state agency."<sup>38</sup> Accordingly, the permitting agency "determines what cooling system a nuclear power facility may use and NRC factors the impacts resulting from use of that system into the NEPA cost-benefit analysis."<sup>39</sup> Under this statutory scheme, the NRC's decision whether to renew the Point Beach licenses does not require an environmental analysis of cooling towers as an alternative.

PSR's argument that NEPA imposes a duty "to lay all facts about adverse environmental effects out for the public to understand" even though the NRC lacks authority to require an alternative to the permitted once-through cooling system is also unavailing.<sup>40</sup> Under NEPA, "[a]n agency has no obligation to gather or consider environmental information if it has no statutory authority to act on that information."<sup>41</sup> As we explained in *Vermont Yankee*, the NRC has no statutory authority to review limitations or other requirements established by WDNR under the Clean Water Act and must accept at face value its determination that the once-through cooling system at Point Beach is sufficiently protective of the environment.<sup>42</sup> Clear statutory language provides that nothing in NEPA shall be deemed to authorize any 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 the Clean Water Act.<sup>43</sup>

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<sup>&</sup>lt;sup>38</sup> Vermont Yankee, CLI-07-16, 65 NRC at 387 n.77.

<sup>&</sup>lt;sup>39</sup> *Id.* at 389 (quoting *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-78-1, 7 NRC 1, 26-27 (1978)).

<sup>&</sup>lt;sup>40</sup> Appeal at 9-10.

<sup>&</sup>lt;sup>41</sup> Sierra Club v. FERC (Sabal Trail), 867 F.3d 1357, 1371-73 (D.C. Cir. 2017) (citing Department of Transportation v. Public Citizen, 541 U.S. 752, 767-68 (2004)).

<sup>&</sup>lt;sup>42</sup> See Vermont Yankee, CLI-07-16, 65 NRC at 376-77, 385-89.

<sup>&</sup>lt;sup>43</sup> See Federal Water Pollution Control Act § 511(c)(2)(B); 33 U.S.C. § 1371(c)(2)(B).

systems, which the NRC has no authority to consider, would run counter to this direction.<sup>44</sup> Here, the NRC complies with NEPA by disclosing the impacts of the once-through cooling system as approved by WDNR.

The Board also noted that PSR did not seek a waiver of 10 C.F.R. § 51.53(c)(3)(ii)(B), which explicitly allows applicants for an initial license renewal to rely on their Clean Water Act certifications in lieu of an environmental analysis of system alternatives for the once-through cooling system.<sup>45</sup> Although our recent decision in *Turkey Point* found that the provisions of 10 C.F.R. § 51.53(c)(3) do not apply to applications for subsequent license renewal, this finding does not undermine the Board's conclusion that Contention 1 is inadmissible. Contention 1 is inadmissible due to a statutory limitation on our authority to regulate cooling systems that have been properly permitted under the Clean Water Act. This statutory limitation, currently reflected in 10 C.F.R. § 51.53(c)(3)(ii)(B), remains unchanged by our recent decision in *Turkey Point* and applies in this proceeding, even though 10 C.F.R. § 51.53(c)(3)(ii)(B) does not. Accordingly, we affirm the Board's dismissal of Contention 1.

#### 2. Contention 2: Reactor Pressure Vessel Materials Testing

PSR asserts in Contention 2, as amended, that Point Beach's "continued operation violates 10 C.F.R. 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."<sup>46</sup> PSR claims that NRC and Point Beach have historically relied too much on "error-prone analytical calculations" rather than metallurgical

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<sup>&</sup>lt;sup>44</sup> See Vermont Yankee, CLI-07-16, 65 NRC at 387 n.77 (citing *Public Citizen*, 541 U.S. at 754); see also Federal Water Pollution Control Act § 511(c)(2)(B); 33 U.S.C. § 1371(c)(2)(B).

 <sup>&</sup>lt;sup>45</sup> See LBP-21-5, 94 NRC at 31 n.111; 10 C.F.R. §§ 2.309(f)(iii), 2.335(a), (b), 51.53(c)(3)(ii)(B).
<sup>46</sup> See Petition at 31; Motion to Amend at 7.

testing to evaluate the integrity of the reactor pressure vessel and that not enough metallurgical samples (known as capsules or coupons) remain in the reactor vessel to adequately test its embrittlement over the period of extended operation.<sup>47</sup> PSR also asserts that continued reliance on calculations during the period of extended operation would be inadequate to protect against the risk of vessel rupture due to pressurized thermal shock because, according to a letter from the Electric Power Research Institute (EPRI), computer software for predicting embrittlement in boiling water reactors is "nonconservative."<sup>48</sup> Therefore, PSR claims that reactor pressure vessel embrittlement—an aging-related issue—is not "adequately dealt with by regulatory processes" and warrants denial of NextEra's application.<sup>49</sup>

The Board found Contention 2 inadmissible because it did not raise a genuine dispute with the application.<sup>50</sup> The Board found that NextEra's application set forth multiple aging analyses and management plans regarding reactor pressure vessel embrittlement, including a plan for capsule testing.<sup>51</sup> The Board found that these plans provide for testing a capsule containing weld materials representative of Point Beach Units 1 and 2, that this capsule will have been subjected to neutron fluence that "will bound the projected fluence at the end of the [license renewal] operating term," and that NextEra plans to use methodologies that comply with NRC regulations.<sup>52</sup> Further, NextEra plans to "monitor irradiation embrittlement to neutron fluences greater than the projected neutron fluence at the end of the [subsequent period of operation]" using supplemental data from other Babcock & Wilcox reactors as part of its Reactor

- <sup>49</sup> Petition at 38-39.
- <sup>50</sup> LBP-21-5, 94 NRC at 42-45.

<sup>52</sup> *Id.* at 42-43 (citing Application, app. A, at B-150).

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<sup>&</sup>lt;sup>47</sup> See Petition at 35-37.

<sup>&</sup>lt;sup>48</sup> Motion to Amend at 3-6.

<sup>&</sup>lt;sup>51</sup> *Id.* at 42 (citing Application, app. A, at A-25).

Vessel Material Surveillance Aging Management Program.<sup>53</sup> The Board found that PSR had not cited or addressed these parts of the application as required by 10 C.F.R. § 2.309(f)(1)(vi).<sup>54</sup>

The Board also found that Contention 2 lacked technical support. The Board found that PSR did not support its assertions that NextEra's aging management program improperly relies on administrative controls and "error-prone analytical calculations."<sup>55</sup> The Board stated that PSR did not adequately explain how the EPRI letter addressing embrittlement calculations at boiling water reactors is relevant to Point Beach, which is a pressurized water reactor.<sup>56</sup> Therefore, the Board found Contention 2 lacked support and did not demonstrate a genuine dispute with the application as required by 10 C.F.R. § 2.309(f)(1)(v) and (vi).<sup>57</sup>

The Board also found Contention 2 inadmissible because it challenged NRC regulations and the current licensing basis for Point Beach and thus raised issues outside the scope of the proceeding. Specifically, the Board found that PSR's assertions that Point Beach has for years been in violation of NRC regulations because "the reactor coolant boundary has not been tested" through adequate coupon testing challenged current and past operations, rather than NextEra's application for license renewal.<sup>58</sup> The Board also found PSR's general assertion that NextEra should use coupon testing rather than calculations to demonstrate reactor pressure vessel integrity to be an impermissible collateral attack on NRC regulations regarding neutron embrittlement and pressurized thermal shock, which permit reliance on calculations.<sup>59</sup>

<sup>57</sup> Id. at 45.

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<sup>&</sup>lt;sup>53</sup> *Id.* at 43 (citing Application, app. A, at A-26, app. B at B-148 to -149).

<sup>&</sup>lt;sup>54</sup> *Id.* at 43-44.

<sup>&</sup>lt;sup>55</sup> *Id.* at 44.

<sup>&</sup>lt;sup>56</sup> *Id.* at 44-45.

<sup>&</sup>lt;sup>58</sup> *Id.* at 41-42.

<sup>&</sup>lt;sup>59</sup> *Id.* at 41, 44; *see* 10 C.F.R. § 50.61.

On appeal, PSR argues that the Board misconstrued Contention 2 as a challenge to the current licensing basis and misapplied the standards for contention admissibility. PSR argues that the "heart of Contention 2 is that [Point Beach] 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 period of extended operation.<sup>60</sup> PSR argues that it does not challenge the current licensing basis for Point Beach, 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."<sup>61</sup> PSR reasserts its position that reliance on calculational methods to determine reactor pressure vessel embrittlement is not an adequate substitute for coupon testing and claims the Board erred by effectively requiring PSR to litigate the merits of this position at the contention admissibility stage.<sup>62</sup>

We disagree. The Board did not require PSR to litigate the merits of its claim that Point Beach lacks an appropriate aging management strategy for the reactor pressure vessel. Instead, it found that PSR did not provide technical support for its claims regarding coupon testing or specifically dispute NextEra's aging management plans, which describe NextEra's plan to employ coupon testing and other methods to address reactor pressure vessel embrittlement. Moreover, PSR's generalized assertions that calculational methods are error prone and should not substitute for coupon testing not only lacked adequate technical support but challenged NRC regulations governing neutron embrittlement and pressurized thermal shock without seeking a waiver of those regulations.

<sup>&</sup>lt;sup>60</sup> Appeal at 11.

<sup>&</sup>lt;sup>61</sup> *Id.* at 16.

<sup>&</sup>lt;sup>62</sup> *Id.* at 17-18.

We also disagree with PSR that the Board misconstrued Contention 2 by finding that some aspects of the contention challenged the current licensing basis. Contention 2 stated that Point Beach's "continued operation" violates NRC requirements "because the reactor pressure boundary has not been tested," and PSR's expert asserted that "[d]uring the last 50 years of operation" Point Beach "has been violating [General Design Criterion] 14 by not testing coupons."<sup>63</sup> These aspects of Contention 2 challenged the basis for current and past operations, not NextEra's plans for managing aging during the period of extended operation, and were thus inadmissible.

In summary, the Board found that Contention 2 was not adequately supported and did not raise a genuine dispute regarding issues within the scope of this proceeding. On appeal, PSR has shown no error in the Board's decision. We therefore affirm the Board's dismissal of Contention 2.

### 3. Contention 3: Environmental Report Analysis of Solar Power

In Contention 3, PSR asserts that NextEra's environmental report failed to adequately evaluate the costs and benefits of replacing the power that would be generated by Point Beach with solar electric power as an alternative to license renewal.<sup>64</sup> PSR claims that a cost-benefit analysis is required because solar generation is technically feasible on a commercial scale and, when coupled with energy storage technology, can provide baseload power.<sup>65</sup> PSR also offers expert declarations that solar generation is preferable to license renewal due to the "harsh economic realities," of nuclear,<sup>66</sup> the "dramatically-changing circumstances in the regional

<sup>&</sup>lt;sup>63</sup> See Petition at 31; Declaration of Arnold Gunderson (Mar. 23, 2021), ¶ 7.8.4.

<sup>&</sup>lt;sup>64</sup> See Petition at 41-55.

<sup>&</sup>lt;sup>65</sup> See id. at 45-49; Appeal at 20.

<sup>&</sup>lt;sup>66</sup> Petition at 53 (citing *Declaration of Mark Cooper, Ph. D.* (Mar. 23, 2021), at 24).

energy mix,"<sup>67</sup> and the low greenhouse gas emissions and environmental impacts from solar generation.<sup>68</sup> Further, the declining costs and growing deployment of solar generating capacity would, according to PSR, render the generating capacity of Point Beach "superfluous" and thus make license renewal unnecessary.<sup>69</sup>

As described in CLI-22-3, we have dismissed Contention 3. Once an updated site-specific environmental impact statement is complete, a notice of opportunity for hearing limited to contentions based on new information in the site-specific environmental impact statement—will be issued and will also allow PSR and other interested persons to resubmit their environmental contentions as well as to submit new or amended contentions.

## III. <u>CONCLUSION</u>

For the reasons given above, we *affirm* the Board's determination that Contentions 1 and 2 are inadmissible. We dismissed Contention 3 in our recent order providing generic direction for all subsequent license renewal proceedings pending before the agency.

IT IS SO ORDERED.



For the Commission

Annette L. Vietti-Cook Secretary of the Commission

Dated at Rockville, Maryland, this 23<sup>rd</sup> day of March 2022.

<sup>67</sup> Declaration of Alvin Compaan, Ph. D. (Mar. 23, 2021), ¶ 3 (Compaan Decl.).

<sup>69</sup> *Id.* at 48.

<sup>&</sup>lt;sup>68</sup> Petition at 48-49 (citing Compaan Decl. ¶¶ 35, 37).

### Additional views of Commissioner Wright

I approve the decision regarding the Board's dismissal of Contentions 1 and 2. 1 disagree, however, with the reasoning behind the treatment of Contention 3. The treatment of Contention 3 relates to the majority's reversal of CLI-20-3 and the generic direction dispositioning contentions impacted by that reversal. As described in my partial dissents in *Turkey Point*, CLI-22-2, and *Peach Bottom*, CLI-22-4, I continue to agree with our previous interpretation in CLI-20-3. I view the majority's decision to reverse direction now as arbitrary, inconsistent with the NRC's Principles of Good Regulation, and contrary to the agency's goals of clear communication and transparent decision-making. This reversal, based only on information and arguments previously considered and rejected, undermines the NRC's role as an effective and credible regulator and impedes stakeholder reliance on our statements and positions.

While I disagree with the majority's reversal of CLI-20-3 both procedurally and substantively, I joined my colleagues on the limited issue of the path forward for the staff to update its environmental analysis and regulatory language to comply with the majority's new holding. Therefore, to carry out that direction, I approve the decision with respect to Contention 3.

# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

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In the Matter of

NEXTERA ENERGY POINT BEACH, LLC

Docket Nos. 50-266 and 50-301-SLR

(Point Beach Nuclear Plant, Units 1 and 2)

# CERTIFICATE OF SERVICE

I hereby certify that copies of the **COMMISSION MEMORANDUM AND ORDER (CLI-22-05)** have been served upon the following persons by Electronic Information Exchange.

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## Point Beach Nuclear Plant (Units 1 and 2) Docket Nos. 50-266 and 50-301-SLR COMMISSION MEMORANDUM AND ORDER (CLI-22-05)

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Office of the Secretary of the Commission

Dated at Rockville, Maryland, this 23<sup>rd</sup> day of March 2022.