

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

BEFORE THE COMMISSION

In the Matter of:)	
NEXTERA ENERGY SEABROOK, LLC)	Docket No. 50-443-LA-2
(Seabrook Station Unit 1))	October 31, 2017

NEXTERA’S NOTICE OF APPEAL OF LBP-17-7

Pursuant to 10 C.F.R. § 2.311, NextEra Energy Seabrook, LLC (“NextEra”) hereby files this Notice of Appeal of the Atomic Safety and Licensing Board’s (“Board”) October 6, 2017 Memorandum and Order LBP-17-7.¹ In that decision, the Board granted C-10 Research and Education Foundation, Inc.’s April 10, 2017 petition to intervene and request for hearing (“Petition”),² and admitted for litigation one reformulated contention. As demonstrated in the accompanying Brief in Support of NextEra’s Appeal of LBP-17-7, the Board clearly erred and abused its discretion in admitting the reformulated contention. Therefore, pursuant to 10 C.F.R. § 2.311(d)(1), NextEra appeals the granting of the Petition.

¹ *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), LBP-17-7, 86 NRC __ (slip op.) (Oct. 6, 2017). Pursuant to 10 C.F.R. § 2.311(b), appeals of board orders on hearing requests and petitions to intervene are due within 25 days after the service of the order; therefore, this appeal is timely.

² C-10 Research and Education Foundation, Inc., “Petition for Leave to Intervene: Nuclear Regulatory Commission Docket No. 50-443,” (Apr. 10, 2017) (ML17100B013).

Respectfully submitted,

Executed in Accord with 10 C.F.R. § 2.304(d)

Steven Hamrick, Esq.
NextEra Energy Seabrook, LLC
801 Pennsylvania Ave., NW Suite 220
Washington, D.C. 20004
Phone: (202) 349-3496
Fax: (202) 347-7076
E-mail: steven.hamrick@fpl.com

Executed in Accord with 10 C.F.R. § 2.304(d)

Paul M. Bessette, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Phone: (202) 739-5796
Fax: (202) 739-3001
E-mail: paul.bessette@morganlewis.com

Executed in Accord with 10 C.F.R. § 2.304(d)

William S. Blair, Esq.
NextEra Energy Seabrook, LLC
700 Universe Blvd.
Juno Beach, FL 33408
Phone: (561) 304-5238
Fax: (561) 304-5366
E-mail: william.blair@fpl.com

Signed (electronically) by Ryan K. Lighty

Ryan K. Lighty, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Phone: (202) 739-5274
Fax: (202) 739-3001
E-mail: ryan.lighty@morganlewis.com

Counsel for NextEra Energy Seabrook, LLC

Dated in Washington, DC
this 31st day of October 2017

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Steven Hamrick, Esq.
NextEra Energy Seabrook, LLC
801 Pennsylvania Ave., NW Suite 220
Washington, D.C. 20004
Phone: (202) 349-3496
Fax: (202) 347-7076
E-mail: steven.hamrick@fpl.com

Paul M. Bessette, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Phone: (202) 739-5796
Fax: (202) 739-3001
E-mail: paul.bessette@morganlewis.com

William S. Blair, Esq.
NextEra Energy Seabrook, LLC
700 Universe Blvd.
Juno Beach, FL 33408
Phone: (561) 304-5238
Fax: (561) 304-5366
E-mail: william.blair@fpl.com

Ryan K. Lighty, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Phone: (202) 739-5274
Fax: (202) 739-3001
E-mail: ryan.lighty@morganlewis.com

Counsel for NextEra Energy Seabrook, LLC

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BRIEF IN SUPPORT OF NEXTERA’S APPEAL OF LBP 17-7

I. INTRODUCTION

Pursuant to 10 C.F.R. § 2.311, NextEra Energy Seabrook, LLC (“NextEra”) files this Brief in Support of NextEra’s Appeal of the Atomic Safety and Licensing Board’s (“Board”) October 6, 2017 Memorandum and Order LBP-17-7.¹ In that decision, the Board granted C-10 Research and Education Foundation, Inc.’s (“C-10”) April 10, 2017 petition to intervene and request for hearing (“Petition”),² which proffered ten contentions purporting to challenge NextEra’s license amendment request 16-03 (“LAR”) for Seabrook Station Unit 1 (“Seabrook”).³ The LAR seeks NRC approval to revise the Seabrook Updated Final Safety Analysis Report (“UFSAR”) to include methods for analyzing Seismic Category I structures with concrete

¹ *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), LBP-17-7, 86 NRC __ (slip op.) (Oct. 6, 2017).

² C-10 Research and Education Foundation, Inc., “Petition for Leave to Intervene: Nuclear Regulatory Commission Docket No. 50-443,” (Apr. 10, 2017) (ML17100B013).

³ SBK-L-16071, Letter from to R. Dodds to NRC Document Control Desk, “License Amendment Request 16-03 – Revise Current Licensing Basis to Adopt A Methodology for the Analysis of Seismic Category I Structures with Concrete Affected by Alkali-Silica Reaction,” (Aug. 1, 2016) (ML16216A240) (“Original LAR”); SBK-L-16153, Letter from to R. Dodds to NRC Document Control Desk, “Supplement to License Amendment Request 16-03 – Revise Current Licensing Basis to Adopt A Methodology for the Analysis of Seismic Category I Structures with Concrete Affected by Alkali-Silica Reaction,” (Sept. 30, 2016) (ML16279A048) (“LAR Supplement”). The Original LAR and LAR Supplement, and all enclosures and attachments, are collectively the “LAR.”

affected by an alkali-silica reaction (“ASR”).⁴

C-10’s proposed contentions, discussed further below, rest largely on one chief complaint and demand—that NextEra must rely solely on *mechanical property* testing of Seabrook concrete samples to evaluate ASR.⁵ But as NextEra noted in its Answer to the proposed contentions, this misses the point of the LAR entirely, which is to change Seabrook’s license to incorporate ASR-expansion in determining *structural* adequacy.⁶ It also ignores a fundamental element of the LAR—that NextEra will continue to conduct and rely on testing of Seabrook’s concrete (as a means of calculating expansion) in assessing the progression of ASR.⁷

In LBP-17-7, the Board found five of C-10’s proffered contentions “independently admissible.”⁸ The Board admitted those contentions and reformulated them into a single contention for hearing (“Reformulated Contention”).⁹ The Board also found, in the alternative, that if the five individual contentions were not “independently admissible,” it possessed the authority to convert those five inadmissible contentions into a single admissible one.¹⁰ As demonstrated below, the Board committed several reversible errors and abused its discretion in admitting the Reformulated Contention.

The Board’s decision in LBP-17-7 suffers from two overarching abuses of discretion resulting in legal error that require reversal of the decision. First, despite the Commission’s

⁴ See Original LAR, Enclosure 7, “NextEra Energy Seabrook’s Evaluation of the Proposed Change” (Non-Proprietary) § 1.0 (“LAR Evaluation”).

⁵ See generally Petition (the word “in-situ” appears 21 times).

⁶ NextEra’s Answer Opposing C-10 Research & Education Foundation’s Petition for Leave to Intervene and Hearing Request on NextEra Energy Seabrook, LLC’s License Amendment Request 16-03 at 17 (May 5, 2017) (ML17125A289) (“NextEra Answer”).

⁷ *Id.* at 44 n.198 (explaining compressive strength testing and elastic modulus testing are used to calculate expansion to date).

⁸ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. § IV.A.2).

⁹ *Id.* at 86.

¹⁰ *Id.* at 86-91.

repeated reminders, the Board went well beyond its limited discretion to permit “some leeway”¹¹ to a *pro se* petitioner—C-10. The Board’s available discretion does not include the authority to relieve *pro se* petitioners of their burden to satisfy the “strict by design” contention admissibility requirements in 10 C.F.R. § 2.309(f)(1); and does not include the authority to insert and rely on Board-supplied information and arguments to rejuvenate “otherwise . . . inadmissible”¹² contentions. The Board has impermissibly done so here, in several instances including its supplementation of Contentions A and D with information from independent outside research,¹³ and its replacement of Contention B with a much broader contention than pled by C-10.¹⁴ These examples and others are discussed further below.

Second, the Board abused its limited discretion to “reformulate” contentions. Commission regulations provide boards with authority to manage adjudicatory proceedings. This authority, intended to promote adjudicatory efficiency, also includes some limited discretion to revise contentions proffered by parties.¹⁵ Boards may “reframe *admissible* contentions”¹⁶ to (a) remove extraneous material (to avoid expending resources on non-litigable matters) or (b) combine similar factual and legal issues (to streamline the proceeding).¹⁷ However, boards may not *create* an admissible contention by repositioning various assertions from multiple *inadmissible* contentions into a new configuration not pled by a petitioner; this

¹¹ See *DTE Elec. Co.* (Fermi Nuclear Power Plant, Unit 2), CLI-15-18, 82 NRC 135, 145 (2015).

¹² *Id.* at 141.

¹³ See *infra*, Parts IV.A.2, IV.A.4.a.

¹⁴ See *infra*, Part IV.A.4.b.

¹⁵ *Crow Butte Res., Inc.* (N. Trend Expansion Project), CLI-09-12, 69 NRC 535, 552 (2009) (internal citation omitted).

¹⁶ *Shaw AREVA MOX Services* (Mixed Oxide Fuel Fabrication Facility), LBP-08-11, 67 NRC 460, 482-83 (2008) (this discussion was cited favorably by the Commission as a correct interpretation of board reformulation authority in *Crow Butte*, CLI-09-12, 69 NRC at 552 n.79) (emphasis added).

¹⁷ *Id.*

would supply the essential threshold information required for an admissible contention, which is impermissible.¹⁸ Notwithstanding, the Board has done so here in its alternative basis for admitting the Reformulated Contention, in which it claims that, even if none of C-10's proposed contentions are admissible, it may use them to create an admissible one.¹⁹ As discussed below, that is an abuse of discretion; thus, admission of the Reformulated Contention on this basis also was reversible error. Such fundamental errors should not be left to stand as a matter of law or equity. Accordingly, the Commission should reverse the Board's decision in LBP-17-7 and reject C-10's proposed contentions as inadmissible.

II. STATEMENT OF THE CASE

A. The Seabrook ASR License Amendment Request

ASR is a chemical reaction that occurs in susceptible concrete and produces an alkali-silicate gel that expands as it absorbs moisture. The expansion exerts a stress on the surrounding concrete and results in cracking. The Seabrook operating license references codes which rely on material property testing as the means for calculating structural capacities.²⁰ However, these codes do not include explicit provisions for the analysis of *reinforced* concrete structures affected by ASR. This is notable because, while ASR may affect the *mechanical properties* of concrete, it does not necessarily result in a corresponding decrease in *structural capacity* of a reinforced concrete structure. Accordingly, because the existing codes, alone, do not account for this disconnect, NextEra determined to develop a methodology (based on an extensive laboratory test program, in-situ monitoring, and future confirmatory testing) that would yield an

¹⁸ Cf., e.g., *Fermi*, CLI-15-18, 82 NRC at 141 (Boards “may not supply information that is lacking in a contention that *otherwise would be inadmissible*.” (emphasis added)).

¹⁹ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. § IV.B).

²⁰ American Concrete Institute (“ACI”) 318-71, “Building Code Requirements for Reinforced Concrete”; Section III of the American Society of Mechanical Engineers (“ASME”) Boiler & Pressure Vessel Code (1975 Edition).

appropriately conservative assessment of structural adequacy for reinforced concrete structures affected by ASR.

NextEra collaborated with MPR Associates (“MPR”) and the Ferguson Structural Engineering Laboratory (“FSEL”) at the University of Texas at Austin to conduct the large-scale test program (“LSTP”) with the objective of creating a methodology for conservatively analyzing ASR-affected structures—*i.e.*, to fill the gap in the codes.²¹ The LSTP considered data from publicly-available literature, as well as tests conducted specifically for Seabrook as part of the LSTP. This included fabrication and instrumented testing of ASR-affected concrete specimens designed with a reinforcement configuration and concrete mixture similar to Seabrook,²² as well as material property testing of concrete from Seabrook for the purpose of calculating expansion to-date caused by ASR.²³ Finally, the LAR proposes to conduct confirmatory testing to empirically verify the similarity between Seabrook’s concrete and the data collected as part of the LSTP.²⁴ Although the LAR review is ongoing, NRC Staff did conclude this “is technically the appropriate *approach* to address structural performance of ASR-affected Seabrook structures for limit states where gaps exist in ASR literature.”²⁵

Additionally, in conjunction with the LAR, Seabrook’s Structures Monitoring Program

²¹ See generally Original LAR, Enclosure 3, MPR-4273, Rev. 0, “Seabrook Station - Implications of Large-Scale Test Program Results on Reinforced Concrete Affected by Alkali-Silica Reaction” (July 2016) (Non-Proprietary) (“MPR-4273”).

²² See, e.g., *id.* at 2-6.

²³ See, e.g., LAR Supplement, Enclosure 3, MPR-4153, Rev. 2, “Seabrook Station - Approach for Determining Through-Thickness Expansion from Alkali-Silica Reaction” § 5.1 (July 2016) (Non-Proprietary).

²⁴ See MPR-4273 at vii and § 6.1.5.

²⁵ Memorandum from A. Erickson, NRC, to J. Trapp, NRC, “Position Paper – ‘Assessment of ACI 318-71 as Design Basis for Category I Concrete Structures Affected by Alkali-Silica Reaction at Seabrook Station,’” Encl. at 6 (June 10, 2013) (ML13128A521) (emphasis added).

(“SMP”) requires monitoring and trending of concrete expansion.²⁶ The SMP employs a three-tiered approach, under which structures with higher levels of ASR expansion are inspected more frequently—and are subject to enhanced measuring, monitoring, and trending techniques—than structures with minimal ASR expansion.²⁷ For example, areas with pattern cracking (Tier 2) are subject to monitoring and trending via a Combined Cracking Index; and areas exhibiting in-plane expansion of 0.1% or more (Tier 3) are subject to structural evaluation and enhanced ASR monitoring, which includes removal of core samples for material property testing (to calculate expansion to-date) and placement of an extensometer (to measure and trend expansion going forward).²⁸

B. The Proposed Contentions

In its Petition, C-10 submitted ten proposed contentions.²⁹ In brief, these ten proposed contentions assert that: (a) the ASR monitoring methodology is flawed because “*only* sample testing of in-situ concrete can accurately gauge the extent of ASR”;³⁰ (b) ASR-expansion in reinforced concrete “is not equivalent to a pre-stressing effect”;³¹ (c) petrographic analysis, including in-situ testing, must be performed;³² (d) the LSTP data is not “representative” of Seabrook, thus in-situ testing must be performed;³³ (e) allowing proprietary information to be withheld is bad public policy;³⁴ (f) rebar corrosion is likely but is not discussed;³⁵ (g) the LSTP

²⁶ LAR Evaluation § 3.5.1.

²⁷ *Id.*

²⁸ *See, e.g.*, LAR Evaluation at tbl.5, § 3.5.1.

²⁹ *See* Petition at 2-3.

³⁰ *Id.* at 4 (emphasis added).

³¹ *Id.* (emphasis in original).

³² *Id.* at 8.

³³ *Id.*

³⁴ *Id.* at 11-12.

did not collect data at or beyond the “tipping point”; (h) the inspection intervals “are too long, and too fixed”;³⁶ (i) sea level rise is not discussed;³⁷ and (j) the LAR language is not objective.³⁸

As noted above, C-10 has one chief complaint—that NextEra must rely solely on *mechanical property* testing of Seabrook concrete samples to evaluate ASR; in other words, C-10 appears to reject the notion that *any* change to the license is permissible. C-10 claims that such testing is required for an accurate assessment of ASR on plant structures going forward.³⁹ Again, this misses the point of the LAR (changing Seabrook’s license to include a means for determining *structural* adequacy of ASR-affected reinforced concrete) and ignores the fact that NextEra will continue to test Seabrook’s concrete. The distinction between “mechanical” consequences and “structural” consequences is important because the latter is relevant for assessing whether an ASR-affected structure can perform its design function. Ultimately, 10 C.F.R. § 2.309(f)(1) demands more than specification of a *preferred* approach.⁴⁰ Accordingly, Petitioner’s contentions fail at a very fundamental level in that they do not dispute the LAR—an important point that was glossed-over in LBP-17-7.

Moreover, nearly all of C-10’s alleged support predates the LAR submission. This is important because these commentaries, primarily from Dr. Brown, attack *previous* proposals (*e.g.*, early versions of aging management programs in the license renewal proceeding) rather than the LAR. But, the features and techniques proposed in the LAR have changed considerably since then; and the outdated commentaries do not support a challenge to the LAR. In fact, the

³⁵ *Id.* at 12-13.

³⁶ *Id.* at 15.

³⁷ *Id.* at 16.

³⁸ *Id.*

³⁹ *E.g.*, *id.* at 4 (arguing it is the “only” appropriate method).

⁴⁰ *NextEra Energy Seabrook LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 323 (2012).

monitoring program proposed in the LAR was explicitly modified in response to some of these challenges; thus, they would only appear to dispute the LAR if read out-of-context, as C-10 and the Board have done here. C-10's sole citation to commentary actually created *after* submission of the LAR still only considers the first half of the LAR⁴¹—it does not consider the LAR Supplement,⁴² which provides significant new information directly relevant to the requested licensing action, and which Dr. Brown has neither addressed nor rebutted.⁴³ Furthermore, despite C-10's citation to his commentary, it is unclear whether Dr. Brown even endorses the arguments advanced by C-10.⁴⁴ Therefore, it was legal error for the Board to uncritically conclude these documents supplied the basis for C-10's contentions.⁴⁵

C. Summary of Board Decision (LBP-17-7)

In LBP-17-7, the Board granted C-10's Petition. The Board (relying partially on new information first supplied in C-10's Reply brief) found C-10 had both representational standing and organizational standing. The Board found Contentions E, F, G, I, and J inadmissible, but admitted a single, Reformulated Contention, based on portions of the remaining contentions, as follows:

The large-scale test program, undertaken for NextEra at the FSEL,

⁴¹ See Petition at 4 (citing P.W. Brown, Commentary on Seabrook Station License Amendment Request 16-03 at 1 (Sept. 30, 2016) (ML16306A248) ("Brown 9/30/16 Commentary"), which notes the "reviewed documents" include only the Original LAR).

⁴² The LAR Supplement was submitted to the NRC in September 2016, and was specifically referenced in the hearing opportunity notice. See Application and Amendments to Facility Operating Licenses and Combined Licenses Involving Proposed No Significant Hazards Considerations and Containing Sensitive Unclassified Non-Safeguards Information and Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information, 82 Fed. Reg. 9601, 9604 (Feb. 7, 2017).

⁴³ See generally LAR Supplement.

⁴⁴ C-10 did not submit an affidavit from Dr. Brown, and C-10's document citations reference his commentary on behalf of the Union of Concerned Scientists, which is not a party.

⁴⁵ *Private Fuel Storage, L.L.C.* (Indep. Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 181 (1998) ("the Board is not to accept uncritically the assertion that a document or other factual information or an expert opinion supplies the basis for a contention."), *aff'd*, CLI-98-13, 48 NRC 26, 37 (1998).

has yielded data that are not “representative” of the progression of ASR at Seabrook. As a result, the proposed monitoring, acceptance criteria, and inspection intervals are not adequate.

The Board argued in the alternative that: (a) contentions A, B, C, D, and H are at least partially admissible on their own; thus, the admitted contention is merely a consolidation of five admissible contentions; and (b) even if those contentions are not independently admissible, the Board acted within its authority to consolidate otherwise inadmissible contentions to create one that is admissible.

III. LEGAL STANDARDS

A. Standard of Review

Section 2.311 “permits an appeal as of right on the question of whether an initial intervention petition should have been wholly denied, or alternatively, was granted improperly.”⁴⁶ The Commission generally defers to board decisions on contention admissibility, but will reverse a board’s ruling “if there has been an error of law or an abuse of discretion.”⁴⁷ The Commission, in fact, has done so multiple times in recent years, because “entertain[ing] contentions grounded on little more than guesswork would waste the scarce adjudicatory resources of all involved.”⁴⁸ As directly germane here, a board commits reversible legal error when it, among other things, supplies a factual or legal basis for a contention that was not

⁴⁶ *Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 & 4), CLI-12-7, 75 NRC 379, 385 (2012) (citing *Statement of Policy on Conduct of Adjudicatory Proceedings*, CLI-98-12, 48 NRC 18, 23 (1998) (“Adjudicatory Policy”); *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 125 (2006)).

⁴⁷ *Id.* at 386 (citing *Progress Energy Fla., Inc.* (Levy Cnty. Nuclear Power Plant, Units 1 & 2), CLI-10-2, 71 NRC 27, 29 (2010); *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 NRC 235, 260 (2009); *Luminant Generation Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 and 4), CLI-11-9, 74 NRC 233, 237 (2011)).

⁴⁸ *Crow Butte*, CLI-09-12, 69 NRC at 552; *see also Crow Butte Res., Inc.* (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 364 (2009) (arguments that are speculative “do not form the basis for a litigable contention”).

proffered by the petitioner.⁴⁹

B. Contention Admissibility Standards

The Commission’s rules on contention admissibility are “strict by design.”⁵⁰ The rules were “toughened . . . in 1989 because in prior years ‘licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation.’”⁵¹ The Commission has emphasized that the “contention pleading rules are designed to ensure both that only well-defined issues are admitted for hearing and that parties admitted to litigate sophisticated technical issues are qualified to do so.”⁵² Failure to comply with any one of the six admissibility criteria in 10 C.F.R. § 2.309(f)(1) is grounds for rejecting a proposed contention.⁵³

C. Discretion of Presiding Officers

The errors of law and abuses of discretion detailed in Section IV, below, consider the tension between the NRC’s “strict by design” rules on contention admissibility, and two areas of board discretion: (1) the NRC’s practice of granting *pro se* petitioners “some leeway” regarding compliance with formalistic pleading requirements, and (2) a presiding officer’s limited discretion to “reformulate” contentions. Accordingly, a discussion of the proper scope of these areas of board discretion informs the analysis below.

1. Pro Se Petitioners Are Afforded “Some Leeway” Regarding Formalistic Pleading Requirements, But Otherwise Must Comply With the Commission’s Contention Admissibility Regulations

⁴⁹ *Adjudicatory Policy*, CLI-98-12, 48 NRC at 22 (“A contention’s proponent, not the licensing board, is responsible for formulating the contention and providing the necessary information to satisfy the basis requirement for the admission of contentions . . .”).

⁵⁰ *Dominion Nuclear Conn., Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001) (citing *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, & 3), CLI-99-11, 49 NRC 328, 334 (1999)).

⁵¹ *Id.*

⁵² *Crow Butte*, CLI-09-12, 69 NRC at 552 (citations omitted).

⁵³ *Private Fuel Storage, LLC* (Indep. Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999).

In NRC adjudicatory proceedings, a *pro se* petitioner is admittedly not to “be held to those standards of clarity and precision to which a lawyer might reasonably be expected to adhere.”⁵⁴ But the Commission has cautioned that it is not the proper function of the board to “assume the role of advocate for the *pro se* litigant.”⁵⁵ “Some leniency”⁵⁶ or “some leeway”⁵⁷ is appropriate for *pro se* petitioners as to formalistic pleading requirements; but that leeway has limits.⁵⁸ A *pro se* petitioner still bears the burden to plead sufficient information and arguments to make its required demonstrations for contention admissibility.⁵⁹ Boards may not use *pro se* status as a justification for relieving petitioners from “obligations imposed by [NRC] rules.”⁶⁰ Even *pro se* petitioners must plead a sound basis for each contention in order to assure that the proposed issues are proper for adjudication.⁶¹

Contentions proposed by *pro se* Petitioners must independently—without board assistance—satisfy the basic requirements of 10 C.F.R. § 2.309(f)(1).⁶² Pursuant to long-standing Commission policy, although “a board may appropriately view a petitioner’s support

⁵⁴ *Pub. Serv. Elec. & Gas Co.* (Salem Nuclear Generating Station, Units 1 & 2), ALAB-136, 6 AEC 487, 489 (1973), cited in *Houston Lighting & Power Co.* (Allens Creek Nuclear Generating Station, Unit 1), ALAB-590, 11 NRC 542, 546 (1980); *Consumers Power Co.* (Midland Plant, Units 1 & 2), LBP-82-63, 16 NRC 571, 578 (1982).

⁵⁵ *See Fermi*, CLI-15-18, 82 NRC at 146 n.53 (quoting *Hall v. Bellmon*, 935 F.2d 1106, 1110 (10th Cir. 1991)).

⁵⁶ *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 & 4), CLI-15-25, 82 NRC 389, 397 n.53 (2015) (citing *Statement of Policy on Conduct of Licensing Proceedings*, CLI-81-8, 13 NRC 452, 454 (1981)).

⁵⁷ *See Fermi*, CLI-15-18, 82 NRC at 145.

⁵⁸ *See id.* at 146 n.53 (citing *S.C. Elec. & Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 & 3), CLI-10-1, 71 NRC 1, 6 (2010)); *Oconee*, CLI-99-11, 49 NRC at 338-39; *id.* (acknowledging the same doctrine in Federal court proceedings, citing *Pilgrim v. Littlefield*, 92 F.3d 413, 416 (6th Cir. 1996) (“[T]he lenient treatment generally accorded to *pro se* litigants has limits.”)).

⁵⁹ *Turkey Point*, CLI-15-25, 82 NRC at 397 n.53 (“To be sure, although we afford some leniency to *pro se* petitioners, . . . we expect parties to our proceedings to fulfill the obligations imposed by our rules.”)

⁶⁰ *Id.*

⁶¹ *Consol. Edison Co. of N.Y.* (Indian Point, Unit No. 2) and *Power Auth. of the State of N.Y.* (Indian Point, Unit No. 3), LBP-83-5, 17 NRC 134, 136 (1983).

⁶² *See Fermi*, CLI-15-18, 82 NRC at 145-46.

for its contention in a light that is favorable to the petitioner, . . . the board cannot do so by ignoring the [contention admissibility] requirements” because “[a] contention’s proponent, not the licensing board, is responsible for formulating the contention and providing the necessary information to satisfy the basis requirement for the admission of contentions.”⁶³

2. The Board Has Limited Authority to “Reformulate” Contentions

Boards also have some authority to reformulate contentions. This authority is part of a mandate to efficiently manage adjudicatory resources; specifically, it flows from a presiding officer’s authority to hold conferences under 10 C.F.R. § 2.319(j) (*e.g.*, for “simplification of contentions”) and 10 C.F.R. § 2.329(c)(1) for “[s]implification, clarification, and specification of the issues.”⁶⁴

This limited authority allows boards to excise extraneous issues from otherwise admissible contentions, and to consolidate otherwise admissible contentions with other related contentions or issues.⁶⁵ But Commission precedent articulates an important limitation: “a board should not add material not raised by a petitioner *in order to render* a contention admissible.”⁶⁶ Furthermore, where a petitioner does not plead “any nexus between” its claims and “any [purported] deficiencies” in the underlying application, a reformulation that imputes that essential “nexus” would exceed the board’s authority.⁶⁷ It makes *no difference* that a petitioner’s claim in one inadmissible contention is purportedly connected to an alleged deficiency in a separate inadmissible contention—even within the same petition—because petitioners have an

⁶³ *Adjudicatory Policy*, CLI-98-12, 48 NRC at 22.

⁶⁴ *MOX*, LBP-08-11, 67 NRC at 482-83; *accord Crow Butte*, CLI-09-12, 69 NRC at 552 n.79.

⁶⁵ *Crow Butte*, CLI-09-12, 69 NRC at 552.

⁶⁶ *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-14, 71 NRC 449, 464 n.80 (2010) (quoting *Crow Butte*, CLI-09-12, 69 NRC at 552-53) (emphasis added).

⁶⁷ *Fermi*, CLI-15-18, 82 NRC at 141.

affirmative obligation to plead the connection themselves if it supplies the threshold “nexus” for an admissible contention.⁶⁸ The Board simply cannot shoulder this fundamental burden for a petitioner—even a *pro se* petitioner.

IV. THE COMMISSION SHOULD REVERSE THE BOARD’S DECISION TO ADMIT THE REFORMULATED CONTENTION

A. The Board Abused Its Discretion And Committed Reversible Error in Admitting Contentions A, B, C, D, & H

1. The Board Misconstrued NextEra’s Arguments Below Regarding the Scope of Board Authority

In its pleadings below, NextEra cited Commission precedent explaining three key concepts on the limits of board authority: (1) a board “may not supply information that is lacking in a contention that otherwise would be inadmissible,” and “may not substitute its own support for a contention;” (2) such prohibited substitutions include legal and technical support, expert opinion, references to specific sources, or a reasoned basis or explanation for a conclusion; and (3) these principles apply equally to *pro se* petitioners.⁶⁹ NextEra also cited Commission precedent noting that, even for *pro se* petitioners, boards may not “make arguments for the litigants that were never made by the litigants themselves,” and may not fabricate “a different challenge from the one [the petitioner] presented.”⁷⁰

In LBP-17-7, the Board misconstrued NextEra’s citations to Commission precedent as constituting an argument that boards lack “the ability to consider even controlling Commission decisions or agency regulations . . . unless cited by the petitioner,” and may not “provide a

⁶⁸ *Id.*

⁶⁹ NextEra Answer at 12-13 (citing *Fermi*, CLI-15-18, 82 NRC at 141, 145-46, 149).

⁷⁰ *Id.*

reasoned explanation for the Board’s ruling not explicitly stated by the petitioner.”⁷¹ But *these* arguments were constructed by the Board; NextEra advanced no such claims or arguments.

NextEra did not (and does not) dispute that boards have the authority to explain the basis for *the board’s* conclusions, or to cite controlling provisions of law as support for such conclusions—that is only logical. Rather, NextEra’s point was that if a petitioner fails to plead the “reasoned basis or explanation” for an (otherwise bare) *expert* conclusion offered as support for a contention, as required per 10 C.F.R. § 2.309(f)(1)(v), a board may not cure this deficiency by offering its own “reasoned basis or explanation” for the expert’s conclusion.⁷² And, if a petitioner fails to identify some requirement the challenged application purportedly fails to satisfy, as required per 10 C.F.R. § 2.309(f)(1)(iv), the board may not conduct independent research to fashion a connection between petitioner’s claim and a material finding the Staff must make.⁷³ To do so is to “supply information that is lacking in a contention that otherwise would be inadmissible,”⁷⁴ which is beyond the scope of the board’s authority.

Rather than address NextEra’s actual arguments, LBP-17-7 rejected the Board-constructed arguments and concluded the Board had not acted inappropriately. Notwithstanding, NextEra’s assertions remain valid and unaddressed. As explained below, the Board has gone well beyond its limited authority to grant “some leeway”⁷⁵ to C-10; rather, it repeatedly supplied missing arguments, nexus, or information necessary to create an admissible contention, which

⁷¹ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 35).

⁷² NextEra’s Reply to NRC Staff’s Answer to C-10’s Petition for Leave to Intervene at 7 (May 12, 2017) (ML17132A285) (“NextEra Reply”) (rebutting any suggestion “that the Board could or should supply the *necessary information to satisfy the basis requirement for admission*,” (emphasis in original) and rejecting the notion the Board could “supply the *missing information* necessary to turn *otherwise inadmissible* contentions into an admissible one” (emphasis in original)).

⁷³ *Id.*

⁷⁴ *Fermi*, CLI-15-18, 82 NRC at 141 (emphasis added).

⁷⁵ *See id.* at 145.

constitutes abuse of discretion and reversible error.

2. The Board Abused Its Discretion And Committed Reversible Error in Finding Contention D Independently Admissible

In Contention D, C-10 asserts (erroneously) that the LAR seeks to “substitute[]” “not representative” data from the LSTP in lieu of performing core sample testing at Seabrook.⁷⁶ In simplified terms, C-10 appears to argue the LAR does not show that the LSTP specimens were identical to Seabrook’s concrete. As NextEra argued in its pleadings below, even if true, this claim would not independently supply the basis for an admissible contention; it does not tie C-10’s stand-alone (and otherwise irrelevant) “representativeness” challenge to any finding the NRC must make (*i.e.*, it is immaterial) or any substantive aspect of the LAR (*i.e.*, it does not demonstrate a genuine dispute).⁷⁷ The Board even appears to acknowledge this fatal defect, but then references *Staff’s* identification of LAR statements connecting conclusions from the LSTP to various features proposed in NextEra’s comprehensive program (*e.g.*, monitoring methodologies, acceptance criteria, and inspection intervals) to complete Petitioner’s argument.⁷⁸ But the Board dismissed that defect as irrelevant on the basis that the nexus to a regulatory requirement, and the nexus to purported substantive defects in the application, were “readily apparent” to the Board—even though they certainly were not pled by C-10.⁷⁹

But the applicable standard is not whether a board can independently (or with the assistance of the NRC Staff) envision or articulate some plausible materiality argument or

⁷⁶ Petition at 2, 8 (arguing the LSTP data “cannot be substituted” for core sample testing).

⁷⁷ NextEra Answer § V.D.

⁷⁸ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 67) (supplementing C-10’s arguments based on “what the Staff itself has said” and what “Staff identifies”).

⁷⁹ *Id.* The Board devotes substantial discussion in LBP-17-7 to identifying the nexus between C-10’s various other contentions—nexus never pled by C-10. *E.g.*, the Board ties Contention A to Contention D (slip op. at 48); Contention B to Contention D (slip op. at 56); Contention B to Contention A (slip op. at 57); Contention D to Contention B (slip op. at 60, 63-64); and Contention D to Contention H (slip op. at 80).

genuine dispute that could be connected to a petitioner's generalized complaints regarding an application. As discussed above, petitioners, even *pro se*, bear this burden.⁸⁰ The regulatory requirement to "demonstrate" the elements of an admissible contention cannot be waived under the guise of granting "some leeway" to a *pro se* petitioner.⁸¹ Such an exercise would stray well beyond the goal of adjudicatory efficiency; it would place the board in "the role of advocate for the *pro se* litigant," which is prohibited.⁸²

Here, the purported connections between the Petitioner's "representativeness" arguments, on one hand, and the LAR's programmatic features, on the other, were not advanced by C-10. They were identified by Staff and injected into the contention by the Board. These connections supply the threshold nexus for admissibility cited by the Board, which is an abuse of discretion. Accordingly, the Board committed an error of law in admitting Contention D.

Moreover, the Board mischaracterized NextEra's arguments in this regard as demands that a *pro se* petitioner use "specific words to connect its allegations to the Staff's ultimate findings."⁸³ But nowhere in its pleadings did NextEra demand that C-10 use "specific words." NextEra's point was much more basic: petitioners must use *some* words to articulate *some* alleged connection to a finding the NRC Staff must make, and *some* dispute with material aspects of the underlying application. Commission precedent makes clear that boards cannot supply such information.⁸⁴ Notwithstanding, that is precisely what the Board did here.

⁸⁰ See *supra*, Part III.C.1.

⁸¹ *Id.*

⁸² See *Fermi*, CLI-15-18, 82 NRC at 146 n.53 (quoting *Hall v. Bellmon*, 935 F.2d 1106, 1110 (10th Cir. 1991)).

⁸³ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 68).

⁸⁴ *Fermi*, CLI-15-18, 82 NRC at 141 (Boards "may not supply information that is lacking in a contention that otherwise would be inadmissible.") (emphasis added) (citing *Crow Butte*, CLI-09-12, 69 NRC at 552-53).

Furthermore, the Board’s sole basis⁸⁵ for concluding that Contention D satisfied the support requirement in 10 C.F.R. § 2.309(f)(1)(v) is a block quote from NUREG/CR-7171, which appears in the Petition without any explanation of materiality by C-10;⁸⁶ it states, in relevant part:

It was noted in Section 6.1 of this report that there *may* be a coupling effect between radiation and ASR that can potentially accelerate ASR activity or cause ASR to occur with aggregates that are not normally reactive.

C-10’s failure to explain the materiality of this quote, alone, renders the purported support insufficient. As the Commission has explained, “[a] contention must make clear why cited references provide a basis for a contention.”⁸⁷ And the Board appears to have recognized this deficiency; it searched NUREG/CR-7171 for *additional* content in support of an articulated basis—this despite the Commission’s oft-cited warning not to do so.⁸⁸ In fact, the Board cited to supplemental content in NUREG/CR-7171—content not cited by C-10 itself—in four separate sentences attempting to articulate the basis for the contention.⁸⁹ Unsurprisingly, with the benefit of its own research, it had “no difficulty discerning the connection between these provisions of NUREG/CR-7171 and C-10’s claim.”⁹⁰ But the Board did more than discern a connection—it created one on behalf of C-10.

⁸⁵ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 69) (emphasis added).

⁸⁶ Petition at 10 (quoting NUREG/CR-7171, *A Review of the Effects of Radiation on Microstructure and Properties of Concretes Used in Nuclear Power Plants* at 88 (Nov. 2013) (ML13325B077) (“NUREG/CR-7171”).

⁸⁷ *USEC Inc. (Am. Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 457 (2006).

⁸⁸ *Id.* (“it is not up to the boards to search through pleadings or other materials to uncover arguments and support never advanced by the petitioners themselves”).

⁸⁹ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 69-70 n.358-61) (citing NUREG/CR-7171 at 89). Moreover, these four sentences relate to *detection* of ASR, which is irrelevant here; NextEra is already aware of ASR-susceptibility, and treats all monitored structures as if ASR is present. *See* NextEra Answer at 34-35.

⁹⁰ *Id.* at __ (slip op. at 70).

Furthermore, the portion of NUREG/CR-7171 referenced in C-10's block quote, Section 6.1, discusses two things—neither of which identify a deficiency in the LAR. First, it references studies showing radiation can cause ASR to occur with aggregates that are not normally reactive.⁹¹ These are irrelevant because Seabrook already *has* reactive aggregate.⁹² Second, it references an *open question* as to whether ASR, once established, behaves differently in irradiated concrete than unirradiated concrete.⁹³ But neither sheer speculation nor the potential for future research on this topic are enough to create a genuine material dispute.⁹⁴ In short, even with the Board's supplemental content, the Petition does not articulate an admissible contention because NUREG/CR-7171 (the sole document cited by the Board as providing support for Contention D)⁹⁵ does not provide adequate support. The Board's misreading of this document was reversible error.

Alternatively, even if the Board's acts of supplying information, arguments, and nexus were appropriate exercises of discretion, and even if NUREG/CR-7171 could somehow be read to support a contention, it was still reversible error to admit Contention D because the Board's genuine dispute finding ignored directly relevant factual information. Specifically, the Board found a genuine material dispute with the LAR because "if the test program was not sufficiently representative of Seabrook concrete, as Contention D alleges, the LAR's *reliance on the test program* to support the monitoring program, acceptance criteria, and inspection intervals would

⁹¹ NUREG/CR-7171 at 63 (citing studies by Ichikawa and Koizumi (2002) and Ichikawa and Kimura (2007)).

⁹² See NextEra Answer at 34-35.

⁹³ NUREG/CR-7171 at 66 (noting merely that a "question may be asked" about this possibility).

⁹⁴ *Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), CLI-15-23, 82 NRC 321, 325-26 (2015) (citing *Crow Butte*, CLI-09-12, 69 NRC at 552 (2009)) (rejecting the assertion that "guesswork" can identify or support a genuine dispute).

⁹⁵ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 69-70).

be undermined.”⁹⁶ But the LAR does not rely on a mere assumption, as the Board’s logic suggests; rather, it calls for *confirmatory testing* to ensure Seabrook’s concrete behaves as predicted.⁹⁷

In other words, representativeness was a generalized goal of the testing program; but the degree of similarity of behavior, on the other hand, is empirically verified throughout the life of the plant. The Petition does not challenge, *or even mention*, this confirmatory testing feature—a feature that disproves C-10’s suggestion that the LAR relies upon a mere *assumption* of similar behavior. LBP-17-7 is likewise silent on this key issue, despite NextEra’s explanation of the importance of this feature in direct response to Board questions at oral argument.⁹⁸ The Commission has explained that a failure to challenge information in the application that is *directly relevant* to the issue raised in a contention necessitates rejection of the claim.⁹⁹ Ultimately, the Board’s misreading of the LAR in this regard is factual error; and because it relied upon this information, its decision to admit Contention D is reversible legal error.

3. The Board’s Reversible Error in Admitting Contention D Is Dispositive of the Admissibility of Contentions A, B, C, and H;

The Board’s error in admitting Contention D renders Contentions A, B, C, and H inadmissible because each explicitly relies on Contention D.¹⁰⁰ The Board’s decisions on C-10’s other challenges individually and collectively rely on some imported nexus (supplied by the Board) with Contention D. Therefore, as Contention D is inadmissible, so are the rest.

Accordingly, the Board committed reversible error in admitting Contentions A, B, C, and H.

⁹⁶ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 68).

⁹⁷ *See* MPR-4273 at vii and § 6.1.5.

⁹⁸ *See* Transcript of Oral Argument at 103, 108, 115, 123 (June 29, 2017) (“Tr.”).

⁹⁹ *See, e.g., Palisades*, CLI-15-23, 82 NRC at 326; *Millstone*, CLI-01-24, 54 NRC at 358; *USEC*, CLI-06-10, 63 NRC at 472.

¹⁰⁰ *See supra* note 79 (identifying examples of Board-supplied nexus assertions).

4. The Board Abused Its Discretion And Committed Reversible Error in Finding Contentions A, B, C, & H Independently Admissible

In the alternative, the independent admissibility findings for each are also tainted by abuse of discretion and error of law, and must be reversed.

a. Contention A – Monitoring Techniques

This contention argues that NextEra’s programmatic use of crack indexing and extensometers must be replaced by a program of *in situ* material property testing.¹⁰¹ Rather than show why NextEra’s proposed program itself is deficient (*i.e.*, demonstrate a genuine dispute), the contention instead demands that NextEra adopt C-10’s preferred course of action (*i.e.*, *in situ* material property testing). But the mere suggestion of a preferred approach is insufficient.¹⁰²

The Board sidestepped this fatal flaw in the contention by claiming it “d[id] not understand Contention A to make such an argument.” Specifically, the Board “interpreted” the contention as a more limited challenge to specific aspects of NextEra’s proposed monitoring program. But this interpretation is contrary to the black and white text of the Petition, which clearly identifies *in situ* material property testing as the “only” approach C-10 finds acceptable.¹⁰³ The Board also appears to contradict itself in this regard in other parts of the decision where it acknowledges C-10’s unilateral demand.¹⁰⁴ At bottom, the Board ignored the clearly inadmissible challenge articulated in the plain text of the Petition.

Even assuming, *arguendo*, Contention A’s arguments, generally, could be construed as the Board suggests, its decision to admit the contention still relies on improper Board supplementation. In the pleadings below, NextEra argued Contention A did not satisfy the

¹⁰¹ Petition at 3-4.

¹⁰² *Seabrook*, CLI-12-5, 75 NRC at 323.

¹⁰³ Petition at 4.

¹⁰⁴ *E.g.*, *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 61, 64, 75).

requirements of 10 C.F.R. § 2.309(f)(1)(v) because the information offered by C-10 in support of the contention did not provide or cite to any reasoned basis for the proffered conclusions.¹⁰⁵ The Board sought to cure this defect by *independently* “review[ing] the accompanying analysis,”¹⁰⁶ which it apparently found on the internet, in search of a reasoned basis never advanced by C-10.¹⁰⁷ But, again, it is improper for “boards to search through pleadings or other materials to uncover arguments and support never advanced by the petitioners themselves.”¹⁰⁸

Furthermore, in several places throughout its discussion of Contention A, the Board inserts brand new claims and arguments never raised by C-10.¹⁰⁹ This additional nexus is precisely what the Commission rejected in *Fermi*. For example, the Board purports to find materiality based on a connection between the concepts of accurate measurement, continued validity of LSTP results, and the Staff’s required findings on inimicality and the health and safety of the public.¹¹⁰ Nowhere in its pleadings does C-10 advance this multi-step argument; rather, the Board supplied the essential nexus between these concepts. The Board then purports to find a genuine material dispute because “combining past expansion with that detected by extensometers may not provide an accurate measurement,” and offers a challenge to “the validity of NextEra’s [empirical correlation] calculations.”¹¹¹ But the Petition provides no indication—whatsoever—that C-10 was even aware the LAR considered “past expansion” or used an “empirical correlation.” There simply is no colorable argument that these assertions were merely

¹⁰⁵ NextEra Answer § V.A.

¹⁰⁶ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op at 49).

¹⁰⁷ *Id.* at __ (slip op. at 41 n.215) (linking to a document on C-10’s website).

¹⁰⁸ *USEC*, CLI-06-10, 63 NRC at 457; *see also Palisades*, CLI-15-23, 82 NRC at 329 (explaining it is legal error for a board to rely on “more support in [an underlying document] than is reflected in the Petition”).

¹⁰⁹ *E.g.*, *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 45, 47-48, 49).

¹¹⁰ *Id.* at __ (slip op. at 45).

¹¹¹ *Id.* at __ (slip op. at 47-48).

the progeny of a reasonable interpretation of some challenge presented by C-10.

Ultimately, even the Board-supplemented version of Contention A fails to satisfy the requirement to demonstrate a genuine dispute with the LAR. Dr. Brown’s 2013 critique cited by C-10 challenges *exclusive* reliance on crack-width indexing as a monitoring technique.¹¹² But the approach described in the LAR specifically addresses Dr. Brown’s concern; it has been revised since 2013 to include multiple additional features such as extensometers, calculation of past through-thickness expansion, etc. Accordingly, Dr. Brown’s outdated critique of an old proposal simply does not identify a genuine dispute with the LAR. The Board’s misreading of the underlying document is factual error upon which it relied in admitting Contention A—that decision, therefore, constitutes legal error.

Furthermore, Dr. Brown’s more recent comments¹¹³ seem to discuss the use of extensometers as a stand-alone monitoring technique (which the LAR does not propose); he does not appear to be aware of (or at least, does not acknowledge or challenge) the *specific application* of extensometers proposed in the LAR’s comprehensive, multi-tiered monitoring program. He offers zero explanation for his conclusion about the possibility of undetected expansion, and offers no connection to a purported defect in the LAR’s comprehensive scheme—nor does C-10. NextEra raised these concerns below,¹¹⁴ but the Board offered only its own conclusory assertion that the statement “provides a reasoned basis.”¹¹⁵ In the end, neither C-10, nor Dr. Brown, nor the Board offer any assessment of the *specific, tiered application* of

¹¹² Petition at 3.

¹¹³ See generally Brown 9/30/16 Commentary.

¹¹⁴ NextEra Answer at 23 (noting the comments do not “challenge the *specific application* of these methods as described in the LAR because they pre-date the LAR itself or ignore highly-relevant portions thereof.” (emphasis added)).

¹¹⁵ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 49).

monitoring techniques proposed in the LAR. Accordingly, with or without the improper Board supplementation, the Board’s misreading of the document is factual error; and it committed legal error in relying on them to admit Contention A.

b. Contention B – Prestressing

Contention B, as pled by C-10, claims that “Expansion occurring within a reinforced concrete structure due to Alkali-Silica Reaction is not equivalent to a pre-stressing effect.”¹¹⁶ In LBP-17-7, the Board explicitly agrees with NextEra that “the Staff need not resolve the theoretical question whether ASR induced expansion within a reinforced concrete causes an effect that is equivalent to prestressing,” and that C-10’s claim, therefore, is immaterial.¹¹⁷

Rather than find the contention inadmissible, the Board, “reformulated” Contention B to “eliminate the unnecessary issue of the prestressing effect”—nevermind that C-10’s “issue of the prestressing effect” was the essence of Contention B. The Board then substituted its own, significantly broader statement of the contention, arguing that the LAR “misconstrues the effects of ASR,” which it (not surprisingly) found admissible.¹¹⁸ But it is an abuse of discretion to purge a petitioner’s central claim from a contention in order to substitute a board’s preferred challenge on the application—particularly where that substitution transforms a clearly immaterial challenge into an admissible contention.¹¹⁹

Alternatively, even if the Commission finds it was permissible for the Board to substitute its own, broad “misconstrues the effects of ASR” argument, the Board still committed legal error in admitting the contention. The Board appears to find the requisite support, and a genuine

¹¹⁶ Petition at 4.

¹¹⁷ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 55).

¹¹⁸ *Id.* at __ (slip op. at 58).

¹¹⁹ *Fermi*, CLI-15-18, 82 NRC at 149.

dispute, based on Dr. Brown’s recommendation “that tests be performed on the test program specimens at varying locations and at the plant itself in order to provide an adequate comparison of the specimens to the concrete at Seabrook.”¹²⁰ But as explained above, NextEra *is* performing such comparative testing—a fact either not recognized or ignored by C-10 (and Dr. Brown).¹²¹ NextEra addressed this very issue at oral argument in response to Board questions.¹²² But, LBP-17-7 makes no mention of this comparative testing. It was factual and legal error for the Board to ignore these arguments in admitting Contention B because, to the extent Dr. Brown’s statement is satisfied by this testing, there is no genuine dispute; and to the extent Dr. Brown demands something more, he does not explain what that “more” would be, nor does he explain why NextEra’s proposal is deficient.¹²³

c. Contention C – Petrography

In Contention C, C-10 claims the LAR is deficient because “[t]horough petrographic analysis, including core sample testing of Seabrook’s in-situ concrete, must be integral to NextEra’s assessment of the advance of ASR.”¹²⁴ In the pleadings below, NextEra noted that C-10 did not explain either of these demands.¹²⁵ NextEra observed that “petrographic analysis” typically refers to a visual examination technique used to confirm the *presence* of ASR in concrete; and that C-10’s demand was immaterial because “Seabrook’s SMP treats *all* structures that are subject to monitoring as if ASR is present—thus, there is no need to ‘detect’ what it

¹²⁰ *Seabrook*, LBP-17-7, 86 NRC at ___ (slip op. at 53) (citing Brown 9/30/16 Commentary at 2).

¹²¹ MPR-4273 at vii (explaining the process for “Confirming Expansion Behavior at Seabrook Station is Similar to Test Programs,” through various tests that will “Compare measured [values] at the plant to limits from test programs.”); *see also id.* § 6.1.5.

¹²² Tr. at 103, 108, 115, 123; *see also supra*, Part IV.A.2.

¹²³ *Cf. Seabrook*, CLI-12-5, 75 NRC at 323.

¹²⁴ Petition at 6.

¹²⁵ NextEra Answer § V.C.

already assumes.”¹²⁶

The “core sample testing” C-10 demands, likewise, is not defined in the Petition. However, the Board interpreted it as a demand for implementation of the “testing and analysis protocols” in ACI 349.3R and ASTM C856-11.¹²⁷ Below, NextEra argued this demand was inadmissible due to a pending Petition for Rulemaking on the same topic.¹²⁸ The Board disagreed, noting there is no evidence the NRC “has initiated or is about to initiate” a rulemaking in response to the petition, “so the rule prohibiting litigation of such matters does not apply.”¹²⁹

However, the Board’s interpretation is erroneous. The threshold for applying this rule is not whether a petition for rulemaking eventually results in publication of a proposed rule, as the Board suggests, but whether the agency is already expending resources on a generic resolution: “it would be ‘counterproductive’ (and contrary to longstanding agency policy) to initiate litigation on an issue that by all accounts very soon will be resolved generically.”¹³⁰ Proceedings under 10 C.F.R. Part 2, Subpart H (including NRC consideration of *petitions* for rulemaking) expend agency resources to resolve generic issues. Thus, the pending petition seeking imposition of the “testing and analysis protocols” in ACI 349.3R and ASTM C856-11 on a generic basis precludes duplicative consideration of this issue in the instant proceeding.

The Board also appears to find a genuine dispute in Dr. Brown’s demand that the LAR cite a predictive model for ASR advancement.¹³¹ Again, merely demanding the adoption of a preferred approach is not enough to show a deficiency in, or a genuine dispute with, the

¹²⁶ *Id.* at 34.

¹²⁷ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 60).

¹²⁸ NextEra Answer at 37.

¹²⁹ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 62).

¹³⁰ *Oconee*, CLI-99-11, 49 NRC at 346.

¹³¹ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 59-60).

application.¹³²

d. Contention H – Inspection Intervals

In Contention H, C-10 purports to challenge the inspection intervals for the SMP as described in the LAR. C-10’s claimed basis is that “there is no real knowledge of the speed of disintegration” of Seabrook’s concrete.¹³³ In its Answer pleading, NextEra noted the factual inaccuracy of this assertion; historical data (indicating the presence of a slow-reacting aggregate) does, in fact, exist.¹³⁴

In LBP-17-7, however, the Board misconstrued NextEra’s factual observation into a claim that “NextEra *relies* on these statements to support the assumption of a *continuously* slow rate of ASR expansion not only in the past but through the termination of the current Seabrook license in 2030.”¹³⁵ But, NextEra does no such thing; nor does the Board point to any language purportedly identifying a reliance on such an assumption. Rather than “assume,” the LAR proposes to *monitor* the rate of progression; in fact, NextEra explained that the LAR relies on trending—a key feature that C-10 did not acknowledge, much less challenge.¹³⁶ The Board itself even recognizes NextEra will “change the monitoring intervals” as necessary.¹³⁷ The Board, therefore, simply mischaracterizes NextEra’s arguments and the LAR itself.

The Board then interprets the contention to pose a genuine dispute, not with the LAR itself, but with the Board’s mischaracterization of it: “[b]ecause the LAR’s monitoring intervals

¹³² *Seabrook*, CLI-12-5, 75 NRC at 323 (noting the Commission has “long held that contentions 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.”).

¹³³ Petition at 15.

¹³⁴ NextEra Answer at 62-63.

¹³⁵ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 82-83) (emphasis added).

¹³⁶ See, e.g., LAR Evaluation at tbl.5.

¹³⁷ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 83)

assume a consistent and slow rate of ASR progression, Dr. Brown’s opinion identifies a clear dispute of material fact.”¹³⁸ As explained above, the Board’s mischaracterization is a mistake of fact; thus, its conclusion that Contention H demonstrates a genuine dispute is reversible error.

Furthermore, the Board’s finding of adequate support, based solely on comments from Dr. Brown, is also based on a mischaracterization of the LAR. The Board acknowledges NextEra’s assertion—which the Board does not dispute—that “Dr. Brown does not directly address the monitoring intervals in the LAR.”¹³⁹ But the Board finds a work-around to NextEra’s dispositive observation in its conclusion that the commentary from Dr. Brown speaks *generally* to the topic of ASR progression, and thus “supports C-10’s challenge to NextEra’s proposed monitoring intervals in Table 5, which assumes a slow progression of ASR expansion at Seabrook.”¹⁴⁰ As explained above, the Board supplied this assumption of continuously slow progression; it is not found in the LAR.

B. The Board Abused Its Discretion and Committed Reversible Error in Finding The Reformulated Contention Admissible on Alternative Grounds

1. Consolidation of “Otherwise . . . Inadmissible” Contentions for the Purpose of *Creating* an Admissible Contention Exceeds Board Authority

Staff’s Answer explained that none of C-10’s contentions, as pled, proffered an admissible contention.¹⁴¹ Nevertheless, Staff assembled a new contention from various pieces of the Petition, along with connections among and between them not pled by C-10.¹⁴² NextEra argued that Staff’s novel reformulation theory—by which boards could rejuvenate “otherwise . . .

¹³⁸ *Id.* at __ (slip op. at 83) (emphasis added).

¹³⁹ *Id.* at __ (slip op. at 81).

¹⁴⁰ *Id.* at __ (slip op. at 82).

¹⁴¹ NRC Staff’s Answer to C-10 Research and Education Foundation, Inc. Petition for Leave to Intervene at 26 (May 5, 2017) (ML17125A304).

¹⁴² *Id.*

inadmissible”¹⁴³ contentions by connecting them via a *board-supplied* “nexus”¹⁴⁴ for the purpose of *creating* an admissible contention¹⁴⁵—was both unprecedented and contrary to law.¹⁴⁶

In the *Fermi* proceeding, the Board “improperly assembled a contention from bits and pieces taken from . . . [petitioner’s hearing request and reply].”¹⁴⁷ The Commission held that such reformulations were improper because the act of supplying a “nexus” between a petitioner’s assertions and some alleged deficiency in the application exceeds a board’s authority if that nexus is “necessary . . . for an admissible contention.”¹⁴⁸ In other words, petitioners have an affirmative duty to plead such nexus, themselves, if essential to the admissibility finding.¹⁴⁹ Notwithstanding, that is precisely what the Board has done here.

Pointing to its own constructions of arguments (*e.g.*, “we discussed the interconnection,” “We further explained” the relationship),¹⁵⁰ the Board suggests it need only “read [the Petition] as a whole” in order to justify such a reformulation.¹⁵¹ But *Fermi* makes clear this is not enough; supplying multiple nexuses not pled by C-10 exceeds a board’s limited reformulation

¹⁴³ *Fermi*, CLI-15-18, 82 NRC at 141.

¹⁴⁴ *Id.*

¹⁴⁵ Neither the Staff, in its sur-reply, nor the Board, in LBP-17-7, have identified any case in which two inadmissible contentions have been combined to create a single admissible one. *See generally* NRC Staff’s Sur-Reply to NextEra’s Reply to NRC Staff’s Answer to C-10’s Petition for Leave to Intervene (June 5, 2017) (ML17156A280); *Seabrook*, LBP-17-7, 86 NRC 135 (slip op.).

¹⁴⁶ *See* NextEra Reply § III. In LBP-17-7, the Board misread NextEra’s argument as a claim that NRC Staff lacks the authority to propose reformulations, generally. *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 85). NextEra made no such argument.

¹⁴⁷ *DTE Elec. Co.* (Fermi Nuclear Power Plant, Unit 2), LBP-15-5, 81 NRC 249, 310 (2015) (Arnold, J., dissenting). *Accord Fermi*, CLI-15-18, 82 NRC 135 (reversing the majority’s decision on these grounds).

¹⁴⁸ *Fermi*, CLI-15-18, 82 NRC at 141.

¹⁴⁹ *Compare id.* (finding improper a board-supplied nexus between assertions where that nexus was “necessary to establish . . . an admissible contention”), *with Turkey Point*, CLI-15-25, 82 NRC at 401 (allowing a “combination of similar issues submitted . . . in support of two separate contentions,” but only where one contention was independently admissible even without the board-supplied combination).

¹⁵⁰ Only in hindsight, after seeing Staff’s Answer and hearing the Board’s leading question at oral argument, Tr. at 36, did C-10 purportedly “refram[e]” its entire Petition in the mold of the Board’s Reformulated Contention. *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 88).

¹⁵¹ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 88).

authority.¹⁵²

The Reformulated Contention is, in essence, a restatement of Contention D. The Board attempts to cure a key deficiency plaguing Contention D—its failure to demonstrate materiality—by stitching it together with portions of Contentions A, B, C, and H in order to provide a nexus between C-10’s stand-alone (*i.e.*, immaterial) “representativeness” argument and the adequacy of various aspects of the LAR. Finding this action within the scope of the Board’s reformulation authority would effectively read-out the requirement in 10 C.F.R. § 2.309(f)(1)(iv) that a *petitioner* demonstrate materiality.

2. The Reformulated Contention Is Inadmissible *Per Se*

Even assuming, *arguendo*, the Board acted within its authority in crafting the Reformulated Contention from pieces of inadmissible contentions, it still suffers from the same deficiencies and shortcomings, discussed above, that make each of the original contentions independently inadmissible.¹⁵³ Namely, it is not sufficiently supported, and does not identify material deficiencies in the various program elements (*e.g.*, monitoring methodologies, acceptance criteria, and inspection intervals). Although NextEra will not rehash all of those arguments, here, it bears reiterating that the overarching defect of the Reformulated Contention is its failure to articulate a genuine dispute with the LAR. The basis of the Board’s genuine dispute finding for the Reformulated Contention is its mistaken claim that the LAR relies on an

¹⁵² *Fermi*, CLI-15-18, 82 NRC at 141. The Board further attempts to justify its action by characterizing it as a less “significant” reformulation than another one approved by the Commission. *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 89) (citing *MOX*, LBP-08-11, 67 NRC at 481). However, the relevant question is whether the reformulation by the Board provides the threshold information required for admission, not the “significance” of the reformulation. *Fermi*, CLI-15-18, 82 NRC at 141 (Boards “may not supply information that is lacking in a contention that otherwise would be inadmissible.”). Here, the Board has improperly provided such threshold information.

¹⁵³ *See supra*, Part IV.A.

assumption that the LSTP concrete is similar to Seabrook's concrete.¹⁵⁴ As explained above, this is factual error.¹⁵⁵

V. CONCLUSION

The Commission should reverse the Board's erroneous decision to grant the Petition, and direct the Board to dismiss the proceeding.

Respectfully submitted,

Executed in Accord with 10 C.F.R. § 2.304(d)

Steven Hamrick, Esq.
NextEra Energy Seabrook, LLC
801 Pennsylvania Ave., NW Suite 220
Washington, D.C. 20004
Phone: (202) 349-3496
Fax: (202) 347-7076
E-mail: steven.hamrick@fpl.com

Executed in Accord with 10 C.F.R. § 2.304(d)

Paul M. Bessette, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Phone: (202) 739-5796
Fax: (202) 739-3001
E-mail: paul.bessette@morganlewis.com

Executed in Accord with 10 C.F.R. § 2.304(d)

William S. Blair, Esq.
NextEra Energy Seabrook, LLC
700 Universe Blvd.
Juno Beach, FL 33408
Phone: (561) 304-5238
Fax: (561) 304-5366
E-mail: william.blair@fpl.com

Signed (electronically) by Ryan K. Lighty

Ryan K. Lighty, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Phone: (202) 739-5274
Fax: (202) 739-3001
E-mail: ryan.lighty@morganlewis.com

Counsel for NextEra Energy Seabrook, LLC

Dated in Washington, DC
this 31st day of October 2017

¹⁵⁴ *Seabrook*, LBP-17-7, 86 NRC at __ (slip op. at 91).

¹⁵⁵ *See* MPR-4273 at vii and § 6.1.5.

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

BEFORE THE COMMISSION

In the Matter of:)	
NEXTERA ENERGY SEABROOK, LLC)	Docket No. 50-443-LA-2
(Seabrook Station Unit 1))	October 31, 2017
)	

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305, I certify that, on this date, the foregoing “NextEra’s Notice of Appeal of LPB-17-7” and “Brief in Support of NextEra’s Appeal of LBP-17-7” were served upon the Electronic Information Exchange (the NRC’s E-Filing System), in the above-captioned proceeding.

Signed (electronically) by Ryan K. Lighty

Ryan K. Lighty, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Phone: (202) 739-5274
Fax: (202) 739-3001
E-mail: ryan.lighty@morganlewis.com

Counsel for NextEra Energy Seabrook, LLC