## UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

## BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

NEXTERA ENERGY SEABROOK, LLC

Docket No. 50-443-LA-2

(Seabrook Station, Unit 1)

# NRC STAFF'S ANSWER TO C-10'S MOTION FOR PARTIAL RECONSIDERATION AND TO REOPEN THE RECORD

In accordance with 10 C.F.R. §§ 2.323(e), 2.326, and 2.345, the U.S. Nuclear Regulatory

Commission Staff files this answer to C-10 Research and Education Foundation's motion for

partial reconsideration of the Atomic Safety and Licensing Board's Memorandum and Order

LBP-20-9 and to reopen the record in the proceeding.<sup>1</sup> As discussed below and in the

accompanying affidavit,<sup>2</sup> the Staff supports the motion only to the extent that it seeks the

deletion of the word "significantly" in the license condition (e) that was imposed by the Board in

LBP-20-9; the Staff opposes the motion in all other respects.

In LBP-20-9, the Board concurred with the Staff that NextEra Energy Seabrook, LLC's

license amendment request (LAR) related to alkali-silica reaction (ASR) at Seabrook Station,

<sup>&</sup>lt;sup>1</sup> C-10 Research and Education Foundation's Motion for Leave to File Motion for Partial Reconsideration of LBP-20-09 (Aug. 31, 2020) (ML20244A320) (Motion); C-10 Research and Education Foundation's Motion for Partial Reconsideration and Motion to Re-Open the Record for Consideration of Supplemental Testimony Regarding License Conditions in LBP-20-09 (Aug. 31, 2020) (ML20244A321); Certificate of Counsel (Aug. 31, 2020) (ML20244A324); Certificate of Service (Aug. 31, 2020) (ML20244A319); Declaration by Victor E. Saouma, Ph.D in Support of C-10 Research and Education Foundation's Motion to Re-Open the Record (Aug. 28, 2020) (ML20244A323); Supplemental Testimony of Victor E. Saouma, Ph.D Regarding License Conditions in LBP-20-09 (Aug. 31, 2020) (ML20244A314) (Saouma, Ph.D Regarding License Conditions in LBP-20-09 (Aug. 31, 2020) (ML20244A314) (Saouma Supplemental Testimony); *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), LBP-20-9, 92 NRC \_\_\_\_\_ (Aug. 21, 2020) (slip op.).

<sup>&</sup>lt;sup>2</sup> Affidavit of Angela Buford, Bryce Lehman, Jacob Philip, and George Thomas in Response to C-10's Motion for Partial Reconsideration and to Reopen the Record (Sep. 10, 2020).

Unit 1 was acceptable, subject to the addition of four Board-developed conditions, labeled (c) through (f), to the Seabrook license.<sup>3</sup> In its motion, C-10 explains that prior to the issuance of LBP-20-9, the parties had not seen these license conditions and could not have reasonably anticipated their imposition, let alone their exact content.<sup>4</sup> Because of this, C-10 asks the Board to reconsider the language of the license conditions and make specific changes to this language, as proposed by Dr. Victor E. Saouma (C-10's expert witness in the Seabrook Board proceeding).<sup>5</sup>

Consistent with 10 C.F.R. §§ 2.323(e) and 2.345, a motion for reconsideration must demonstrate a compelling circumstance, "such as the existence of a clear and material error in a decision, which could not have been reasonably anticipated, which renders the decision invalid."<sup>6</sup> The Staff agrees with C-10 that the language of the license conditions could not have reasonably been anticipated, and because, as explained in the accompanying affidavit, the Staff believes that the use of the word "significantly" in condition (e) is a clear and material error that renders LBP-20-9 invalid, the Staff supports C-10's motion to this extent. The Staff, however, opposes all of the other changes proposed by C-10 because, as explained in the accompanying affidavit, they are without merit. Additionally, one of C-10's proposed changes is impermissible as a matter of law. Specifically, Dr. Saouma's request that the Board add language to condition (c) stating that the proper use of error bars by NextEra should be "independently reviewed by the NRC Staff"<sup>7</sup> would violate the requirement that "condition[s] be precisely drawn so that the

<sup>7</sup> Motion at 2.

<sup>&</sup>lt;sup>3</sup> LBP-20-9, 92 NRC at \_\_\_ (slip op. at 192–94).

<sup>&</sup>lt;sup>4</sup> Motion at 2–3.

<sup>&</sup>lt;sup>5</sup> Id.

<sup>&</sup>lt;sup>6</sup> 10 C.F.R. § 2.345. The description of compelling circumstances in 10 C.F.R. § 2.323(e) is substantively the same.

verification of compliance becomes a largely ministerial rather than an adjudicatory act....<sup>\*8</sup> Although not required for a valid decision, the Staff also recommends various editorial changes to the license conditions to make them more consistent with the relevant Staff guidance in Office of Nuclear Reactor Regulation (NRR) Office Instruction LIC-101<sup>9</sup> and with the NRC's principles of good regulation.<sup>10</sup> Specifically, the Staff recommends deleting the clause "rather than in 2025 and every ten years thereafter" and changing "MPR-4273" to "MPR-4273, Revision 1" in condition (c), spelling out the abbreviation "SEM" as "Structural Evaluation Methodology" in condition (d), and spelling out the abbreviation "SMP" as "Structures Monitoring Program" in condition (e). The Staff also recommends that, in addition to deleting the word "significantly" in condition (e), the Board change the value in this condition from "0.2 mm/m (0.02%)" to "0.24 mm/m (0.024%)," consistent with the increased ASR expansion rate posited in the Board's decision.<sup>11</sup>

The Staff also opposes C-10's motion to the extent that it requests to reopen the record in the proceeding. Under 10 C.F.R. § 2.326, a motion to reopen a closed record "will not be granted unless the following criteria are satisfied:" (1) the motion is timely; (2) the motion addresses a significant safety or environmental issue; and (3) the motion demonstrates that a materially different result would have been likely had the newly proffered evidence been considered initially. The Staff agrees that C-10's motion was timely filed, but, as discussed above and in the accompanying affidavit, the only pertinent issue brought up in the motion is whether to delete the word "significantly" in condition (e). This question does not rise to the level of a significant safety issue and the Board does not need to consider additional evidence

<sup>&</sup>lt;sup>8</sup> *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-00-13, 52 NRC 23, 34 (2000) ("[T]he Staff verification efforts should be able to verify compliance without having to make overly complex judgments....").

<sup>&</sup>lt;sup>9</sup> NRR Office Instruction LIC-101, "License Amendment Review Procedures," at App. B, p. 22 (July 31, 2020) (ML19248C539).

<sup>&</sup>lt;sup>10</sup> NUREG-1350, Volume 31, "2019-2020 Information Digest," at 3 (Aug. 2019) (ML19242D326).

<sup>&</sup>lt;sup>11</sup> See LBP-20-9, 92 NRC at \_\_\_ (slip op. at 135).

to rule on whether the inclusion of the word "significantly" in condition (e) would make the condition excessively unclear. Additionally, none of the other issues raised by C-10 rise to the level of a significant safety or environmental issue, nor would a materially different decision result from the Board considering the additional evidence proffered by C-10. Therefore, there is no need to reopen the record in the proceeding.

The affidavit of Angela Buford, Bryce Lehman, Jacob Philip, and George Thomas is provided in support of this Staff answer. As explained in that affidavit as well as in Exhibits NRC001-R-00-BD01, NRC002-00-BD01, NRC003-00-BD01, NRC004-00-BD01, NRC005-00-BD01, and NRC006-00-BD01 and LBP-20-09, these individuals are experts with respect to the Staff's review of the LAR.<sup>12</sup> They have an extensive understanding of the LAR after years of work on it, including through multiple inspections, audits, requests for additional information, and public meetings. They are also experts with respect to the evaluation and writing of the terms of NRC licenses. In fact, Ms. Buford, Mr. Lehman, and Dr. Thomas helped write the Staff-imposed conditions (a) and (b) to which the Board-imposed conditions (c) through (f) were added. The affidavit explains both the technical bases for the Staff's position as well as how this position is consistent with the Staff's guidance for imposing license conditions in license amendment proceedings. Taken together, the changes supported by the affidavit would ensure that conditions (c) through (f) provide reasonable assurance of adequate protection of public health and safety and are clear and enforceable legal obligations.

Based on the foregoing, the Board should grant, in part, C-10's motion to the extent that it seeks reconsideration of LBP-20-9 with respect to the deletion of the word "significantly" in condition (e) and deny C-10's motion in all other respects. Upon reconsideration, the Board should change conditions (c) through (f) to reflect this proposed deletion and also the Staff's other recommendations discussed above such that the conditions read:

<sup>&</sup>lt;sup>12</sup> See, e.g., LBP-20-9, 92 NRC at \_\_\_ (slip op. at 52).

- NextEra shall undertake the monitoring required by MPR-4273, Revision 1, Appendix B,
  Check 3, for control extensometers every six months.
- d. If stress analyses conducted pursuant to the Structural Evaluation Methodology show that the stress in the rebar from ASR-induced expansion and other loads will exceed the yield strength of the rebar, NextEra must develop a monitoring program sufficient to ensure that rebar failure or yielding does not occur, or is detected if it has already occurred, in the areas at-risk of rebar failure or yielding.
- If the ASR expansion rate in any area of a Seabrook seismic Category I structure exceeds 0.24 mm/m (0.024%) through-thickness expansion per year, NextEra's Management will perform an engineering evaluation focused on the continued suitability of the six-month monitoring interval for Tier 3 areas. If the engineering evaluation concludes that more frequent monitoring is necessary, it shall be implemented under the Structures Monitoring Program.
- f. Each core extracted from Seabrook Unit 1 will be subjected to a petrographic analysis to detect internal microcracking and delamination.

### /Signed (electronically) by/

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#### Executed in Accord with 10 CFR 2.304(d)

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Dated this 10th day of September 2020

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## Certificate of Service

Pursuant to 10 C.F.R § 2.305, I hereby certify that copies of the foregoing "NRC STAFF'S ANSWER TO C-10'S MOTION FOR PARTIAL RECONSIDERATION AND TO REOPEN THE RECORD," dated September 10, 2020, and the "AFFIDAVIT OF ANGELA BUFORD, BRYCE LEHMAN, JACOB PHILIP, AND GEORGE THOMAS IN RESPONSE TO C-10'S MOTION FOR PARTIAL RECONSIDERATION AND TO REOPEN THE RECORD," dated September 10, 2020, have been served upon the Electronic Information Exchange (the NRC's E-Filing System), in the captioned proceeding, this 10th day of September 2020.

## /Signed (electronically) by/

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Dated this 10th day of September 2020