## UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION Before the Atomic Safety and Licensing Board

In the Matter of

Docket No. 50-443-LR

NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1) ASLBP No. 10-906-02-LR

# FRIENDS OF THE COAST AND NEW ENGLAND COALITION'S ANSWER TO NEXTERA'S MOTION FOR SUMMARY DISPOSITION OF CONTENTIONS 4B (SAMA SOURCE TERMS) AND 4D (SAMA ATMOSPHERIC MODELING)

### INTRODUCTION

Friends of the Coast and New England Coalition ("Friends/NEC") hereby answers NextEra

Energy Seabrook, LLC's ("NextEra") Motions for Summary Disposition of Friends/NEC

Contentions 4B (SAMA<sup>1</sup> Source TERMS) and 4D (SAMA Analysis Atmospheric Modeling).

Friends/NEC concurs with NextEra's Statement of Material Facts concerning Contention 4 B and

therefore offers no objection to the summary disposition of Contention 4B.

As more fully set forth below, Friends/NEC does dispute certain portions of NextEra's Statement

of Material Facts regarding Contention D and therefore pleads that the Atomic Safety and

Licensing Board Panel ("Board") should find that genuine issues of material fact continue to exist

and thus NextEra is not entitled to a decision as a matter of law. 10 C.F.R. § 2.710(d)(2).

### BACKGROUND

NextEra filed a License Renewal Application ("LRA") for Seabrook Station ("Seabrook") with the Nuclear Regulatory Commission ("NRC", or the "Commission") in May 2010.

<sup>&</sup>lt;sup>1</sup> Severe Accident Mitigation Alternatives (analysis)

Friends/NEC filed a Petition to Intervene and Request for a Hearing ("Petition") on October 20, 2010 raising four contentions including Contention 4, a multi-part challenge to NextEra's analysis of severe accident mitigation alternatives ("SAMA").

On February 15, 2011, the Board admitted portions of Contention 4, including Contention 4B (SAMA Source TERMS) and 4D (SAMA Analysis Atmospheric Modeling).

On March 19, 2012, NextEra submitted a supplement to its SAMA analysis ("March 2012 SAMA supplement (SBK-L-12053)").14

On April 26, 2013, the NRC Staff issued its second draft supplemental environment impact statement for Seabrook ("DSEIS") reviewing the updated analysis of severe accident mitigation alternatives.

On May 6, 2013, the Board granted the parties' joint motion regarding the timing of NextEra's summary disposition motions.16 On May 10, 2013, NextEra moved for summary disposition of Contentions 4B and 4D.

#### STATEMENT OF LAW

ASLB Panels rely on 10 C.F.R. Subpart G. 10 C.F.R. § 2.1205(c) in ruling on Subpart L motions for summary disposition Subpart G states that summary disposition is appropriate where the record demonstrates that no genuine dispute exists regarding any material fact and the moving party is entitled to a decision as a matter of law.

When a summary disposition motion is supported by affidavits the "party opposing the motion may not rest upon . . . mere allegations or denials," but must, by affidavit or as otherwise provided in the rule, set forth "specific facts showing that there is a genuine issue of fact" warranting a hearing. "Bare assertions or general denials are not sufficient. Although the opposing party does not have to show that it would prevail on the issues, it must at least demonstrate that there is a genuine factual issue to be tried." 10 C.F.R. § 2.710(b); *Advanced Medical Systems, Inc.* (One Factory Row, Geneva, Ohio, 44041), CLI-93-22, 38 N.R.C. 98, 102 (1993).

The National Environmental Policy Act ("NEPA") demands that federal agencies

contemplating major actions prepare an environmental impact statement ("EIS") addressing "any adverse environmental effects which cannot be avoided should the proposal be implemented."

42 U.S.C. § 4332(C)(ii).

Pursuant to this inquiry, an EIS must "discuss the extent to which adverse effects can be avoided" by mitigation. *Robertson v. Methow Valley Citizens Council*,

NRC's NEPA regulations require license renewal applicants perform a plant-specific, quantitative assessment of measures that could significantly mitigate the frequency-weighted consequences of radiological impacts in a severe accident — a SAMA analysis.

Challenges to a SAMA analysis "must be tethered to the computer

modeling and mathematical aspects of the analysis," Davis Besse, CLI-12-8, 75 N.R.C. at

415, and must demonstrate a significant defect skewing the cost benefit results. CLI-12-8, 75

N.R.C. at 414. [Emphasis added]

DISCUSSION

Friends/NEC, in consultation with appropriate experts, has carefully reviewed NextEra's Motion for Summary Disposition, the Statement of Material Facts and the documents attached /NEC has admitted to no contest with all but two of the twenty three stated material facts. However , Friends/NEC denies the validity of NextEra's conclusions in the two remaining stated material facts because NextEra did not consider uncertainty in determining whether an estimated potential 32% increase in total benefit<sup>2</sup>would result in the identification of new or additional potentially cost-beneficial SAMAs.

In support of the motion, NextEra's experts performed a bounding type of analysis to fully characterize the impacts from using an alternative meteorological model suggested in Contention 4D. Specifically, NextEra's experts performed a confirmatory wind trajectory analysis using the

<sup>&</sup>lt;sup>2</sup> accounting for NextEra's Exposure Index correction factor

CALMET meteorological model<sup>3</sup>. In addition, they performed an "Exposure Index" analysis to compare the results of the CALMET annual wind trajectory roses with the annual wind rose from the Seabrook Station SAMA analysis. This Exposure Index analysis, according to NextEra, "suggests that use of a more complex model like CALMET could potentially increase the calculated benefit of a SAMA by about 32%." NextEra argues that in "… contrast, an increase by more than a factor of two" would be required before another SAMA could be considered costbeneficial.<sup>4</sup>

Friends/NEC experience, for example intervening in Vermont Yankee's Extended Power Uprate and License Renewal Applications, is that is that NRC expects applicants to consider uncertainty in the identification of potentially cost-beneficial SAMAs.57 As the Commission has stated, "in a highly predictive analysis such as a SAMA analysis, there are bound to be significant uncertainties, and therefore an uncertainty analysis is performed<sup>5</sup>."

While guidance is not regulation, NRC endorsed guidance leads to conformance with regulation. Uncertainty analysis, of the type expected by NRC, is prescribed in USNRC RG 1.200, Rev. 2, March 2009, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities." and NEI 05-01 (Att. 4D-C), and principles and practice for technically adequate probabilistic risk assessments in conjunction with ASME/ANS-RA-Sa-2009, "Addenda to ASME RA-S-2008, Standard for Level 1/Large Early Release Frequency Probabilistic Risk Assessment for Nuclear Power Plant Applications,"

 <sup>&</sup>lt;sup>3</sup> NextEra's Motion for Summary Disposition at 9. CALMET is model for developing three-dimensional time dependent meteorological fields. *Id. See also* Joint Declaration of Steven R. Hanna and Kevin R.
<sup>4</sup> Atmospheric Modeling) ("Hanna & O'Kula Joint Decl.") at ¶¶ 117-125; NextEra's Motion at 9-10; Hanna

Atmospheric Modeling) ("Hanna & O'Kula Joint Deci.") at ¶¶ 117-125; NextEra's Motion at 9-10; Hanna & O'Kula Joint Deci. at ¶¶ 126-131.

<sup>&</sup>lt;sup>5</sup> *Pilgrim*, CLI-12-01, 75 NRC at 58.

In short, NextEra has performed a meteorological analysis including dynamic factors, as recommended by Friends/NEC but has then failed to qualify its resulting conclusions with an uncertainty analysis that has the potential to unearth additional cost-beneficial SAMA considerations.

Friends/NEC does not have the resources to employ an expert witness and produce the appropriate supporting affidavits to support its contentions at this juncture. However Friends/NEC respectfully submits NextEra's errors and omissions are clearly obvious to laymen experienced in NRC regulation. Friends/NEC respectfully submits that NextEra has not qualified for judgment as a matter of law because NextEra has not shown that use of a different methodology would not result in the identification of additional potentially cost-beneficial SAMAs.<sup>6</sup>

#### V. CONCLUSION

For the above-stated reasons, the Board should grant NextEra's motion for summary disposition

of Friends/NEC Contention 4B and deny NextEra's motion for summary disposition of

Friends/NEC Contention 4D.

Respectfully Submitted, /Signed (electronically) by Raymond Shadis Edgecomb, Maine – July 15, 2013

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<sup>&</sup>lt;sup>6</sup> *Pilgrim*, CLI-09-11, 69 NRC at 533 (stating that the "ultimate concern" is whether any additional SAMA should have been identified as potentially cost-beneficial).