UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

FLORIDA POWER & LIGHT COMPANY

(Turkey Point Nuclear Generating Units 3 and 4)

Docket Nos. 50-250-SLR 50-251-SLR

NRC STAFF'S ANSWER TO JOINT INTERVENORS'
(1) AMENDED MOTION TO MIGRATE OR AMEND CONTENTIONS 1-E AND 5-E
AND TO ADMIT FOUR NEW CONTENTIONS, AND (2) PETITION FOR WAIVER

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INTRODUCTION

In accordance with 10 C.F.R. § 2.309(i) and the Atomic Safety and Licensing Board's Order of April 2, 2019,¹ the U.S. Nuclear Regulatory Commission Staff files this answer to the Friends of the Earth's, Natural Resources Defense Council's, and Miami Waterkeeper's (collectively, Joint Intervenors) (1) motion to migrate contentions and admit new contentions (Motion), as amended on June 28, 2019,² and (2) petition for waiver, filed on June 24, 2019.³

¹ Order (Granting in Part Intervenors' Joint Motion for Partial Reconsideration of Initial Scheduling Order) (ADAMS Accession No. ML19092A386).

² Natural Resources Defense Council's, Friends of the Earth's, and Miami Waterkeeper's Motion to Migrate Contentions & Admit New Contentions in Response to NRC Staff's Supplemental Draft Environmental Impact Statement (June 28, 2019) (ML19179A316) (Motion); Errata to Natural Resources Defense Council's, Friends of the Earth's, and Miami Waterkeeper's Motion to Migrate Contentions & Admit New Contentions in Response to NRC Staff's Supplemental Draft Environmental Impact Statement (June 28, 2019) (ML19179A313).

³ Natural Resources Defense Council's, Friends of the Earth's, and Miami Waterkeeper's Petition for Waiver of 10 C.F.R. §§ 51.53(c)(3) and 51.71(d) and 10 C.F.R. Part 51, Subpart A, Appendix B (June 24, 2019) (ML19175A311).

As discussed in detail below, the Staff opposes Joint Intervenors' Motion to the extent that it seeks to migrate Contentions 1-E and 5-E from Florida Power & Light Company's (FPL or the Applicant) environmental report (ER)⁴ to the Staff's draft supplemental environmental impact statement (DSEIS)⁵ because, subsequent to the filing of the Motion, the Board dismissed these contentions as moot. Further, the Staff opposes the Motion to the extent that it seeks to admit new or amended contentions because the proposed new or amended contentions do not satisfy the Commission's contention admissibility standards, set forth in 10 C.F.R. § 2.309(f)(1)-(2). Finally, the Staff opposes the Joint Intervenors' petition for waiver because it does not establish special circumstances warranting a waiver of the Commission's regulations, as required by 10 C.F.R. § 2.335(b).

BACKGROUND

This proceeding concerns the subsequent license renewal application (SLRA) submitted by FPL on January 30, 2018, as later supplemented and revised, to authorize an additional 20 years of operation for Turkey Point Nuclear Generating Unit Nos. 3 and 4 (Turkey Point).⁶
Timely requests for hearing were filed by the Joint Intervenors (then referred to as Joint

⁴ Applicant's Environmental Report, Subsequent Operating License Renewal Stage, Turkey Point Nuclear Plant Units 3 and 4 (Jan. 2018) (ML18113A145) (ER). FPL subsequently supplemented the ER. See letter from William Maher, FPL, to NRC Document Control Desk (Apr. 10, 2018) (ML18102A521).

⁵ NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 5, Second Renewal, Regarding Subsequent License Renewal for Turkey Point Nuclear Generating Unit Nos. 3 and 4, Draft Report for Comment (Mar. 2019) (ML19078A330) (DSEIS).

⁶ See (1) Letter from Mano K. Nazar, FPL, to NRC Document Control Desk (Jan. 30, 2018) (ML18037A812); (2) Letter from William D. Maher, FPL, to NRC Document Control Desk (Feb. 9, 2018) (ML18044A653); (3) Letter from William D. Maher, FPL, to NRC Document Control Desk (Feb. 16, 2018) (ML18053A123); (4) Letter from William D. Maher, FPL, to NRC Document Control Desk (Mar. 1, 2018) (ML18072A224); and (5) Letter from William D. Maher, FPL, to NRC Document Control Desk (Apr. 10, 2018) (ML18102A521 and ML18113A132) (transmitting a revised SLRA).

Petitioners)⁷ and Southern Alliance for Clean Energy (SACE).⁸ An additional petition was submitted by Mr. Albert Gomez.⁹ On March 7, 2019, the Board issued its decision on standing and contention admissibility in which, in part, it granted the Joint Intervenors' and SACE's petitions to intervene, and admitted the Joint Intervenors' Contentions 1-E and 5-E and SACE's Contentions 1A and 2, as reframed by the Board; the Board denied Mr. Gomez's petition.¹⁰

On April 1, 2019, the Staff issued its DSEIS,¹¹ and on April 9, 2019, SACE withdrew from the proceeding.¹² On May 20, 2019, based on the DSEIS, FPL filed motions to dismiss Joint Intervenors' Contentions 1-E and 5-E as moot.¹³ The Staff supported the motions to dismiss¹⁴ and the Joint Intervenors opposed them.¹⁵ The Joint Intervenors filed the instant Motion with

⁷ Request for Hearing and Petition to Intervene Submitted by Friends of the Earth, Natural Resources Defense Council, and Miami Waterkeeper (Aug. 1, 2018) (ML18213A417) (Joint Petitioners Petition).

⁸ Southern Alliance for Clean Energy's Request for Hearing and Petition to Intervene (Aug. 1, 2018) (SACE Petition) (ML18213A528).

⁹ Proposed Petition to Intervene and for Hearing under 10 C.F.R. § 2.206, for Docket ID # NRC-2018-0074 (undated) (ML18219A900).

¹⁰ Fla. Power & Light Co. (Turkey Point Nuclear Generating Units 3 & 4), LBP-19-3, 89 NRC ___, ___ (Mar. 7, 2019) (slip op. at 63). The Applicant filed an appeal from the Board's decision. Florida Power & Light Company's Notice of Appeal of LBP 19-3, and Brief in Support of [FPL's] Appeal of LBP-19-3 (Apr. 1, 2019). On July 15, 2019, the Applicant informed the Commission that its appeal is moot in light of recent developments. Notice Regarding Dismissal of Contentions (July 15, 2019), at 1-2.

¹¹ See Letter from Sherwin E. Turk to the Board (Apr. 3, 2019) (ML19093B846). The document date of the DSEIS in ADAMS is March 31, 2019.

¹² Southern Alliance for Clean Energy's Notice of Withdrawal (Apr. 9, 2019) (ML19099A314). As FPL stated in its Notice Regarding SACE Withdrawal (Apr. 11, 2019) (ML19101A296), SACE's withdrawal from the proceeding effectively extinguished its pending contentions. *Id.* at 1 (citing *Houston Lighting & Power Co.* (South Texas Project, Units 1 & 2), ALAB-799, 21 NRC 360, 382 (1985)).

¹³ FPL's Motion to Dismiss Joint Petitioners' Contention 1-E as Moot (May 20, 2019) (ML19140A355); FPL's Motion to Dismiss Joint Petitioners' Contention 5-E as Moot (May 20, 2019) (ML19140A356).

¹⁴ NRC Staff's Answer to FPL's Motions to Dismiss (June 10, 2019) (ML19161A252).

¹⁵ Joint Petitioners' Answer Opposing FPL's Motion to Dismiss Joint Petitioners' Contention 1-E as Moot (June 10, 2019) (ML19161A360); Joint Petitioners' Answer Opposing FPL's Motion to Dismiss Joint Petitioners' Contention 5-E as Moot (June 10, 2019) (ML19161A361).

supporting reports and petition for waiver on June 24, 2019, and filed an amended motion with amended expert reports, along with an Errata statement, on June 28, 2019.

On July 8, 2019, the Board granted FPL's motions to dismiss Joint Intervenors'

Contentions 1-E and 5-E, finding that the Staff's DSEIS cured FPL's previous omissions in its

ER.¹⁶ Accordingly, the Board dismissed Joint Intervenors' Contentions 1-E and 5-E as moot.¹⁷

DISCUSSION

In their Motion, the Joint Intervenors seek (1) to migrate Contentions 1-E and 5-E, admitted as "contentions of omission" concerning the Applicant's ER, to transform those contentions into challenges to the DSEIS, (2) to amend Contentions 1-E and 5-E to become contentions challenging the "adequacy" of the DSEIS; and (3) to proffer four new contentions (Contentions 6-E, 7-E, 8-E, and 9-E) alleging inadequacies in the DSEIS. In addition, in their Waiver Petition, the Joint Intervenors seek a waiver of the Commission's regulations in 10 C.F.R. §§ 51.53(c)(3) and 51.71(d), and 10 C.F.R. Part 51, Appendix B, to allow them to challenge (in Contention 7-E) one "Category 1" determination in the GEIS and 10 C.F.R. Part 51, Appendix B, Table B-1, and to challenge (in Contention 6-E) one new issue that is not categorized as Category 1 or 2 and that the NRC Staff analyzed for the first time in the DSEIS.¹⁸

As more fully set forth below, the Joint Intervenors' request to migrate Contentions 1-E and 5-E should be denied, as those contentions have already been dismissed by the Board;

¹⁶ Florida Power & Light Co. (Turkey Point Nuclear Generating Units 3 and 4), Memorandum and Order (Granting FPL's Motions to Dismiss Joint Intervenors' Contentions 1-E and 5-E as Moot) (LBP-19-06) (July 8, 2019).

¹⁷ *Id*. at 10.

¹⁸ Waiver Petition at [unnumbered] 1. The Joint Intervenors seek a waiver of one Category 1 generic determination, groundwater quality degradation (plants with cooling ponds in salt marshes), and one new issue that is neither a Category 1 nor a Category 2 issue, water quality impacts on adjacent water bodies (plants with cooling ponds in salt marshes). *Id.* at [unnumbered] 4.

further, migration of these two contentions of omission is impermissible as the DSEIS cures the ER's alleged omissions, and the DSEIS is therefore substantially dissimilar to the ER.

Additionally, the Joint Intervenors' request for a hearing on their amended Contentions 1-E and 5-E and new Contentions 6-E, 7-E, 8-E, and 9-E should be denied as they have failed to satisfy the Commission's requirements in 10 C.F.R. § 2.309 for new or amended contentions, contention admissibility, or both, and their Waiver Petition fails to establish a *prima facie* showing that special circumstances exist such that the Commission's regulations should be waived in this proceeding. The Staff addresses these matters *seriatim* in the discussion below.

I. Legal Standards Governing the Admissibility of New or Amended Contentions

A. Good Cause Standard for New or Amended Contentions Filed After the Deadline for Filing Contentions

The admissibility of new or amended contentions in NRC adjudicatory proceedings is governed by three regulations. These are: 10 C.F.R. § 2.309(f)(2), concerning new and timely contentions; 10 C.F.R. § 2.309(c), concerning contentions filed after the deadline in § 2.309(b); and 10 C.F.R. § 2.309(f)(1), establishing the general admissibility requirements for contentions. *See, e.g., DTE Electric Co.* (Fermi Nuclear Power Plant, Unit 3), CLI-15-1, 81 NRC 1, 7 n.29 (2015); *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), LBP-06-14, 63 NRC 568, 571-72 (2006).

In this regard, the Commission's regulations provide that a new or amended contention may be admitted as timely if it meets the requirements of 10 C.F.R. § 2.309(f)(2). Under this provision, a contention filed after the initial filing period may be admitted with leave, if it meets the following requirements:

(2) Contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner. On issues arising under the National Environmental Policy Act, participants shall file contentions based on the applicant's environmental report. Participants may file new or amended environmental contentions after the deadline in [10 C.F.R. § 2.309(b)] (e.g., based on a draft or final NRC environmental impact statement, environmental assessment, or any supplements to these documents) if the contention complies with the requirements in [10 C.F.R. § 2.309(c)].

Further, 10 C.F.R. § 2.309(c) provides that motions for leave to file new or amended contentions filed after the deadline for filing contentions "will not be entertained" absent a determination by the presiding officer that a participant has demonstrated good cause by showing that:

- (i) The information upon which the filing is based was not previously available;
- (ii) The information upon which the filing is based is materially different from information previously available; and
- (iii) The filing has been submitted in a timely fashion based on the availability of the subsequent information.¹⁹

B. Contention Admissibility Standards

The legal requirements governing the admissibility of contentions are set forth in 10 C.F.R. § 2.309(f)(1)-(2).²⁰ Specifically, to be admitted, a contention must satisfy the following requirements:

¹⁹ 10 C.F.R. § 2.309(c). *Cf. Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 89 (1998) ("intervenors must file their environmental contentions as soon as possible, even before issuance of the draft EIS, if the contested issue is addressed in the applicant's ER. See 10 C.F.R. § 2.714(b)(2)(iii)."). The provisions of former § 2.714(b)(2), cited here, are now codified in § 2.309(f)(2).

²⁰ These requirements substantially reiterate the requirements stated in former 10 C.F.R. § 2.714, published in revised form in 1989. See Statement of Consideration, "Rules of Practice for Domestic

- (f) Contentions. (1) A request for hearing or petition for leave to intervene must set forth with particularity the contentions sought to be raised. For each contention, the request or petition must:
 - (i) Provide a specific statement of the issue of law or fact to be raised or controverted;
 - (ii) Provide a brief explanation of the basis for the contention;²¹
 - (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;²²
 - (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;²³
 - (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/ petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with

Licensing Proceedings—Procedural Changes in the Hearing Process," 54 Fed. Reg. 33,168 (Aug. 11, 1989), as corrected, 54 Fed. Reg. 39,728 (Sept. 28, 1989). While former 10 C.F.R. § 2.714 was revised in 1989, those revisions did not constitute "a substantial departure" from then existing practice in licensing cases. 54 Fed. Reg. at 33,170-71. Thus, the prior standards governing the admissibility of contentions remain in effect to the extent they do not conflict with the 1989 amendments. *Arizona Public Serv. Co.* (Palo Verde Nuclear Generating Station, Units 1, 2 and 3), LBP-91-19, 33 NRC 397, 400 (1991).

²¹ The requirement that a petitioner provide an explanation of the basis for its contention helps to define the scope of a contention. Thus, "[t]he reach of a contention necessarily hinges upon its terms coupled with its stated bases." *Public Serv. Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988), *aff'd sub nom Massachusetts v. NRC*, 924 F.2d 311 (D.C. Cir.), *cert. denied*, 502 U.S. 899 (1991); *accord Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 379 (2002).

²² The scope of a proceeding is defined by the Commission in its initial hearing notice and Order referring the proceeding to the Board. *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790-91 (1985). Contentions may only be admitted if they fall within the scope of issues set forth in the *Federal Register* Notice and comply with the requirements of former 10 C.F.R. § 2.714(b) (restated in 10 C.F.R. § 2.309(f)), and applicable case law. *Public Serv. Co. of Indiana* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170-71 (1976); *Philadelphia Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20 (1974).

²³ "Materiality" requires that the petitioner show why the alleged error or omission is of possible significance to the result of the proceeding, demonstrating a "significant link between the claimed deficiency and the agency's ultimate determination." *Entergy Nuclear Operations, Inc.* (Palisades Nuclear Plant), LBP-15-20, 81 NRC 829, 850 (2015).

references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue;²⁴ [and]

- (vi) ... [P]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief ²⁵
- (2) Contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner. On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report

10 C.F.R. § 2.309(f)(1)-(2).

As has often been observed, the contention admissibility rules exist to "focus litigation on concrete issues, and result in a clearer and more focused record for decision." In this regard,

²⁴ It is the petitioner's obligation to present the factual information and expert opinions necessary to support its contention. *See USEC Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 457 (2006) (moreover, it is the petitioner's responsibility to satisfy the basic contention admissibility requirements; Boards should not have to search through a petition to "uncover" arguments and support for a contention, and "may not simply 'infer' unarticulated bases of contentions"). *See also Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2 and 3), CLI-91-12, 34 NRC 149, 155 (1991).

²⁵ All contentions must "show that a genuine dispute exists" with regard to the license application in question, challenge and identify either specific portions of, or alleged omissions from, the application, and provide the supporting reasons for each dispute. This requires the petitioner to read the entire application, state both the applicant and petitioner's views, and explain the disagreement, and if petitioner believes an issue is not addressed, to explain the deficiency. Basic assertions that an application is insufficient or inadequate is insufficient to meet this standard. *Nuclear Mgmt. Co., LLC* (Palisades Nuclear Power Plant), LBP-06-10, 63 NRC 314, 340-42 (2006).

²⁶ See e.g., Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, NE), LBP-15-15, 81 NRC 598, 601 (2015) (citing "Changes to Adjudicatory Process," 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004)).

the Commission has explained that the rules governing the admissibility of contention are "strict by design."²⁷ Failure to comply with any of the requirements set forth in the regulations is grounds for the dismissal of a contention.²⁸ As further stated by the Commission, the rules require "a clear statement as to the basis for the contentions and the submission of … supporting information and references to specific documents and sources that establish the validity of the contention." "Mere 'notice pleading' does not suffice."²⁹ "A petitioner's issue will be ruled inadmissible if the petitioner 'has offered no tangible information, no experts, no substantive affidavits,' but instead only 'bare assertions and speculation."³⁰

It is well established that the purpose for the "basis" requirements is (1) to assure that the contention raises a matter appropriate for adjudication in a particular proceeding; (2) to establish a sufficient foundation for the contention to warrant further inquiry into the assertion; and (3) to put other parties sufficiently on notice of the issues so that they will know generally

²⁷ Entergy Nuclear Operations, Inc. (Indian Point, Unit 2) CLI-16-5, 83 NRC 131, 136 (2016) (citing Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001) and South Carolina Elec. & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-1, 71 NRC 1, 7 (2010). The Commission further stated that it "should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing." Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2202 (Jan. 14, 2004).

²⁸ Indian Point, CLI-16-5, 83 NRC at 136. See also Oconee Nuclear Station, CLI-99-11, 49 NRC at 334-35 (the heightened contention admissibility rules are designed to preclude contentions "based on little more than speculation"). The requirements are intended, inter alia, to ensure that a petitioner reviews the application and supporting documents prior to filing contentions; that contentions are supported by at least some facts or expert opinion known to the petitioner at the time of filing; and that there exists a genuine dispute before a contention is admitted for litigation, to avoid the practice of filing contentions which lack any factual support and seeking to flesh them out later through discovery. Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), LBP-91-35, 34 NRC 163, 167-68 (1991).

²⁹ Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 118-19 (2006) (footnotes omitted).

³⁰ Fansteel, Inc. (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 203 (2003) (citing *GPU Nuclear Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 192, 208 (2000)).

what they will have to defend against or oppose.³¹ Determining whether the contention is adequately supported by a concise allegation of the facts or expert opinion is not a hearing on the merits; a petitioner does not have to prove its contention at the admissibility stage,³² or provide all the evidence required to withstand a summary disposition motion.³³ Nonetheless, the Petitioner must provide some support for its contention, either in the form of facts or expert testimony, and "[f]ailure to do so requires that the contention be rejected."³⁴

If a petitioner neglects to provide the requisite support for its contentions, the licensing board should not make assumptions of fact that favor the petitioner, or search for or supply information that is lacking.³⁵ Moreover, any supporting material provided by a petitioner, including those portions of the material that are not relied upon, is subject to licensing board scrutiny.³⁶ Likewise, providing any material or document as a basis for a contention, without setting forth an explanation of its significance, is inadequate to support the admission of the contention.³⁷ In short, the information, facts, and expert opinions provided by the petitioner are

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³¹ Peach Bottom, ALAB-216, 8 AEC at 20-21.

³² Private Fuel Storage L.L.C. (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 139 (2004).

³³ Compare with 10 C.F.R. § 2.710(c). "[A]t the contention filing stage the factual support necessary to show that a genuine dispute exists need not be in affidavit or formal evidentiary form and need not be of the quality necessary to withstand a summary disposition motion." 54 Fed. Reg. at 33,171.

³⁴ Palo Verde, CLI-91-12, 34 NRC at 155; accord, Indian Point, CLI-16-5, 83 NRC at 136. See "Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process," 54 Fed. Reg. at 33,170 ("This requirement does not call upon the intervener to make its case at this stage of the proceeding, but rather to indicate what facts or expert opinions, be it one fact or opinion or many, of which it is aware at that point in time which provide the basis for its contention.").

³⁵ See American Centrifuge Plant, CLI-06-10, 63 NRC at 457 (2006).

³⁶ Tennessee Valley Authority (Bellefonte Nuclear Plant, Units 1 and 2), LBP-10-7, 71 NRC 391, 421 (2010); Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1996).

³⁷ See Fansteel, CLI-03-13, 58 NRC at 205.

to be examined by the licensing board to confirm that they do indeed supply adequate support for the contention.³⁸

Finally, it is well established that a contention must be rejected if it constitutes an attack on applicable statutory requirements; challenges the basic structure of the Commission's regulatory process or is an attack on the regulations;³⁹ is nothing more than a generalization regarding the petitioner's view of what applicable policies ought to be; seeks to raise an issue which is not proper for adjudication in the proceeding or does not apply to the facility in question; or seeks to raise an issue which is not concrete or litigable.⁴⁰

C. Environmental Review of License Renewal and Subsequent License Renewal Applications

The National Environmental Policy Act of 1969, as amended ("NEPA"), 42 U.S.C. § 4321 et seq., requires Federal agencies to include in any recommendation or report on proposals for major Federal actions significantly affecting the quality of the human environment, a detailed statement on:

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

³⁹ As set forth in 10 C.F.R. § 2.335(a), "no rule or regulation of the Commission ... is subject to attack ... in any adjudicatory proceeding," in the absence of a waiver petition granted by the Commission. *See also Millstone*, CLI-03-14, 58 NRC at 218. Further, any contention that amounts to an attack on applicable statutory requirements or represents a challenge to the basic structure of the Commission's regulatory process must be rejected. *Public Serv. Co. of New Hampshire* (Seabrook Station, Units 1 and 2), LBP-82-76, 16 NRC 1029, 1035 (1982) (*citing Peach Bottom*, ALAB-216, 8 AEC at 20-21).

³⁸ Bellefonte Nuclear Plant, LBP-10-7, 71 NRC at 421.

⁴⁰ Peach Bottom, ALAB-216, 8 AEC at 20-21.

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.⁴¹

In accordance with NEPA, the NRC is required to take a "hard look" at the environmental impacts of a proposed major Federal action that could significantly affect the environment, as well as reasonable alternatives to that action.⁴² This "hard look" is tempered by a "rule of reason" that requires agencies to address only impacts that are reasonably foreseeable—not remote and speculative.⁴³ "NEPA does not call for certainty or precision, but permits the agency to provide an *estimate* of anticipated (not unduly speculative) impacts."⁴⁴ Neither does NEPA call for Federal agencies to do the impossible.⁴⁵ Further, "NEPA gives agencies broad discretion to keep their inquiries within appropriate and manageable boundaries."⁴⁶ As the Commission has observed, "NEPA requires consideration of 'reasonable' alternatives, not all conceivable ones."⁴⁷ Further, the Staff's EISs "need only discuss those alternatives that ... will bring about the ends of the proposed action—a principle equally applicable to Environmental Reports."⁴⁸

⁴¹ NEPA, Section 102(2)(C), 42 U.S.C. § 4332.

⁴² Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998).

⁴³ See, e.g., Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-156, 6 AEC 831, 836 (1973).

⁴⁴ Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-05-20, 62 NRC 523, 536 (2005).

⁴⁵ The Supreme Court has observed that where it is not possible for an agency to analyze the environmental consequences of a proposed action or alternatives to it, requiring such analysis would have "no factual predicate" and under those circumstances an EIS is not required. *Kleppe v. Sierra Club*, 427 U.S. 390, 401-02 (1976).

⁴⁶ Louisiana Energy Servs., L.P., CLI-98-3, 47 NRC at 103 (citation omitted).

⁴⁷ NextEra Energy Seabrook, LLC (Seabrook Station, Unit 1), CLI-12-5, 75 NRC 301, 338 (2012).

⁴⁸ *Id.* at 339 (footnotes and quotation marks omitted).

The NRC has adopted regulations in 10 C.F.R. Part 51, implementing its NEPA responsibilities, pursuant to which the Staff performs an environmental review for license renewal to assess the potential impacts of 20 additional years of operation. ⁴⁹ In 1996, the Commission amended the environmental review requirements in 10 C.F.R. Part 51 to address the scope of environmental review for license renewal applications; ⁵⁰ as part of that rulemaking, Appendix B was added to Part 51, delineating the issues that are to be considered in a license renewal environmental review. ⁵¹ The regulations in Part 51 and Appendix B were further amended in 2013, updating the Commission's 1996 findings; in particular, the 2013 amendment redefined the number and scope of the environmental impact issues that must be addressed during license renewal environmental reviews, and incorporated lessons learned and knowledge gained during previous license renewal environmental reviews. ⁵²

The regulations in 10 C.F.R. Part 51, Appendix B divide the license renewal environmental review into "Category 1" generic issues and "Category 2" site-specific issues. The generic impacts of operating a plant for an additional 20 years, that are common to all plants or to a specific subgroup of plants, were addressed in the Commission's "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" ("GEIS"),

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⁴⁹ Turkey Point, CLI-01-17, 54 NRC at 6-7.

⁵⁰ Final Rule, "Environmental Review of Renewal of Nuclear Power Plant Operating Licenses," 61 Fed. Reg. 28,467 (June 5, 1996).

⁵¹ The 1996 rule added Appendix B to Subpart A of 10 C.F.R. Part 51, "Environmental Effect of Renewing the Operating License of a Nuclear Power Plant"; Appendix B included Table B-1, "Summary of Findings on NEPA Issues for License Renewal of Nuclear Power Plants," which summarized the findings of the 1996 GEIS.

⁵² Final Rule, "Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses," 78 Fed. Reg. 37,281 (June 20, 2013).

NUREG-1437 (May 1996), as later revised in 2013.⁵³ The findings and analyses contained in the GEIS were used by the Commission as the technical basis for its revisions of 10 C.F.R. Part 51, which defined the scope of its review of the environmental impacts of license renewal under NEPA.

A license renewal applicant is generally not required to discuss Category 1 issues in its Environmental Report, but instead may reference and adopt the Commission's generic findings set forth in 10 C.F.R. Part 51 and the GEIS.⁵⁴ In addition, pursuant to 10 C.F.R. § 51.53(c)(3)(iv), an applicant's environmental report "must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware." Thus, an applicant must provide a plant-specific review of the Category 2 issues in its Environmental Report and must address any *new and significant* information that might render the Commission's Category 1 determinations incorrect in that proceeding.⁵⁵

The Staff's license renewal environmental review is guided by the 2013 GEIS-LR (NUREG-1437, Rev. 1) (June 2013), and by the "Standard Review Plan for Environmental Review of Nuclear Power Plants – Operating License Renewal" ("ESRP-LR") (NUREG-1555,

⁵³ See NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Rev. 1 (June 2013), Vols. 1-3 (ML13106A241, ML13106A242, and ML13106A244).

⁵⁴ *Turkey Point*, CLI-01-17, 54 NRC at 11. The Commission has emphasized that generic analysis is an appropriate method of meeting the agency's statutory obligations under NEPA. *Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), *Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), CLI-09-10, 69 NRC 521, 523-25 (2009), *citing Massachusetts v. NRC*, 522 F.3d 115 (1st Cir. 2008).

⁵⁵ See, e.g., Exelon Generation Co., LLC (Limerick Generating Station, Units 1 and 2), CLI-13-07, 78 NRC 199, 212-13 (2013); Turkey Point, CLI-01-17, 54 NRC at 11-12; Entergy Nuclear Generation Company and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), CLI-09-10, 69 NRC 521, 527 (2009).

Supp. 1, Rev. 1) (June 2013).⁵⁶ The Staff publishes a site-specific Supplement to the GEIS (a supplemental EIS, or "SEIS"), providing its environmental evaluation of each license renewal application. Like the applicant, the NRC Staff is not required to address generic (Category 1) impacts in its plant-specific EIS, in accordance with 10 C.F.R. §§ 51.71(d) and 51.95(c). The Staff must, however, address any new and significant information of which it becomes aware, which might affect the applicability of the Commission's generic Category 1 determinations in the proceeding.⁵⁷

Contentions raising environmental issues in a license renewal proceeding are limited to those issues that are affected by license renewal and have not been addressed by rulemaking or on a generic basis.⁵⁸ As the Commission has stated, Category 1 issues "are not subject to site-specific review and thus fall beyond the scope of individual license renewal proceedings."⁵⁹

⁵⁶ The 1996 GEIS identified 92 license renewal environmental issues, of which 69 were determined to be generic (*i.e.*, Category 1), 21 were determined to be plant-specific (*i.e.*, Category 2), and two did not fit into either category (i.e., uncategorized). The 2013 revision to the GEIS modified this list, identifying 78 environmental impact issues for license renewal, of which 59 were determined to be generic for all sites, 2 are uncategorized, and 17 are site-specific Category 2 issues. NUREG-1437, Rev. 1, Vol. 1, at 1-36. The findings of the environmental impact analyses conducted for the GEIS (as revised in 2013) are listed in Table B-1 of Appendix B, which lists each issue and its category level.

⁵⁷ See, e.g., Limerick, CLI-13-07, 78 NRC at 216-17; Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-16-8, 83 NRC 417, 439 (2016). Following publication of a site-specific supplement to the GEIS, further supplementation is required only "if there are 'significant new circumstances or information' . . . [that] paint[s] a dramatically different picture of impacts compared to the description of impacts in the EIS." Massachusetts v. NRC, 708 F.3d at 68-69, quoting Town of Winthrop v. FAA, 535 F.3d 1, 7, 12 (1st Cir. 2008); accord, Limerick, CLI-13-07, 78 NRC at 211, 216-17.

⁵⁸ Turkey Point, CLI-01-17, 54 NRC at 11-12; see 10 C.F.R. § 51.53(c)(3)(i)-(ii).

⁵⁹ *Id.* at 12 (emphasis added); see 10 C.F.R. § 51.53(c)(3)(i)-(ii). In *Turkey Point*, the Commission recognized that the rules "provide a number of opportunities for individuals to alert the Commission to new and significant information that might render a generic finding invalid, either with respect to all nuclear power plants or for one plant in particular. In the hearing process, for example, petitioners with new information showing that a generic rule would not serve its purpose at a particular plant may seek a waiver of the rule." *Turkey Point*, CLI-01-17, 54 NRC at 12.

As the Commission further explained, challenges to the Category 1 conclusions in the GEIS constitute challenges to NRC regulations:

The license renewal GEIS determined that the environmental effects of storing spent fuel for an additional 20 years at the site of nuclear reactors would be "not significant." Accordingly, this finding was expressly incorporated into Part 51 of our regulations. Because the generic environmental analysis was incorporated into a regulation, the conclusions of that analysis may not be challenged in litigation unless the rule is waived by the Commission for a particular proceeding or the rule itself is suspended or altered in a rulemaking proceeding. ⁶⁰

In sum, as the Commission has made clear, a contention challenging a Category 1 generic determination can only be admitted if the Commission grants a waiver of its regulations.

Further, as discussed *infra* at 52-58, an intervenor seeking to challenge a Category 1 determination based on significant new information must first obtain a waiver of the Commission's regulations before the contention may be admitted.

II. The Proposed New and Amended Contentions Should Be Rejected.

In their Motion, the Joint Intervenors (1) request to migrate or, in the alternative, to amend two previously admitted contentions (Contentions 1-E and 5-E) so that they allege challenges to the DSEIS and (2) proffer four new contentions (Contentions 6-E, 7-E, 8-E, and 9-E) as challenges to the DSEIS. As more fully set forth below, the Joint Intervenors' request to migrate Contentions 1-E and 5-E should be denied as those contentions have since been dismissed by the Board; further, as discussed *infra* at 18-19, migration of these two contentions of omission would be impermissible as the DSEIS cured the alleged omissions. Additionally,

⁶⁰ Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-07-03, 65 NRC 13, 17 (footnotes omitted), reconsid. denied, CLI-07-13, 65 NRC 211, 214 (2007). This approach has been found to comply with NEPA. See, e.g., Massachusetts v. NRC, 708 F.3d at 68-69.

the Joint Intervenors' request for a hearing on Amended Contentions 1-E and 5-E and New Contentions 6-E, 7-E, 8-E, and 9-E should be denied as those contentions fail to satisfy the Commission's requirements for new and amended contentions, contention admissibility, or both.

A. The Request to Migrate Contentions 1-E and 5-E Should Be Denied.

Contentions 1-E and 5-E, as admitted by the Board, are "contentions of omission"⁶¹ that challenged the ER for failing to discuss certain issues.⁶² In their Motion, the Joint Intervenors request, in part, that Contentions 1-E and 5-E migrate to challenge the Staff's DSEIS;⁶³ in the alternative, they seek to migrate the contentions by amending the contentions' language to challenge the DSEIS.⁶⁴

⁶¹ See Turkey Point, LBP-19-6, 90 NRC at ___, ___ (slip op. at 1, 4). Contentions that claim a failure to include specific information or an issue in an application are considered contentions of omission, while contentions "that challenge substantively and specifically how particular information has been discussed in [an] application" are considered contentions of adequacy. *Pacific Gas & Elec. Co.* (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-16-11, 83 NRC 524, 534, n.60 (2016); *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 382-84 (2002).

⁶² See Motion at 9, 18, and 20; *Turkey Point*, LBP-19-6, 90 NRC at __ (slip op. at 1, 2, 4, 6, and 7); *Turkey Point*, LBP-19-3, 89 NRC at __ (slip op. at 43 n.62 and 52-53).

⁶³ Motion at 7-8. As the Joint Intervenors appear to recognize, *id.*, challenges to new information must be addressed in a new or amended contention. *See, e.g., McGuire*, CLI-02-28, 56 NRC at 383. As the Commission has observed, if a contention of omission could be transformed into a contention of adequacy without the filing of new or amended contentions, the NRC's contention pleading standards would be circumvented. *Id.*; *accord, Diablo Canyon*, CLI-16-11, 83 NRC at 539.

⁶⁴ Compare Turkey Point, LBP-19-3, 89 NRC at ___ (slip op. at 63 n.82) ("In light of the adverse impact of continued CCS operations on the threatened American crocodile and its critical seagrass habitat, the ER is deficient for failing to consider mechanical draft cooling towers as a reasonable alternative to the CCS in connection with the license renewal of Turkey Point Units 3 and 4.") (emphasis added) with Motion at 17 ("In light of the adverse impact of continued [CCS] operations on the threatened American crocodile and its critical seagrass habitat, the DSEIS is deficient for failing to consider mechanical draft cooling towers as a reasonable alternative to the [CCS] in connection with the license renewal of Turkey Point Units 3 and 4.") (emphasis added); Compare Turkey Point, LBP-19-3, 89 NRC at __ (slip op. at 63 n.82) ("The ER is deficient ... in its failure to analyze the potential impacts of ammonia releases during the renewal period on threatened and endangered species and their critical habitat.") (emphasis added) with Motion at 20 ("The DSEIS is deficient in its failure to analyze the potential impacts of ammonia releases during the renewal period on threatened and endangered species and their critical habitat.") (emphasis added).

The Staff opposes the Joint Intervenors' request to migrate Contentions 1-E and 5-E to challenge the DSEIS. First, after the Joint Intervenors filed their Motion, the Board dismissed Contentions 1-E and 5-E as moot.⁶⁵ As such, these contentions are no longer available to be migrated from the ER to the DSEIS,⁶⁶ and migration of the dismissed contentions is procedurally not possible.

Second, the Joint Intervenors' request to migrate these contentions should be rejected because the Motion fails to show that the principles of migration apply. In this regard, a contention may migrate when the Board construes a contention challenging the applicant's environmental report as a challenge to the Staff's subsequently issued NEPA evaluation document; in that event, the contention will migrate without need for the intervenor to amend the contention.⁶⁷ This is appropriate, however, only where the Staff's NEPA evaluation of the issue "is essentially *in pari materia*" with the applicant's discussion of that issue in its ER.⁶⁸ Here, the original contentions were contentions of omission, and the particular omissions alleged in those contentions have been cured by the DSEIS—as the Board explicitly observed in LBP-19-6.⁶⁹ As the Joint Intervenors recognize, migration requires that the DSEIS be "sufficiently similar" to the

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⁶⁵ *Turkey Point*, LBP-19-6, 90 NRC ___ (slip op).

⁶⁶ See Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, Nebraska), CLI-15-17, 82 NRC 33, 42-43 (2015) (discussing the migration by a licensing board of environmental contentions that were previously admitted). The Joint Intervenors appear to agree that mooted contentions cannot migrate. See Motion at 21 n.89 ("If the Board finds that the DSEIS does not moot Contention 5-E, the Contention should be allowed to migrate.").

⁶⁷ Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, Nebraska), CLI-15-17, 82 NRC 33, 42 n.58 (2015), citing Crow Butte Resources, Inc. (In Situ Leach Facility, Crawford, Nebraska), LBP-15-11, 81 NRC 401, 409-10 & n.38 (citing Detroit Edison Co. (Fermi Nuclear Power Plant, Unit 3), LBP-12-23, 76 NRC 445, 470-71 (2012)).

⁶⁸ Crow Butte, LBP-15-11, 81 NRC at 410.

⁶⁹ *Turkey Point*, LBP-19-6, 90 NRC at ___ (slip op at 1).

Applicant's ER;⁷⁰ here, however, inasmuch as (a) the DSEIS cured the omissions alleged in these contentions, and (b) the additional omissions alleged in the Motion differ substantially from the omissions alleged in the admitted contentions, migration of the original contentions to the DSEIS is not possible.

Finally, the Joint Intervenors' request to migrate should be denied because these contentions challenging the ER lack specificity as to any alleged deficiencies in the DSEIS and fail to show that a genuine dispute exists with the DSEIS regarding the ER's omissions, in contravention of 10 C.F.R. § 2.309(f)(1)(i), (ii), (v) and (vi).

For these reasons, the Board should deny the Joint Intervenors' request to migrate Contentions 1-E and 5-E.

B. Proposed Amended Contention 1-Eb Should Not Be Admitted

Joint Intervenors' proposed Amended Contention 1-Eb states:

The DSEIS fails to analyze adequately mechanical draft cooling towers as a reasonable alternative that could mitigate adverse impacts of the cooling canal system in connection with the license renewal of Turkey Point Units 3 and 4.⁷¹

The Joint Intervenors argue that the DSEIS's analysis of mechanical draft cooling towers as an alternative cooling water system is inadequate because it "only analyzes the adverse impacts of constructing and operating the alternative" and does not analyze the benefits (i.e., the reductions of adverse impacts) that would result from Turkey Point Units 3 and 4 using mechanical draft cooling towers instead of the CCS as a heat sink.⁷² Specifically, the Joint Intervenors argue that the DSEIS "fails to consider how the cooling tower alternative could

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⁷⁰ See Motion at 6.

⁷¹ Motion at 8.

⁷² *Id.* at 10.

reduce acknowledged adverse impacts to (1) threatened, endangered, and protected species and essential fish habitat and (2) groundwater use conflicts."⁷³ The Joint Intervenors, however, fail to observe that the DSIES did, in fact, discuss the beneficial impacts on ESA-listed species, critical habitats, and groundwater use conflicts that would result from a cessation of CCS usage by Turkey Point Units 3 and 4. The Joint Intervenors' contention therefore lacks specificity and fails to demonstrate a genuine dispute of material fact with the DSEIS, contrary to the requirements of 10 C.F.R. § 2.309(f)(1)(i), (ii), (v) and (vi).

First, the Joint Intervenors state that the DSEIS "fails to analyze how the cooling tower alternative compares to the proposed action."⁷⁴ But, as identified by the Board,⁷⁵ Table 2-2 of the DSEIS summarizes the impact of the cooling tower alternative, along with the impacts of the proposed action, the no-action alternative, and replacement power alternatives, for numerous different resource areas, including special status species and habitats and groundwater resources.⁷⁶

Second, with respect to the alleged failure to discuss the reduction of adverse impacts to species and habitat from the use of cooling towers instead of the CCS, the Joint Intervenors postulate that ceasing operation of the CCS as a heat sink and replacing it with cooling towers while keeping the canals in place and freshening the CCS could protect species and habitat, and they fault the DSEIS for failing to "consider adequately these benefits of the cooling tower alternative." This exact scenario, though, is specifically analyzed in a portion of the DSEIS

⁷³ *Id.* at 12.

⁷⁴ *Id.* at 11 (citing DSEIS at 2-20–20-21)

⁷⁵ *Turkey Point*, LBP-19-6, 90 NRC at ___ (slip op at 6).

⁷⁶ DSEIS at 2-22-2-23.

⁷⁷ Motion at 13.

that is not cited by the Joint Intervenors, which states that, although Turkey Point Units 1 and 2 would continue to withdraw water from the CCS and Unit 5 would continue to discharge blowdown to the CCS, if Turkey Point Units 3 and 4 no longer use the CCS, then (1) less heat would to be discharged to the CCS, which could cause the water in the CCS to become less saline and, thus, more hospitable for species and (2) less flow would occur within the CCS, which could cause the water in the CCS to become stagnant and, thus, less hospitable for species. The DSEIS further notes that regardless of whether Turkey Point Units 3 and 4 use the CCS, FPL is required to take the freshening actions required by the 2016 Consent Order with the State of Florida and the 2015 Consent Agreement with Miami-Dade County, which would help to ensure that the CCS continues to provide habitat for species. Also, the DSEIS observes that future changed conditions may require reinitiated consultations between the NRC and the U.S. Fish and Wildlife Service, which would determine the effects on ESA-listed species and critical habitat.

Third, with respect to the alleged failure to discuss the reduction of adverse impacts to groundwater use conflicts from the use of cooling towers instead of the CCS, the Joint Intervenors postulate that "ending the heat contribution of Turkey Point Units 3 and 4 to the cooling canals could freshen the water and reduce the groundwater impacts faster," and they

⁷⁸ DSEIS at 4-68.

⁷⁹ State of Florida Department of Environmental Protection v. FPL, OGC File No. 16-0241, Consent Order (June 20, 2016) (ML16216A216) (Consent Order).

⁸⁰ Miami-Dade County, Department of Regulatory and Economic Resources, Division of Environmental Resources Management v. FPL, Consent Agreement (Oct. 7, 2015) (ML15286A366) (Consent Agreement).

⁸¹ DSEIS at 4-68.

⁸² Id. at 4-68.

fault the DSEIS for failing to "complete[] this analysis" and "compare how significant this change would be."83 This exact scenario, though, is specifically analyzed in a portion of the DSEIS that is not cited by the Joint Intervenors, which states that, although the CCS would continue to receive effluent discharges from Turkey Point Unit 5 as well as stormwater runoff from the Turkey Point plant complex, if Turkey Point Units 3 and 4 no longer use the CCS, then that would "substantially reduce thermal discharges to the CCS as well as cooling water and other effluents from the plant's cooling water system."84 In turn, "[t]his flow reduction would reduce groundwater mounding (i.e., a localized increase in the water table) beneath the CCS and reduce the generation of hypersaline water," such that the amount of water used to support freshening activities in accordance with the provisions of the Consent Order and the Consent Agreement "could be reduced" as compared to the withdrawals "described in Section 3.5.2.3 of this [D]SEIS and ... evaluated in Section 4.5.1.2"85

Because proposed Amended Contention 1-Eb alleges that the DSEIS is deficient with respect to specific issues but does not discuss the DSEIS's analyses of these issues, the Joint Intervenors do not show, in contravention of 10 C.F.R. § 2.309(f)(1)(vi), that a genuine dispute exists with the DSEIS. Further, to the extent (if any) that the Joint Intervenors may have wished to challenge the adequacy of the above DSEIS analyses, the contention does not provide a specific statement of the issue of law or fact to be raised or controverted, along with a concise statement of supporting alleged facts or expert opinions, in contravention of 10 C.F.R.

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⁸³ Motion at 16.

⁸⁴ DSEIS at 4-35-4-36.

⁸⁵ Id. at 4-36.

§ 2.309(f)(1)(i), (ii) and (v).86 For these reasons, proposed Amended Contention 1-Eb should be rejected.

C. Proposed Amended Contention 5-Eb Should Not Be Admitted

Joint Intervenors' proposed Amended Contention 5-Eb states:

The DSEIS is deficient in its analysis of the potential impacts of ammonia releases during the renewal period on threatened and endangered species and their critical habitat.⁸⁷

The Joint Intervenors argue that although the DSEIS acknowledges that Turkey Point is a source of ammonia, it gives inadequate consideration to how the ammonia released will impact ESA-listed species and critical habitats.⁸⁸ Specifically, the Joint Intervenors fault the DSEIS for "fail[ing] to consider the impacts of ammonia discharges on all but one threatened and endangered species and important habitat" (i.e., the West Indian manatee).⁸⁹

Proposed Amended Contention 5-Eb is not admissible because, as discussed below, the DSEIS discusses impacts to the relevant ESA-listed species and critical habitats, and the Joint Intervenors do not provide any alleged facts or expert opinions for why, given the specific circumstances of each species and habitat, these discussions are insufficient.

⁸⁶ Nor could such additional statements be provided now, as the deadline for providing such information has passed. See Order (Granting in Part Intervenors' Joint Motion for Partial Reconsideration of Initial Scheduling Order) (Apr. 2, 2019) (ML19092A386) (setting the deadline for new or amended contentions based on the DSEIS as June 24, 2019). Further, this information cannot be provided for the first time in a reply brief See, e.g., Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-25, 60 NRC 223, 224 (2004) ("[W]e concur with the Board that the reply briefs constituted a late attempt to reinvigorate thinly supported contentions by presenting entirely new arguments in the reply briefs.").

⁸⁷ Motion at 21.

⁸⁸ Motion at 22.

⁸⁹ Motion at 23-24 (emphasis added).

In the Staff's DSEIS and the Biological Assessment⁹⁰ that was incorporated by reference into the DSEIS,⁹¹ the Staff discusses the environment in which Turkey Point is located and the role that ammonia may play in this environment. For instance, the DSEIS states that FPL monitors the CCS, Biscayne Bay, Card Sound, marshland, mangrove areas, and canals adjacent to the CCS "for numerous water quality parameters, including ammonia and other nutrients and salinity" to evaluate the effects, if any, of CCS operation on the surrounding environment.⁹² The DSEIS further observes that between June 2010 and May 2016, ammonia concentrations within the CCS ranged from below detectable levels to 0.3 mg/L and averaged 0.04 mg/L.⁹³ Importantly, the DSEIS notes that at all times the ammonia concentrations in the CCS were below the Miami-Dade County water quality standard for ammonia of 0.5 mg/L.⁹⁴ The DSEIS further observes that in Biscayne Bay and Card Sound, exceedances of the water quality standard for ammonia were detected at the bottom of the Barge Turning Basin, the Turtle Point remnant canal, the Card Sound remnant canal, the S-20 canal, and the Sea-Dade remnant canal, which are excavations outside of, but close to, the CCS.⁹⁵ In addition, the DSEIS observes that FPL's monitoring program has not detected evidence in the surrounding

⁹⁰ Biological Assessment for the Turkey Point Nuclear Generating Unit Nos. 3 and 4 Proposed Subsequent License Renewal (Dec. 2018) (ML18344A008) (BA).

⁹¹ DSEIS at 4-60.

⁹² DSEIS at 3-41.

⁹³ DSEIS at 3-42; BA at 15.

⁹⁴ *Id*.

⁹⁵ DSEIS at 3-50–3-53; BA at 60 (citing letter from Wilbur Mayorga, DERM, to Matthew J. Raffenberg, FPL, RE: Site Assessment Report (SAR) dated March 17, 2017 and the SAR Supplemental Information dated November 11, 2017, submitted pursuant to Addendum 1 dated August 15, 2016 of the Consent Agreement between Florida Power & Light (FPL) and Miami-Dade County, Division of Environmental Resources Management for FPL's Turkey Point facility located at, near, or in the vicinity of 9700 SW 344 Street, Unincorporated Miami-Dade County, Florida (DERM IW-3, IW-16, IW5-6229, DWO-10, CLI-2014-0312, CLI-2016-0303, HWR-851 (July 10, 2018)).

marshland and mangroves areas of any impacts of ammonia, nutrients, or salinity from the CCS on soil pore water quality via the groundwater pathway.⁹⁶

Additionally, FPL has a vegetative monitoring plan, which includes surveys of plots of freshwater marshland and mangrove habitat adjacent to the CCS as well as one plot in an area further from the CCS that serves as a reference plot.⁹⁷ During surveys, FPL measures the percent cover, species diversity, plant height, and biomass of each plot as well as other factors that may indicate changes in the health of the vegetation and habitat.⁹⁸ Using FPL's data from 2011 through 2017, the Staff plotted the height of sawgrass plants and live biomass and determined that wetlands at different distances from the CCS exhibit similar growth trends, suggesting that landscape-scale environmental factors have a greater effect on changes in live biomass and sawgrass height than proximity to the CCS.⁹⁹

In summary, the DSEIS and the Biological Assessment, which is incorporated by reference therein, provide a comprehensive discussion of ammonia in and near the CCS, including observations that (1) in the CCS, the concentration of ammonia is below the applicable water quality standard, (2) at the bottom of certain excavations next to the CCS and connected to Biscayne Bay, the concentration of ammonia is above the applicable water quality standard, and (3) in surrounding marshland and mangrove areas, ammonia has not been detected in soil pore water, and (4) wetlands near the CCS do not exhibit different growth trends than wetlands further from the CCS. Based on this information, the Staff evaluated the impacts to ESA-listed

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⁹⁶ DSEIS at 3-53.

⁹⁷ DSEIS at 3-86; BA at 9.

⁹⁸ *Id*.

⁹⁹ DSEIS at 3-87; BA at 9-10.

species and critical habitats from ammonia, considering the species' and habitats' potential to contact ammonia, as follows.

For ESA-listed species and critical habitat in the CCS (i.e., the American crocodile), the Staff evaluated the impact of the CCS, including its ammonia concentration, on the species and habitat. The Biological Assessment observes that there has been a reduction in American crocodile nesting and hatchling abundance due in part to a decrease in water quality in the CCS but that this adverse impact is expected to lessen as a result of the requirements of the Consent Order and Consent Agreement, including the requirement that FPL develop and implement a nutrient management plan. ¹⁰⁰ In consideration of this and other information, the Biological Assessment concludes, in part, that the current conditions within the CCS are having an adverse impact on crocodiles, but that this impact will likely decrease. ¹⁰¹

For ESA-listed species that may feed in the CCS (i.e., the American crocodile, red knot, piping plover, wood stork, Everglade snail kite, Kirtland's warbler, and Florida bonneted bat), the Biological Assessment discusses the reduction in prey resources in the CCS. To the American crocodile, the Biological Assessment observes that because of, among other things, an increase in nutrients within the CCS, the number of prey species within the CCS available to the American crocodile has been limited, but that this adverse impact is expected to lessen as a result of the requirements of the Consent Order and Consent Agreement, including the requirement that FPL develop and implement a nutrient management plan. For the red knot,

¹⁰⁰ BA at 32-34, 36.

¹⁰¹ BA at 44.

¹⁰² BA at 41-42, 53, 57.

¹⁰³ BA at 36, 41-42.

piping plover, wood stork, Everglade snail kite, and Kirtland's warbler, the Biological Assessment observes that, despite the pronounced ecosystem shift experienced by the CCS, which resulted in a reduction in the number of fish species and the density of fish, the CCS still provides prey items that can tolerate high salinity and temperature levels. ¹⁰⁴ For the Florida bonneted bat, which consumes insects in open waters, no data exist that describe the insect populations within the CCS; however, these bats are rare in the "action area" and, therefore, are unlikely to use the CCS for foraging. ¹⁰⁵ In consideration of this and other information, the Biological Assessment concludes, in part, that current conditions in the CCS are having an adverse impact on the American crocodile, but this impact will likely decrease; ¹⁰⁶ further, these conditions are having a minimal impact on the red knot, piping plover, wood stork, Everglade snail kite, Kirtland's warbler, and Florida bonneted bat. ¹⁰⁷

For ESA-listed species in wetlands (i.e., the eastern indigo snake, red knot, piping plover, wood stork, Everglade snail kite, Kirtland's warbler, Florida bonneted bat, Blodgett's silverbush, Cape Sable thoroughwort, Florida semaphore cactus, sand flax, and Florida bristle fern), the Biological Assessment discusses indirect impacts to wetland habitat that could occur due to conditions in the CCS.¹⁰⁸ The Biological Assessment discusses that impacts to wetlands

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¹⁰⁴ BA at 53. Although the analysis generally applies to all of these species, it concentrates on the wood stork because it is the only one of these species that FPL has observed occurring within the action area and foraging within the CCS. *Id.* at 51-52.

¹⁰⁵ BA at 57. The "action area" is defined in the implementing regulations for Section 7(a)(2) of the Endangered Species Act, 50 C.F.R. § 402.02 ("Definitions") as "all areas affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. The action area effectively bounds the analysis of federally listed species and critical habitats." DSEIS at 3-105.

¹⁰⁶ BA at 44.

¹⁰⁷ BA at 53, 58.

¹⁰⁸ BA at 46, 51-52, 57, 64.

would be minimal based on, in part, FPL's wetland monitoring data and FPL's efforts to minimize impacts through implementation of its environmental compliance procedures, best management practices, stormwater pollution prevention plan, and spill prevention control and countermeasures plan.¹⁰⁹ The Biological Assessment concludes that given that these impacts would result in minor if any changes to wetland habitats, continued operations would have an insignificant impact on the vegetative community or prey resources for the species.¹¹⁰ Additionally, the Biological Assessment addresses the Florida panther,¹¹¹ stating that the greatest threat to its survival and recovery is habitat loss and habitat fragmentation and that, because it has not been observed in the action area and because the proposed action will not involve new construction and will restrict public access, the proposed action may affect, but is not likely to adversely affect, that species.¹¹²

For ESA-listed species and critical habitat in Biscayne Bay (i.e., the loggerhead sea turtle, green sea turtle, leatherback sea turtle, hawksbill sea turtle, smalltooth sawfish, and West Indian manatee), the DSEIS and Biological Assessment explain why ammonia in the CCS would not affect surface water quality through the groundwater pathway in a way that would affect these species.¹¹³ Specifically, these documents discuss the only potential pathway by which ammonia from the CCS could reach these species;¹¹⁴ describe FPL's monitoring of the

¹⁰⁹ BA at 46-47, 52-53, 57, 64.

¹¹⁰ *Id*.

¹¹¹ See Motion at 13 and 20.

¹¹² BA at 58.

¹¹³ DSEIS at 4-64-4-67; BA at 59-62.

¹¹⁴ DSEIS at 4-64-4-65; BA at 59-60.

CCS and surrounding waterbodies for ammonia;¹¹⁵ state that FPL has identified no evidence of ecological impacts on surrounding areas from ammonia originating in the CCS;¹¹⁶ discuss the identification of sampling locations that have exceeded the water quality standard for ammonia;¹¹⁷ discuss the requirement that FPL develop and implement an ammonia mitigation plan¹¹⁸ and other requirements of the Consent Order and Consent Agreement;¹¹⁹ and explain the potential effects of elevated ammonia levels on species.¹²⁰ The DSEIS and Biological Assessment conclude that ammonia would result in insignificant impacts on these species because the locations of ammonia concentrations in excess of the water quality standard for ammonia are in stagnant or dead-end canals where the species are unlikely to be present or to be present for only a short duration and because FPL is required to remediate the issue.¹²¹

As demonstrated by the foregoing summary of the Staff's analysis, the impacts of ammonia, if any, are discussed with respect to each species and habitat in proportion to the impacts that it may have on that species or habitat. This is consistent with NEPA. The Joint Intervenors' only basis for faulting this Staff analysis is their claim that the evaluation of the

¹¹⁵ DSEIS at 4-65; BA at 60.

¹¹⁶ *Id*.

¹¹⁷ *Id*.

¹¹⁸ *Id*.

¹¹⁹ DSEIS at 4-66.

¹²⁰ DSEIS at 4-65-4-67; BA at 60-61.

¹²¹ DSEIS at 4-66-4-67; BA at 61.

¹²² See, e.g., NRDC v. Morton, 458 F.2d 827, 834 (D.C. Cir. 1972) ("The agency may limit its discussion of environmental impact to a brief statement, when that is the case, that the alternative course involves no effect on the environment, or that their effect, briefly described, is simply not significant.").

West Indian manatee is different than the evaluation of other species.¹²³ The Joint Intervenors, however, do not provide any alleged facts or expert opinions to support a claim that differing treatment is not justified by the differing circumstances of the different species and habitats, and do not demonstrate a genuine dispute of material fact with the DSEIS, in contravention of 10 C.F.R. § 2.309(f)(1)(v) and (vi). Therefore, proposed Amended Contention 5-Eb is not admissible.

D. The Joint Intervenors' New Proposed Contentions Should Be Rejected

In their Motion, the Joint Intervenors request that the Board admit four new proposed contentions, each of which generally asserts that the Staff's DSEIS is deficient in some manner. However, the proposed contentions lack sufficient specificity to allow other parties to identify precisely what inadequacies are alleged to exist in the DSEIS or what information is proffered to support, specifically, each contention's claims. In general, the Motion points to unspecified "evidence" offered by the Joint Intervenors—typically citing Section IV.B of the Motion, which in turn refers to multiple documents, including documents that were not submitted by the Joint Intervenors. As a result, other parties are left to speculate as to which of the many statements in those documents are relied upon by the Joint Intervenors to support a particular contention, and which of those (unidentified) statements are alleged to demonstrate a genuine

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¹²³ Motion at 24 ("One need only compare the NRC's analysis of ammonia impacts on another species—the West Indian manatee—to grasp the inadequacy of the remainder of DSEIS's analysis.").

¹²⁴ See Motion at 13 nn.60 & 62, 15 nn.67 & 70, 38, 42, 43, 44 n.184, 49, 51, and 52. Significantly, the Joint Intervenors refer to multiple proffered and non-proffered documents in their Motion, without citing those documents in support of a specific contention or showing how those documents establish a genuine dispute of material fact with statements in the DSEIS. See e.g., (1) Motion at 26-27, citing a non-proffered Miami-Dade County ("MDC") petition concerning an Everglades Mitigation Bank Phase II Permit modification; (2) Motion at 27, citing three non-proffered "new reports" issued in October and December 2018; and (3) Motion at 28, citing a proffered report by Dr. William Nuttle, Ph.D.

dispute of material fat with the DSEIS. Moreover, only in three places does the Motion cite a specific report or expert declaration filed by the Joint Intervenors—and even in those three places, the Motion fails to cite any specific statements in the referenced documents in support the Joint Intervenors' claims. Accordingly, as discussed with respect to each individual contention below, the proposed contentions must be rejected due to their vagueness and lack of specificity, and their failure to establish a genuine dispute of material fact, as required by 10 C.F.R. § 2.309(f)(1)(i), (ii), (v) and (vi).

Finally, the Motion fails to establish a basis for the Joint Intervenors' claim that "good cause" exists to support these new contentions, many months after the deadline for filing initial contentions, contrary to the requirements of 10 C.F.R. §§ 2.309(c) and 2.309(f)(2). Thus, regardless of when their experts signed their Declarations or reports, the Joint Intervenors have not shown that the information upon which the filing is based was not previously available and is materially different from information previously available, and that the filing has been submitted in a timely fashion based on the availability of the subsequent information. For these reasons, as set forth in greater detail below, the Joint Intervenors' motion to admit these four new proposed contentions should be denied.

¹²⁵ See Contention 6-E, Motion at 44 and n.186 (citing Dr. Fourqurean's report regarding impacts on water quality in Biscayne Bay via the groundwater pathway, with regard to seagrass communities and "narrative water quality standards"); and Contention 9-E, Motion at 52 nn.206 & 207 (*citing* Wexler Declaration at 2).

¹²⁶ 10 C.F.R. § 2.309(c). See discussion supra, at 6.

1. Proposed Contention 6-E

Proposed Contention 6-E states:

The DSEIS Fails to Take the Requisite "Hard Look" at the Impacts on Surface Waters via the Groundwater Pathway. 127

In Contention 6-E, the Joint Intervenors assert that the Staff's DSEIS "evaluation of impacts on nearby surface waters via the groundwater pathway is inadequate," and its "conclusion that these impacts will be SMALL is unsupported by and contrary to the evidence and unlawfully substitutes the existence of permit requirements and [oversight] for a proper NEPA analysis." ¹²⁸ In this regard, the Joint Intervenors claim that "Section 4.5.1.1" of the DSEIS is deficient in relying on the State of Florida's and Miami-Dade County's regulatory oversight; ¹²⁹ that the Staff improperly relied on FPL's analysts' view that "more favorable climatic conditions should help to achieve the desired salinity;" ¹³⁰ and that "recent data" demonstrates that the cooling canal system (CCS) "has degraded nearby surface waters and placed vital seagrass communities in jeopardy from phosphorus loadings attributable to the [CCS]," contrary to the information

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¹²⁷ Motion at 40. The Joint Intervenors assert that this contention addresses "a 'new site-specific issue that has been identified [by the NRC Staff] for Turkey Point,' and therefore the Category 1 prohibition does not apply." *Id.* at 42 (footnote omitted). Nonetheless, inasmuch as the new information concerns a Category 1 issue, they seek a waiver of the Commission's regulations "out of an abundance of caution". See Motion at 2 n.3. The Joint Intervenors' request for waiver is addressed *infra* at 52-58. As stated below, inasmuch as this issue ("water quality impacts on adjacent water bodies (plants with cooling ponds in salt marshes")), is a new issue that was not addressed in the GEIS as either a Category 1 or Category 2 issue (see DSEIS at page XVII), the Staff believes a waiver of Commission regulations is not required for the Joint Intervenors to raise this issue.

¹²⁸ *Id*.

¹²⁹ *Id.* at 40 and 41 nn.170 & 171. Regulatory oversight is exercised by the Florida Department of Environmental Protection (FDEP) (*e.g.*, through its Consent Order) and the Miami-Dade County Department of Regulatory and Economic Resources (DERM) (*e.g.*, through its Consent Agreement with FPL). See *Turkey Point*, LBP-19-3, 89 NRC at (slip op. at 35 n.54).

¹³⁰ *Id.* at 41.

presented in the DSEIS.¹³¹ No particular data or other evidence, however, is cited in support of this assertion, nor do the Joint Intervenors point to any specific deficiency in the Staff's DSEIS.

The Joint Intervenors' assertion that the DSEIS is deficient for relying on the State's and County's regulatory oversight and enforcement ignores the Board's clear holding in LBP-19-3 that "absent evidence to the contrary (which Joint Petitioners fail to provide), we presume that FDEP will enforce, and FPL will comply with, the legally mandated measures in the Consent Order." In this regard, the Board held as follows in rejecting similar claims presented in SACE Contention 2:

Pursuant to binding case law, we accord "substantial weight" to the determination of FDEP and DERM that FPL will comply with its legal obligations. See Pub. Serv. Co. of N.H. (Seabrook Station, Units 1 & 2), CLI-77-8, 5 NRC 503, 527 (1977) (holding that a finding of environmental acceptability made by a competent state authority [pursuant to a thorough hearing] "is properly entitled to substantial weight in the conduct of our own NEPA analysis.") (internal quotation marks omitted); cf. Pac. Gas & Elec. Co. (Diablo Canyon Power Plant, Units 1 & 2), CLI-03-2, 57 NRC 19, 29 (2003) (absent evidence to the contrary, Commission will assume that licensee will comply with license obligations). FPL's past violations in this case, standing alone, do not constitute sufficient information to give rise to a genuine dispute with the assumption that FDEP and DERM will enforce, and FPL will comply with, the legally mandated mitigation measures in the permits. See Fla. Power & Light Co. (Turkey Point Nuclear Generating Units 3 & 4), CLI-16-18, 84 NRC 167, 174-75 n.38 $(2016).^{133}$

Further, notwithstanding the Joint Intervenors' arguments that "recent data," "new reports and expert opinions," and "the evidence" support their assertions in Contention 6-E, 134

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¹³¹ *Id.* at 42, citing DSEIS at 4-23.

¹³² Turkey Point, LBP-19-3, 89 NRC at ____ (slip op. at 54).

¹³³ *Id.*, slip op. at 38 (footnote omitted).

¹³⁴ *Id.* at 41.

the contention fails to identify the documents (or specific statements in any document) that support the contention's assertions. The sole reference to any particular report or "evidence" in this contention appears in the Joint Intervenors' statement that they "offer Dr. Fourqurean's report, which demonstrates impacts on water quality in Biscayne Bay via the groundwater pathway are impacting seagrass communities and that continued operation of the cooling canal system is likely to violate narrative water quality standards." However, the Motion fails to refer to any particular section or statement in Dr. Fourqurean's 22-page report in support of the contention; ather, the reader is required to wonder which statements in his report, or which other documents referred to in either the Motion or Dr. Fourqurean's report, are relied upon in support of this contention; and the reader must guess which of the specific statements contained in those documents will be relied upon by the Joint Intervenors at hearing.

As discussed *supra* at 7, 10 C.F.R. § 2.309(f)(1)(v) requires petitioners (or intervenors) to "provide a concise statement of the alleged facts or expert opinions which support the [intervenor's] position on the issue and on which the petitioner [or intervenor] intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue." The Joint Intervenors have failed to comply with this fundamental requirement. Moreover, by not providing specific factual statements and sources in support of the contention, the Joint Intervenors contravened the well-established principle that it is the petitioner's (intervenor's) responsibility to satisfy the basic contention admissibility requirements. As the Commission has

¹³⁵ *Id.* at 44.

¹³⁶ Expert Report of James Fourqurean, Ph.D. (updated June 24, 2019). Dr. Fourqurean's report appears to be an updated summary of his opinions, previously offered in 2015 in other litigation. *See id.* at 14-15.

¹³⁷ USEC Inc., CLI-06-10, 63 NRC at 457.

held, Boards should not have to search through a petition to "uncover" arguments and support for a contention, and "may not simply 'infer' unarticulated bases of contentions."¹³⁸ For these reasons, Contention 6-E must be rejected.

Moreover, there is no basis for Contention 6-E's assertion that the Staff failed to take NEPA's required "hard look" at the impacts on surface water via the groundwater pathway.

Among other things, the DSEIS describes the structure and physical operation of the CCS; the CCS's connection with Biscayne Aquifer groundwater; ¹³⁹ and the Biscayne Aquifer's connection with surface water in Biscayne Bay and Card Sound. ¹⁴⁰ The DSEIS describes recent studies to evaluate potential effects of CCS operations via the movement of groundwater from the CCS to adjacent surface water bodies and explains that, in response to Orders from the State of Florida and Miami-Dade County, FPL conducts an extensive water quality monitoring program that includes the CCS, Biscayne Bay, Card Sound, marshland, mangrove areas, and canals adjacent to the CCS. ¹⁴¹ The DSEIS explains that the water quality monitoring program seeks to evaluate the effects, if any, of CCS operation on the surrounding environment, and it monitors numerous water quality parameters including nutrients, ammonia, and salinity. ¹⁴²

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¹³⁸ *Id.;* see also Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2 and 3), CLI-91-12, 34 NRC 149, 155 (1991).

¹³⁹ See DSEIS Section 3.1.3 (Cooling and Auxiliary Water Systems).

¹⁴⁰ See DSEIS Section 3.5.1.1 (Surface Water Hydrology). DSEIS Section 4.5.1.1 (Surface Water Resources) contains a summary of how the CCS may indirectly impact the water quality of adjacent surface water bodies via the groundwater pathway, referencing relevant information from Sections 3.1.3 (Cooling and Auxiliary Water Systems) and 3.5.1 (Surface Water Resources). DSEIS Section 3.5.1.3 (Surface Water Discharges) explains that discharges are permitted from Turkey Point into the CCS and the Biscayne Aquifer, pursuant to an NPDES permit issued by the State of Florida. *Id* at 3-39.

¹⁴¹ See DSEIS Section 3.5.1.4 (Adjacent Surface Water Quality and Cooling Canal System Operation). Adjacent marshland, mangrove areas and canal surface water bodies are also described in the DSEIS at pages 3-32 – 3-36.

¹⁴² *Id.* at 3-41.

The DSEIS further describes the ammonia, nutrients and salinity conditions within the CCS; how those conditions have changed over time; applicable State and County regulatory requirements; mitigating actions taken by FPL to reduce any indirect effects on groundwater, ecology and adjacent surface water bodies; and the success or failure of those mitigating actions. It includes descriptions of mitigating alternatives considered, as well as the results of numerical modeling performed to project the success of CCS salinity mitigation efforts. The DSEIS concluded, *inter alia*, as follows:

- Discernable effects from CCS derived temperature, ammonia, nutrients, and salinity on Biscayne Bay or Card Sound water qualities has not been detected.
- Similarly, impacts on surrounding marsh and mangrove areas from CCS
 contributions of ammonia, nutrients, and salinity have not been detected. Impacts on
 adjacent canals from CCS contributions of ammonia, nutrients, and salinity have
 been slight.
- Upward movement of hypersaline water from the Biscayne aquifer and into Biscayne Bay and Card Sound has not been detected in either pore water or shallow monitor well samples collected in the Bay and Sound.¹⁴⁶

In sum, the DSEIS observed that notwithstanding periods of seagrass die-off, releases of nutrients, and algae bloom during operations over a period of approximately 47 years, the impacts on adjacent surface water bodies have been slight (i.e. SMALL).¹⁴⁷ Further, the DSEIS observed that FPL would be required to develop other measures if current mitigation measures

¹⁴³ *Id.* at 3-46 – 3.53. The DSEIS further identifies any observed impacts from ammonia and nutrients and salinity on Biscayne Bay, Card Sound, marshlands, mangrove areas, and adjacent canals, and describes the mitigating actions that have been taken. *Id.*, Section 3.5.1.4 (Adjacent Surface Water Quality and Cooling Canal System Operation).

¹⁴⁴ *Id.* at 3-48 (Study of Water Alternatives to Reduce CCS Salinities).

¹⁴⁵ *Id.* at 3-49 (Application of Numerical Modeling to CCS Salinity Mitigation).

¹⁴⁶ *Id.* at 4-23.

¹⁴⁷ *Id*.

are not successful; and even if the currently planned mitigation measures are not fully successful, they would nonetheless produce beneficial effects on groundwater quality.¹⁴⁸ The Staff's review of FPL's monitoring database and the 2017 Turkey Point Annual Monitoring Report (cited in the Motion)¹⁴⁹ did not find any information that would change this conclusion.¹⁵⁰ Nothing in the Joint Intervenors' Motion demonstrates a genuine dispute of material fact with the Staff's conclusions, in contravention of 10 C.F.R. § 2.309(f)(2)(vi).

Finally, the Joint Intervenors fail to demonstrate good cause for the filing of this contention almost nine months after the August 1, 2018 deadline for filing initial contentions in this proceeding. Dr. Fourqurean's report and his attached Curriculum Vitae¹⁵¹ cite numerous documents, which appear to have been published from 1958 to April 2019;¹⁵² indeed, most of the sources cited in his report appear to have been in existence long before the deadline for filing initial contentions in this proceeding.¹⁵³ Despite the Joint Intervenors' assertions that "good cause" supports their late filing of this contention now,¹⁵⁴ they fail to show that they could not have filed this contention many months ago, as a challenge to the Applicant's ER, rather than waiting for publication of the Staff's DSEIS. Indeed, while the Joint Intervenors note that Dr. Fourqurean's report "updates an earlier submission in this proceeding" and claim that "[h]e

¹⁴⁸ See id. at 4-23, 4-27, 4-29-4-30.

¹⁴⁹ See Motion at 38.

¹⁵⁰ See, e.g., DSEIS at 3-65—3-68.

¹⁵¹ Curriculum Vitae, James W. Fourgurean, Ph.D. (updated June 24, 2019) (Fourgurean CV).

¹⁵² See, e.g., Motion at 1, 13.

¹⁵³ See id., passim; Fourgurean CV, passim.

¹⁵⁴ See generally, Motion at 31-40.

only recently presented these results . . . in April 2019," ¹⁵⁵ they fail to explain why they could not have submitted the previous version of his report in support of this contention at that time, nor do they show that Dr. Fourqurean's conclusions in April 2019 differed to any extent from his earlier conclusions. Moreover, if they had filed this contention as required in August 2018, they could have moved to amend the contention later, upon their discovery of any new information that was not available previously—rather than waiting to file the contention *ab initio* nearly nine months after the deadline. Accordingly, Contention 6-E should be rejected due to the Joint Intervenors' failure to satisfy the good cause requirements of 10 C.F.R. §§ 2.309(c) and 2.309(f)(2).

2. Proposed Contention 7-E

Proposed Contention 7-E states:

The DSEIS Fails to Take the Requisite "Hard Look" at Impacts to Groundwater Quality. 156

In this contention, the Joint Intervenors challenge the Staff's evaluation of groundwater quality impacts in Section 4.5.1.2 of the DSEIS.¹⁵⁷ Raising claims that appear to be substantially similar to their claims in Contention 6-E, the Joint Intervenors assert that the Staff improperly

¹⁵⁵ Motion at 39. Indeed, Dr. Fourqurean had previously filed substantially similar reports and opinions almost nine months ago, in support of other contentions filed by SACE. See SACE Petition (Aug. 1, 2018), Attachment 8 (Expert Report of James Fourqurean, Ph.D. (May 14, 2018)), and Attachment 15 (Declaration of James W. Fourqurean, Ph.D. (July 17, 2018)). Similarly, Drs. Wexler and Nuttle, upon whose opinions the present Motion also relies, previously filed similar expert opinions in support of SACE's contentions. See *id.*, Attachment 4 (Expert Report of William Nuttle (May 14, 2018)); Attachment 9 (Expert Report of E.J. Wexler (undated; data available as of May 14. 2018)); Attachment 11 (Declaration of William K. Nuttle (July 17, 2018)); and Attachment 16 (Declaration of E.J. Wexler (July 25, 2018)).

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¹⁵⁶ Motion at 44. Like Contention 6-E, discussed above, the Joint Intervenors state that this contention challenges "new information" presented in the DSEIS concerning a Category 1 issue, for which they seek a waiver of the Commission's regulations. *Id.* at 44. The Joint Intervenors' request for waiver is addressed *infra* at 52-58.

¹⁵⁷ Motion at 45.

relied upon the State's and County's regulatory requirements and oversight rather than taking a "hard look" at the evidence, and that FPL's freshening efforts are not working. The Joint Intervenors again cite unspecified "evidence" in support of their claims, and they refer the reader to various sections of Contention 6-E. As in the case of Contention 6-E, the Joint Intervenors claim that this contention challenges only "new information" presented in the DSEIS, 160 but they seek a waiver of the Commission's regulations to permit a challenge to the related Category 1 issue. 161

The Staff opposes the admission of this contention for the reasons stated in response to Contention 6-E. Here, as in the case of that contention, the Joint Intervenors have failed to specify the specific documents and statements that provide the basis needed to support the contention. In this regard, while Contention 6-E had referred to one particular document (*i.e.*, Dr. Fourqurean's report), Contention 7-E makes no reference whatsoever to any particular document or expert opinion statement. In addition, like Contention 6-E, this contention fails to explain why the Staff's DSEIS may not reasonably rely upon regulatory oversight by the State of Florida and Miami-Dade County.

Moreover, there is no basis for Contention 7-E's assertion that the Staff failed to take NEPA's required "hard look" at the impacts to groundwater quality. For example, in Section 4.5.1.2 of the DSEIS, the Staff evaluated the significance of new information and potential environmental impacts within the context of the Category 1 issue, "groundwater quality

¹⁵⁸ *Id.* at 44-45.

¹⁵⁹ *Id.* at 45, 46 and 47.

¹⁶⁰ *Id.* at 44.

¹⁶¹ *Id.* at 1-2 and 46.

degradation (plants with cooling ponds in salt marshes)." As described in Section 4.5.1.2, the Staff considered new information that shows that CCS operations have produced a hypersaline plume of groundwater beneath the CCS, which has measurably degraded groundwater quality beyond the CCS and Turkey Point's site boundaries. The Staff further found that CCS operation has contributed to the migration of the saltwater interface across portions of southeastern Miami-Dade County, to the west and north of the Turkey Point site, as detailed in Section 3.5.2.2 of the DSEIS. Based on its review of all new information available at the time the DSEIS was prepared, the Staff concluded that the impacts of current Turkey Point operations on groundwater quality are MODERATE—but that the potential impacts of the proposed action of subsequent license renewal (to commence in 2032 and 2033, for Units 3 and 4, respectively) were likely to be SMALL, in light of continuing regulatory oversight and mitigation measures mandated by State and County regulatory authorities.

Thus, Section 3.5.2.2 of the DSEIS details the existing environmental regulatory mechanisms, including permits and agreements, that govern Turkey Point operations, including requirements imposed by Miami-Dade County DERM and the Florida DEP to remedy the hypersaline plume emanating from the CCS. As described in Section 3.5.2.2, FPL is required to stop and retract the hypersaline plume within 10 years, to mitigate CCS impacts on regional groundwater quality. Further, in accordance with permits issued by the State of Florida, FPL constructed and has begun operation of a CCS freshening well system (November 2016) and

¹⁶² DSEIS at 4-25.

¹⁶³ *Id.* at 3-57—3-79.

¹⁶⁴ See e.g., id. at 4-25—4-28.

¹⁶⁵ *Id.* at 3-69.

recovery well system (May 2018) to achieve the objectives of its agreements with the County and State. 166

As summarized in DSEIS Section 4.5.1.2, the Staff reviewed the information submitted by FPL to the State concerning those two systems, including groundwater modeling analyses, which predicted that the recovery well system would succeed in retracting the hypersaline plume within 10 years of startup (*i.e.*, by 2028). The Staff acknowledged, however, that groundwater models are only approximations of complex, natural systems, and are reliant on critical assumptions about future environmental conditions; thus, the DSEIS acknowledged the existence of uncertainty in the model's predictions.¹⁶⁷ Regardless of any such uncertainties, however, the Staff observed that FPL is required to monitor and report to the State and County on the effectiveness of its well systems, and FPL's failure to comply or to meet the remediation objectives would require that FPL develop and submit alternative mitigation plans to the responsible regulatory authorities.¹⁶⁸

The Joint Intervenors have provided no basis to support the assertion that the Staff's DSEIS failed to take a "hard look" at all available information concerning this issue, or that its conclusions concerning current and future groundwater quality impacts were unreasonable, particularly in light of the State's and County's continuing responsibility and authority to enforce FPL's compliance with State and County permits, agreements, and Orders to mitigate the groundwater quality impacts of CCS operation.

¹⁶⁶ *Id.* at 3-70.

¹⁶⁷*Id.* at 4-27.

¹⁶⁸ *Id*.

Finally, like Contention 6-E, Contention 7-E fails to demonstrate good cause for its late filing, many months after the deadline for filing initial contentions, contrary to the requirements of 10 C.F.R. §§ 2.309(c) and 2.309(f)(2). For all these reasons, as more fully stated in response to Contention 6-E, Contention 7-E should be rejected.

3. Proposed Contention 8-E

Proposed Contention 8-E states:

The DSEIS Fails to Take the Requisite "Hard Look" at Cumulative Impacts on Water Resources. 169

In this contention, the Joint Intervenors assert that the Staff's DSEIS is deficient in its evaluation of cumulative impacts on "water resources," 170 citing the Staff's conclusions in DSEIS Section 4.16.2.1. 171 In particular, they take issue with the Staff's determinations that "the Applicant's recovery well system will be 'successful' in retracting the hypersaline plume before the end of the current license period and 'result in beneficial impacts on groundwater quality within the Biscayne aquifer ... 1712 Similarly, they contest the Staff's expectation that the Applicant's "freshening system," together with "proper operation and maintenance" of the CCS will result in "no substantial contribution to cumulative impacts" on groundwater quality or associated impacts on surface water quality during the SLR period. 173

As in the case of Contentions 6-E and 7-E, this contention claims in general terms that the DSEIS is not supported by "the evidence," is "contrary to the evidence including evidence

¹⁷¹ *Id.* at 48 and 49.

¹⁶⁹ Motion at 47.

¹⁷⁰ *Id*.

¹⁷² *Id.* at 48, *citing* DSEIS at 4-116 – 117.

¹⁷³ *Id*.

provided by Intervenors," unlawfully relies on "the existence of state and county requirements and [oversight]" instead of conducting "a proper NEPA analysis." In identifying the basis for this contention, they incorporate by reference the statements made in support of Contentions 6-E and 7-E¹⁷⁵ – although they state that this cumulative impacts contention raises only a site-specific Category 2 issue, ¹⁷⁶ unlike Contentions 6-E and 7-E, for which they seek a waiver of the Commission's regulations.

The Staff opposes the admission of this contention for the reasons stated in response to Contentions 6-E and 7-E, *supra*. Here, as in the case of those contentions, the Joint Intervenors have failed to specify the specific documents and statements that provide the basis needed to support the contention. In this regard, while Contention 6-E refers to one document in particular (*i.e.*, Dr. Fourqurean's report), Contention 8-E makes no reference to any particular document or expert opinion statement. Like Contentions 6-E and 7-E, this contention fails to explain why the Staff's DSEIS may not reasonably rely upon regulatory oversight by the State of Florida and Miami-Dade County.

Moreover, there is no basis for Contention 8-E's assertion that the Staff failed to take NEPA's required "hard look" at the proposed action's cumulative impacts on water resources. The Joint intervenors point to a single sentence in DSEIS Section 4.16.2.1, which stated, "[a]s stated in Section 4.5.1.2 of this SEIS, current modeling projections indicate that FPL's recovery well system will be successful in retracting the hypersaline plume back to within the boundaries of the CCS within 10 years of startup (i.e., by about 2028) while also retracting the saltwater

¹⁷⁴ *Id.* at 48.

¹⁷⁵ *Id*.

¹⁷⁶ *Id.* at 48. The Joint Intervenors did not seek a waiver of Commission regulations in filing this contention.

interface back to the east from its current location."¹⁷⁷ The Joint Intervenors' selective citation of that sentence, however, does not fairly characterize the Staff's evaluation, which was far more deliberative and nuanced than the Joint Intervenors suggest.¹⁷⁸ In this regard, the DSEIS further stated as follows:

In its environmental report, FPL stated that groundwater modeling of the recovery well system operation indicates that the westward migration of the hypersaline plume will be stopped in 3 years of operation, with retraction of the hypersaline plume north and west of the CCS beginning in 5 years. FPL further projects that system operation will achieve retraction of the plume back to the FPL site boundary within 10 years, as required by the 2016 FDEP Consent Order with FDEP (FPL 2018f). FPL is required to conduct periodic continuous surface electromagnetic mapping surveys to delineate the extent of the hypersaline plume in order to measure the success of recovery and remediation efforts and report the results to FDEP. After 5 years of system operation, FPL must provide a report to FDEP that evaluates the effectiveness of the recovery well system in retracting the hypersaline plume to the L-31E Canal within 10 years. If FPL's report shows that the remediation efforts will not retract the hypersaline plume to the L-31E Canal within 10 years, FPL must develop and submit an DEP for its approval (FDEP 2016e).179

Thus, as discussed in detail in DSEIS Sections 3.5.2.2, 4.5.1.2, and 4.16.2.1, available groundwater modeling information indicated that FPL's recovery well system will be successful in retracting the hypersaline plume back to the boundaries of the CCS within 10 years of startup (i.e., 2028)¹⁸⁰ but, as stated *supra* at 41, however, the Staff recognized that there is considerable uncertainty in the groundwater modeling that was performed and in the associated assumptions that were used; further, the Staff recognized that FPL may continue to operate the

¹⁷⁷ Motion at 48, *citing* DSEIS at 4-116.

¹⁷⁸ See id. at 48.

¹⁷⁹ DSEIS at 3-70 – 3-71 (emphasis added).

¹⁸⁰ See DSEIS at 4-27 and 4-116.

freshening well system "as long as necessary to maintain compliance with state and county requirements.¹⁸¹ Further, the Staff recognized that FPL is required to report on the success of its mitigation measures and to develop other measures, if necessary, to achieve the stated goals; and that the State and County have the authority to protect groundwater resources, including the authority to require remediation of the hypersaline plume. In sum, the Joint intervenors have provided no reason to believe that the Staff failed to take a hard look at the available information, in evaluating cumulative impacts on water resources in the DSEIS.

Finally, like Contention 6-E, this contention fails to demonstrate good cause for its filing many months after the deadline for filing initial contentions. Whatever basis may exist to support the filing of this contention, substantially similar information was available to the Joint Intervenors at the time initial contentions challenging the Applicant's ER were due to be filed. The Joint Intervenors have not demonstrated good cause why this contention could not have been filed sooner, contrary to the requirements of 10 C.F.R. §§ 2.309(c) and (f)(2).

For these reasons, as more fully stated above in response to Contentions 6-E and 7-E, Contention 8-E should be rejected.

4. Proposed Contention 9-E

Proposed Contention 9-E states:

The DSEIS Fails to Take the Requisite "Hard Look" at Impacts to Groundwater Use Conflicts. 182

In this contention, as in Contentions 6-E, 7-E, and 8-E, the Joint Intervenors claim that the Staff's DSEIS conclusions regarding impacts to the Biscayne aquifer and Upper Floridan aquifer are unsupported, contrary to Intervenors' evidence, and improperly rely on state and county

¹⁸¹ DSEIS at 4-117.

¹⁸² Motion at 50.

oversight.¹⁸³ Contention 9-E relies, in part, on the Joint Intervenors' assertions in Contention 6-E, and it contests the Staff's conclusions in Section 4.5.1.2 of the DSEIS that groundwater use conflicts will be SMALL for the Biscayne aquifer and MODERATE for the Floridan aquifer.¹⁸⁴ The contention incorporates by reference arguments made in support of Contentions 6-E and 7-E.¹⁸⁵

In contrast to Contentions 6-E, 7-E, and 8-E, Contention 9-E cites a specific supporting document (the Declaration of Dr. E.J. Wexler). ¹⁸⁶ In this regard, Contention 9-E recites certain statements in the DSEIS regarding "groundwater use conflicts," and then states as follows:

Intervenors contest this conclusion with evidence demonstrating that current effort to mitigate the hypersaline plume and reduce salinity in the cooling canal system to 34 PSU are not working and are unlikely to work in the future. Retraction of the hypersaline plume is not likely to occur without the addition of more wells and increased pumped volumes. Existing analyses referenced in the DSEIS are therefore inadequate to support the Staff's conclusions on groundwater use conflicts because the rate of groundwater withdrawal necessary to hit salinity targets and retract the hypersaline plume is substantially higher than evaluated in the DSEIS. Thus, Intervenors have provided sufficient information in support of this contention to establish a genuine dispute exists on a material issue of fact or law.

²⁰⁵ See [Motion] Sections IV.B, above.

²⁰⁶ Wexler Decl. at 2.

²⁰⁷ See Wexler Decl. at 2.

¹⁸³ *Id.*

¹⁸⁴ *Id.* at 51

¹⁸⁵ *Id.* Notwithstanding their citation of Contentions 6-E and 7-E (for which they requested a waiver of Commission regulations), the Joint Intervenors state that the issue raised in this contention is a site-specific Category 2 issue. *Id.* at 51. The Joint Intervenors did not seek a waiver of the regulations in filing this contention.

¹⁸⁶ Declaration of E.J. Wexler in Support of the Friends of the Earth, Natural Resources Defense Council, & Miami Waterkeeper (Wexler Declaration) (revised June 28, 2019).

Notwithstanding the fact that the Joint Intervenors point to a specific document (Dr. Wexler's Declaration), to support the admission of Contention 9-E, they fail to satisfy the contention admissibility requirements and late-filing requirements in 10 C.F.R. § 2.309 for two fundamental reasons: (1) They fail to demonstrate any genuine dispute of material fact with the DSEIS, and (2) they fail to demonstrate good cause for the late filing of this contention.

In this regard, a review of the Executive Summary of Dr. Wexler's Declaration, specifically cited in this contention (as well as a review of other portions of his Declaration), shows that he does not appear to have any real disagreement with the facts stated in the Staff's DSEIS; rather, he challenges the reliability of the analytical model relied upon by the Applicant and Staff, and he differs in his <u>prediction</u> as to whether the Applicant's present freshening program will ultimately be successful. Thus, like the DSEIS, Dr. Wexler observes that evaporation has increased the salinity of water in the CCS to as much as 90 practical salinity units (PSU); that hypersaline water has seeped out from the CCS into the underlying Biscayne aquifer and has migrated westward from the CCS in the aquifer. Like the DSEIS, Dr. Wexler observes that FPL is required by the 2016 FDEP Consent Order to reduce the CCS water salinity to an annual average of 34 PSU, and to halt and retract the hypersaline plume to the L-31E Canal within 10 years; and he observes that FPL has installed a recovery well system for the purpose of retracting the plume.

¹⁸⁷ Wexler Declaration at 2.

¹⁸⁸ *Id*.

¹⁸⁹ *Id.*

¹⁹⁰ *Id.*

Dr. Wexler asserts that the DSEIS relies upon a 2016 analysis by Tetra Tech in support of its conclusion that "the recovery system will achieve this objective," and that Tetra Tech's "analyses assumed that the CCS would be maintained at 34 PSU for the duration of the recovery period;" he challenges the Staff's prediction that the Applicant will be able to achieve its objectives prior to the start of the SLR period of extended operation [i.e., 13 years from now], claiming that "[n]ew water quality information shows that FPL was unable to achieve freshening (i.e., reducing average salinity) within the CCS despite the addition of an average of 12.8 million gallons per day (MGD) of brackish water from the Upper Floridan Aquifer to the CCS from November 2016 to May 2017 "192 Finally, Dr. Wexler states:

My analysis using the Tetra Tech model shows that without freshening the CCS, the recovery system will not be able to meet the target of retracting the hypersaline water. My analysis also points out other limitations in the Tetra Tech analyses and the reliability of the model predictions. We also present results from a new, independently developed model that examines processes within the CCS and indicates that freshening of the CCS will be difficult to achieve with the volumes of water currently being used and the locations selected for adding the water.¹⁹³

Dr. Wexler's assertions do not establish a genuine dispute of material fact with the Staff's DSEIS. First, Dr. Wexler does not appear to contest the facts stated in the DSEIS. Indeed, while he claims that "new water quality information" supports his views, that same "new" information (two FPL reports issued in 2017) was considered by the Staff in its DSEIS.¹⁹⁴

¹⁹¹ Wexler Declaration at 2 (emphasis added), *citing* "Tetra Tech 2016a" ("A Groundwater Flow and Salt Transport Model of the Biscayne Aquifer: June 2016"); see DSEIS at 4-27, 4-29 and 6-31.

¹⁹² Wexler Declaration at 2.

¹⁹³ *Id*.

¹⁹⁴ Compare Wexler Declaration at 2 (*citing* "FPL 2017a" and "FPL 2017b") *with, e.g.,* DSEIS at 3-41, 3-42, 3-45, 3-47, 3-49, and 6-15.

Further, the 2016 and 2018 Tetra Tech models cited in his Declaration, including the "recent groundwater modeling analyses," cited by Dr. Wexler, were considered in the Staff's DSEIS.¹⁹⁵

The only "new" information in Dr. Wexler's Declaration appears to be his discussion of a "new, independently developed model," which "indicates that freshening of the CCS will be difficult to achieve with the volumes of water currently being used and the locations selected for adding water." 196 However, even if the Board were to rely upon Dr. Wexler's analytical modeling and accept his claims that <u>current</u> mitigation measures will not succeed, that would not establish a genuine dispute of material fact with the DSEIS. Dr. Wexler ignores the fundamental fact—relied upon by the Staff's DSEIS and acknowledged by the Board in LBP-19-3—that the State of Florida and Miami-Dade County are actively engaged in regulating FPL's water quality impacts and have imposed extensive requirements on FPL to freshen the CCS waters and retract the hypersaline plume, and thereby redress the CCS's adverse water quality impacts.¹⁹⁷ Neither Dr. Wexler not the Joint Intervenors have provided any reason to believe that the State and would refrain from modifying current requirements affecting "the volumes of water currently being used and the locations selected for adding water," if necessary, to accomplish the desired goals prior to the start of the SLR period of extended operation some 13 years hence, in 2032 and 2033, as the Staff concluded in the DSEIS. 198 In sum, Contention 9-E and Dr. Wexler's supporting Declaration fail to demonstrate a genuine dispute of material fact with the Staff's DSEIS.

¹⁹⁵ Compare Wexler Declaration at 2 and 7 (References) with DSEIS at 3-73, 4-26 and 6-31.

¹⁹⁶ Wexler Declaration at 2 (emphasis added).

¹⁹⁷ LBP-19-3, 89 NRC at ___, slip op. at 38; DSEIS at 4-27.

¹⁹⁸ Compare Wexler Declaration at 2 with DSEIS at 4-27.

Moreover, there is no basis for Contention 9-E's assertion that the Staff failed to take NEPA's required "hard look" at the proposed action's "impacts to groundwater use conflicts." In this regard, DSEIS Section 4.5.1.2 evaluates the Category 2 issue, "Groundwater Use Conflicts (Plants That Withdraw More Than 100 Gallons per Minute)," including consideration of new information regarding current Turkey Point operations. As part of its analysis, the Staff considered new information detailed in DSEIS Sections 3.5.2.1 – 3.5.2.3, with respect to groundwater hydrology; groundwater quality degradation and the regulatory mechanisms and assumptions governing FPL's ongoing remediation activities (discussed above); as well as information regarding FPL's historic and projected future groundwater withdrawals from the Biscayne and Floridan aquifer systems.

As the Staff observed, FPL began withdrawing water from the Floridan aquifer system in 2007, and did not withdraw any groundwater from the Biscayne Aquifer until 2015. ¹⁹⁹ To support CCS freshening activities, groundwater has been intermittently withdrawn from the Biscayne Aquifer (a) since 2015, on an emergency basis, through 3 onsite marine wells to address salinity spikes in the CCS, ²⁰⁰ and (b) more recently, from 10 wells associated with the full-scale recovery well system, which operates continuously to recover hypersaline groundwater. ²⁰¹ With respect to potential conflicts involving the Biscayne aquifer, the NRC Staff's analysis focused on the operation of FPL's 10 recovery wells, which commenced full operation in May 2018, along with consideration of the intermittent operation of the 3 marine wells. With respect to the Upper Floridan Aquifer, the Staff's analysis in Section 4.5.1.2

¹⁹⁹ See DSEIS Section 3.5.2.3 (Turkey Point Site Water Supply Systems).

²⁰⁰ DSEIS at 3-81.

²⁰¹ *Id.* at 3-70.

considered FPL's three production wells (operational since 2007) that supply process makeup water principally for Turkey Point Units 3,4, and 5 as well as the site's five freshening wells, installed in 2016.²⁰² Based on its review of all information available at the time the DSEIS was prepared, the Staff concluded that groundwater use conflicts would be SMALL for the Biscayne Aquifer and MODERATE for the Upper Floridan aquifer, as a result of subsequent license renewal.

Finally, the Joint Intervenors fail to demonstrate good cause for not filing this contention sooner. Contention 9-E relies heavily upon the Declaration of Dr. E.J. Wexler. Dr. Wexler, however, filed a substantially similar declaration in this proceeding many months ago, in support of SACE Contention 2.²⁰³ In addition, as explained in a previous version of Dr. Wexler's June 28 Declaration,²⁰⁴ Dr. Wexler has been substantially involved as an expert witness in other litigation challenging FPL's discharges of hypersaline water and nutrients from Turkey Point Units 3 and 4 into the Biscayne Aquifer and Biscayne Bay, in which he submitted "an Expert Report ... regarding the adequacy of FPL's groundwater models to predict the behavior of the

²⁰² Contrary to the Joint Intervenors' assertion that the DSEIS relied upon an "unsubstantiated" statement that FPL's current groundwater withdrawal rates will not change, the DSEIS cited statements in the ER that FPL does not expect any significant changes in its water well systems over the license renewal term, and it has no plans to use surface water sources for maintenance or operation. See DSEIS § 4.5.1.2. Further, in Section 4.5.1.2, the Staff evaluated a groundwater drawdown analysis, which assumed that FPL's freshening wells operate at maximum permitted rates, combined with other existing permitted withdrawals (using permitted rates) in the region, based on the best available information. See id. at 4-31. The Joint Intervenors have pointed to no information indicating that withdrawal rates will be permitted to rise in the future. Moreover, while FPL's groundwater withdrawals could increase in the future, any increases would require approval by the responsible State agencies.

²⁰³ As noted *supra* at 38 n.155, Dr. Wexler had previously filed a similar report and expert opinion in support of SACE's contentions. See SACE Petition, Attachment 9 (Expert Report of E.J. Wexler (undated; data available as of May 14. 2018)), and Attachment 16 (Declaration of E.J. Wexler (July 25, 2018)).

²⁰⁴ Dr. Wexler's Declaration of June 28, 2019, revised a previous Declaration dated June 24, 2019, in which he explained that he was "offering an updated version of my June 24, 2019 report in this matter to remove information that may be subject to copyright." *Id.* at 1. As noted below, other changes were made to his Declaration apart from the removal of copyright information. *See* n.205, *infra*.

body of hypersaline water introduced into the Biscayne Aquifer by the Turkey Point cooling canal system."²⁰⁵ Inasmuch as the Applicant's ER contained information that was substantially similar to information in the DSEIS regarding the hypersaline plume, regulatory requirements for FPL to freshen CCS water salinity and to retract the hypersaline plume, no reason appears why the Joint Intervenors could not have obtained Dr. Wexler's assistance in filing a similar contention many months ago—even prior to the deadline for filing initial contentions.

Accordingly, Contention 9-E should be rejected for failing to demonstrate good cause for its late filing, contrary to the requirements of 10 C.F.R. § 2.309(c) and (f)(2).

III. The Joint Intervenors' Petition for Waiver Should Be Denied.

It is a fundamental principle that NRC regulations are not subject to attack in an adjudicatory proceeding; the application of a specific regulation may be waived or an exception be made for a particular proceeding, however, upon the Commission's grant of a petition for

Wexler Declaration (June 24, 2019), at 1, ¶ 3. These statements were omitted in Dr. Wexler's instant Declaration.

²⁰⁵ In his previous Declaration, Dr. Wexler described his prior involvement with these issues, as follows:

^{3.} Previously, I was retained by Southern Alliance for Clean Energy, Tropic Audubon Society, and Friends of the Everglades as an expert witness in Southern Alliance for Clean Energy, et al. v. Florida Power & Light Company, No. 1:16-cv-23017-DPG in the United States District Court for the Southern District of Florida, Miami Division ("CWA Lawsuit"). In that lawsuit, the plaintiffs allege that Florida Power & Light Co. ("FPL") has violated and is violating the federal Clean Water Act by discharging pollutants from the Turkey Point Units 3 and 4 nuclear reactors, including nutrients, hypersaline water and other chemical and radioactive contaminants, into waters of the United States in the Biscayne Bay and into the Biscayne Aquifer in violation of FPL's CWA permit. On May 14, 2018, I submitted an Expert Report in the CWA Lawsuit regarding the adequacy of FPL's groundwater models to predict the behavior of the body of hypersaline water introduced into the Biscayne Aquifer by the Turkey Point cooling canal system ("CCS").

waiver.²⁰⁶ The sole ground for a petition of waiver is that "special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule or regulation (or a provision of it) would not serve the purposes for which the rule or regulation was adopted."²⁰⁷ The petition must be accompanied by an affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding as to which the application of the rule or regulation (or provision of it) would not serve the purposes for which the rule or regulation was adopted. The affidavit "must state with particularity the special circumstances alleged to justify the waiver or exception requested."²⁰⁸ Other participants may file a response by counteraffidavit or otherwise.²⁰⁹

If the presiding officer determines that the petitioning participant has not made "a *prima* facie showing" that the application of the specific Commission rule or regulation (or provision thereof) to a particular aspect or aspects of the subject matter of the proceeding would not serve the purposes for which the rule or regulation was adopted and that application of the rule or regulation should be waived or an exception granted, the presiding officer may not further consider the matter.²¹⁰ If, however, the presiding officer determines that the required *prima* facie showing has been made, the presiding officer shall, before ruling on the petition, certify the matter directly to the Commission for a determination in the matter of whether the application of

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²⁰⁶ 10 C.F.R. § 2.335(a).

²⁰⁷ 10 C.F.R. § 2.335(b).

²⁰⁸ *Id*.

²⁰⁹ *Id.*

²¹⁰ 10 C.F.R. § 2.335(c).

the rule or regulation or provision thereof to a particular aspect or aspects of the subject matter of the proceeding should be waived or an exception made.²¹¹

In *Millstone*, the Commission established a four-factor test for waiver applications:

- (i) the rule's strict application 'would not serve the purposes for which it was adopted;'
- (ii) the movant has alleged 'special circumstances' that were 'not considered either explicitly or by necessary implication, in the rulemaking proceeding leading to the rule sought to be waived;'
- (iii) those circumstances are 'unique' to the facility rather than 'common to a large class of facilities;' and
- (iv) a waiver of the regulation is necessary to reach a significant safety problem.²¹²

Intervenors must satisfy all four factors to obtain a waiver.²¹³ The fourth *Millstone* factor may also apply to a significant environmental issue.²¹⁴ The waiver standard is "stringent by design, and "[t]he waiver petitioner faces a substantial burden, but not an impossible one."²¹⁵ The purpose of rulemaking is to "carv[e] out issues from adjudication for generic resolution;" therefore, Intervenors must show something "extraordinary about the subject matter of the proceeding" such that the rule should not apply.²¹⁶

²¹² Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 NRC 551, 559–60 (2005).

²¹⁴ Exelon Generation Co., LLC (Limerick Generating Station, Units 1 and 2), CLI-13-07, WL 5872241 at 4 (2013).

²¹¹ 10 C.F.R. § 2.335(d).

²¹³ Id. at 560.

²¹⁵ *Id.* at 3–4.

²¹⁶ *Id.* at 3 (internal quotation marks omitted).

Here, the Joint Intervenors seek a waiver of the Commission's regulations in 10 C.F.R. §§ 51.53(c)(3) and 51.71(d), and 10 C.F.R. Part 51, Appendix B with respect to two issues analyzed in the DSEIS: groundwater quality degradation (plants with cooling ponds in salt marshes) and water quality impacts on adjacent water bodies (plants with cooling ponds in salt marshes).²¹⁷ The first issue is categorized in the Commission's regulations in Appendix B as a "Category 1" issue. The second issue is neither categorized in the Commission's regulations nor analyzed in the GEIS. Rather, it is a new, site-specific issue that the NRC staff analyzed for the first time in the DSEIS.²¹⁸ The Joint Intervenors request a waiver only for the purpose of allowing litigation of new contentions 6-E and 7-E.²¹⁹

The Joint Intervenors assert that a waiver is not required to litigate the issue of water quality impacts on adjacent water bodies (plants with cooling ponds in salt marshes).²²⁰ The NRC Staff agrees. The NRC Staff analyzed this site-specific issue for the first time in the DSEIS. This issue was not analyzed in the GEIS. As such, no Commission regulation codifies the NRC Staff's environmental determinations with respect to this issue, and no waiver of any Commission rule is required to litigate it. Regardless of the need for a waiver to litigate this issue, contentions 6-E and 7-E are inadmissible for the reasons explained above.

The Joint Intervenors also argue that a waiver petition is not required to litigate the issue of groundwater quality degradation (plants with cooling ponds in salt marshes), because "[n]o NRC regulation prohibits Intervenors from challenging new information identified and evaluated

²¹⁷ Waiver Petition at [unnumbered] 1.

²¹⁸ DSEIS at 4-21 to 4-23.

²¹⁹ Waiver Petitioner at [unnumbered] 1.

²²⁰ *Id.* at 6.

by the NRC Staff in a DSEIS with respect to a Category 1 issue."²²¹ This is not true. The Commission has addressed this issue squarely on several occasions. For example, in *Vermont Yankee/Pilgrim*, the Commission held that a waiver is required to litigate purportedly new and significant information with respect to a Category 1 issue.²²² The Commission explained that "[f]undamentally, any contention on a 'Category 1' issue amounts to a challenge to our regulation that bars challenges to generic environmental findings," and "adjudicating Category 1 issues site by site based on merely a claim of 'new and significant information,' would defeat the purpose of resolving generic issues in a GEIS."²²³ Similarly, in its more recent *Limerick* decision, the Commission held that intervenors must obtain a waiver to litigate the significance of new information, in a contention challenging a previously completed severe accident mitigation alternatives (SAMA) analysis—which is "the functional equivalent of a Category 1 issue."²²⁴

In its DSEIS concerning the Turkey Point SLR application, the Staff analyzed the significance of new information concerning groundwater quality degradation (plants with cooling ponds in salt marshes) and concluded that the information was not significant such that it would change the impact determination in the GEIS (SMALL).²²⁵ To challenge the Staff's analysis of new and potentially significant information on this Category 1 issue, or to rely upon other new

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²²¹ *Id.*

²²² Entergy Nuclear Vt. Yankee, LLC and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13 (2007) (Vermont Yankee/Pilgrim).

²²³ *Id.* at 20–21.

²²⁴ Exelon Generation Co., LLC (Limerick Generating Station, Units 1 and 2), CLI-12-19, 76 NRC 377, 386-87 (2012).

²²⁵ DSEIS at 4-24 to 4-28.

information concerning this issue, it is clear that the Joint Intervenors must obtain a waiver of the Commission's rules concerning its generic environmental finding.²²⁶

Here, the Joint Intervenors have failed to make a *prima facie* showing that the Commission's regulations in 10 C.F.R. §§ 51.53(c)(3) and 51.71(d), and 10 C.F.R. Part 51, Appendix B, Table B-1, should be waived with respect to the Category 1 issue, groundwater quality degradation (plants with cooling ponds in salt marshes). The Joint Intervenors fail to satisfy the first *Millstone* factor that strict application of the regulation would not serve the purposes for which it was adopted. The purpose of the rule is to codify the generic environmental impact findings from the GEIS where the impacts were determined to be the same or similar for all plants to avoid repetitive NEPA reviews.²²⁷ Rather than explain why application of the rule in this proceeding would not serve this purpose, the Joint Intervenors argue that application of the rule would "unjustifiably prevent Intervenors from challenging the sufficiency of the DSEIS's analysis of new information."²²⁸ The Joint Intervenors also make the general statement that the DSEIS is the first analysis to address "this new information" in a subsequent license renewal proceeding and that preventing challenges to new information regarding a Category 1 issue would not serve the purpose of the rule.²²⁹ Rather than address the purpose of the rule, these arguments effectively challenge Commission case law on the

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²²⁶ Indeed, the Board has previously concluded that "Joint Petitioners may not circumvent the regulatory bar against challenging a Category 1 issue by alleging the existence of new *and significant* information." *Turkey Point*, LBP-19-3, slip op. at 53 n.74 (emphasis added).

²²⁷ Final Rule, Revisions to Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 78 Fed. Reg. 37281, 37283 (June 20, 2013); Final Rule, Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 61 Fed. Reg. 28467 (June 5, 1996).

²²⁸ Waiver Request at [unnumbered] 7.

²²⁹ *Id.* at [unnumbered] 7–8.

need to obtain a waiver to litigate Category 1 issues based on purportedly new and significant information. Therefore, the Joint Intervenors have failed to satisfy the first *Millstone* factor and thus have failed to make a *prima facie* showing that the Commission's regulations should be waived. Accordingly, the Board should not further consider their challenges concerning the Category 1 issue, groundwater quality degradation (plants with cooling ponds in salt marshes).

CONCLUSION

For the foregoing reasons, the Board should deny the Joint Intervenors' Motion and Waiver Petition and should reject the proposed new and amended contentions.

Respectfully submitted,

/Signed (electronically) by/

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Dated at Rockville, Maryland this 19th day of July 2019

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

FLORIDA POWER & LIGHT COMPANY

(Turkey Point Nuclear Generating Units 3 and 4)

Docket Nos. 50-250-SLR 50-251-SLR

CERTIFICATE OF SERVICE

Pursuant to 10 C.F.R. § 2.305, I hereby certify that copies of the foregoing "NRC STAFF'S ANSWER TO JOINT INTERVENORS' AMENDED MOTION TO MIGRATE OR AMEND CONTENTIONS 1-E AND 5-E AND TO ADMIT FOUR NEW CONTENTIONS, AND (2) PETITION FOR WAIVER," dated July 19, 2019, have been filed through the Electronic Information Exchange, the NRC's E-Filing System, in the above-captioned proceeding, this 19th day of July 2019.

Copies of the foregoing have also been sent by e-mail to Richard E. Ayres, Esq. (for Friends of the Earth, Inc.) at ayresr@ayreslawgroup.com, this 19th day of July 2019.

/Signed (electronically) by/

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Dated at Rockville, Maryland this 19th day of July 2019