UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	Docket Nos. 52-040-COL
Florida Power & Light Company	)	52-041-COL
	)	
Turkey Point Units 6 and 7	)	ASLBP No. 10-903-02-COL
(Combined License Application)	)	

FLORIDA POWER & LIGHT COMPANY'S ANSWER OPPOSING CITIZENS ALLIED FOR SAFE ENERGY'S PETITION TO INTERVENE AND REQUEST FOR HEARING REGARDING THE FINAL EIS FOR TURKEY POINT 6 & 7

I. INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(i)(1), Applicant Florida Power & Light Company ("FPL") hereby answers and opposes the Petition to Intervene and Request for Hearing in Opposition to the Final Report EIS Granting COL's [*sic*] for Turkey Point Units 6 and 7 ("Petition") filed on November 28, 2016 by Citizens Allied for Safe Energy ("CASE") in the combined license ("COL") proceeding for the proposed Turkey Point Units 6 and 7. The Petition proffers four contentions for consideration by the Atomic Safety and Licensing Board (the "Board"), which are purportedly prompted by the NRC Staff's publication of the Final Environmental Impact Statement for Combined Licenses for Turkey Point Units 6 and 7, NUREG-2176 (Oct. 2016) (the "FEIS").

As set forth below, CASE has failed to demonstrate that it has standing to participate in this proceeding. In addition, the Petition makes no attempt to show that any of the proposed Contentions are based on new information in the FEIS, and indeed, they are not. CASE's

Contentions all should be rejected as untimely, because they are based on information that was previously available in the February 2015 Draft Environmental Impact Statement ("DEIS"), if not earlier. Furthermore, the Contentions are replete with nothing more than bare assertions that are wholly without factual or expert support, and fail to raise genuine material disputes. CASE's Contentions make claims that are simply incorrect and that mischaracterize or ignore relevant portions of the FEIS that address or contradict CASE's assertions. In addition, the Contentions are generalized statements that lack the required specificity, and raise issues that are outside the scope of the proceeding. Consequently, the proposed contentions satisfy neither the Commission's timeliness standards under 10 C.F.R. § 2.309(c)(1), nor its admissibility standards under 10 C.F.R. § 2.309(f)(1), and should therefore be rejected.

II. PROCEDURAL BACKGROUND

FPL submitted an application to the NRC for a COL for Turkey Point Units 6 and 7 ("Application") on June 30, 2009. The Application included an Environmental Report ("ER"), as required under the NRC's regulations implementing the National Environmental Policy Act ("NEPA"). FPL has submitted several revisions to the Application since the initial filing. The current version of the ER is Revision 7. All of the revisions are available on the NRC's website.[1]

The Board granted CASE's initial intervention in this proceeding, ruling that CASE proffered two contentions that were admissible, in part, concerning the environmental impacts and safe management of low-level radioactive waste.[2] Upon subsequent revision of the Application, the Board granted FPL's motions to dismiss one of the contentions as moot, and for

[1] *See* Combined License Application Documents for Turkey Point Units 6 and 7, *available at* http://www.nrc.gov/reactors/new-reactors/col/turkey-point/documents.html#application.

[2] *Florida Power & Light Company* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-11-6, 73 N.R.C. 149, 237-46, 248 (2011).

a favorable judgment as a matter of law on the second.[3] Soon thereafter, the Board rejected CASE's attempt to admit two new contentions.[4] Because at that time CASE no longer had a contention or unresolved pleading pending before the Board, the Board dismissed CASE as a party from this proceeding.[5]

CASE subsequently sought to litigate a new contention concerning the storage and disposal of spent nuclear fuel at the proposed Turkey Point units, which contention was held in abeyance pending the completion of a Commission rulemaking in August 2014.[6] Pursuant to the Commission's direction, the Board then denied CASE's contention.[7] That dismissal once again resulted in CASE having no contentions pending before the Board. Consequently, the Board dismissed CASE as a participant in this proceeding.[8]

In response to the NRC Staff's publication of the DEIS, CASE again petitioned the Board for leave to intervene based on three new contentions.[9] The Board denied those contentions as well, agreeing with FPL and the NRC Staff that the contentions were not admissible.[10]

In October 2016, the NRC Staff published the FEIS. In response, CASE now petitions the Board to admit four new contentions. As will be shown below, each proposed contention is inexcusably untimely – they all could have been raised when the DEIS was issued, if not earlier.

---

[3] *See Florida Power & Light Company* (Turkey Point Nuclear Generating Plant, Units 6 and 7), LBP-12-7, 75 N.R.C. 503, 507-08 (2012).

[4] LBP-12-7, 75 N.R.C. at 520.

[5] *Id.*

[6] *See* Licensing Board Order (Denying Waste Confidence Contention Motions and Dismissing CASE) at 2 (Sept. 10, 2014) (unpublished).

[7] *Id.* at 2-3.

[8] *Id.* at 3.

[9] *See generally* [CASE] Petition to Intervene and Request for Hearing Regarding the Draft EIS for Turkey Point 6 and 7 COL (Apr. 13, 2015).

[10] Licensing Board Memorandum and Order (Denying CASE's Petition to Intervene) at 1 (June 25, 2015) (unpublished).

And CASE has not even attempted to make the required demonstration of good cause to justify its untimely filing. In addition, even if timely, CASE's contentions all fall far short of the Commission's stringent admissibility requirements.

III. APPLICABLE LEGAL STANDARDS

A. CONTENTION ADMISSIBILITY STANDARDS

1. New Contentions Must Satisfy the Commission's Timeliness Standards Set Forth in 10 CFR § 2.309(c)(1).

The NRC does not look with favor on new contentions that are submitted after a COL applicant's initial filing. *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 N.R.C. 631, 636 (2004). As the Commission has repeatedly stressed,

> [O]ur contention admissibility and timeliness rules require a high level of discipline and preparation by petitioners "who must examine the publicly available material and set forth their claims and the support for their claims at the outset." "There simply would be 'no end to NRC licensing proceedings if petitioners could disregard our timeliness requirements'" and add new contentions at their convenience during the course of a proceeding based on information that could have formed the basis for a timely contention at the outset of the proceeding. Our expanding adjudicatory docket makes it critically important that parties comply with our pleading requirements and that the Board enforce those requirements.

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 N.R.C. 235, 271-72 (2009) (citations omitted).

Accordingly, the Commission's rules of practice require that "[c]ontentions 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." 10 C.F.R. §

2.309(f)(2). With respect to NEPA-related issues, contentions are to be based on the applicant's environmental report. *Id.* New or amended environmental contentions may be filed after the initial filing deadline—for example, based on a draft or final NRC environmental impact statement—only "if the contention complies with the requirements in paragraph (c) of this section." *Id.* 10 C.F.R. § 2.309(c)(1), in turn, requires that the contention "not be entertained" absent a demonstration of 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.

10 C.F.R. § 2.309(c)(1)(i)-(iii).

In short, new or amended contentions—even when ostensibly based on recently issued NRC environmental review documents—"must be *based on new facts* not previously available." *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-12-10, 75 N.R.C. 479, 493 n.70 (2012) (emphasis in original). *See also DTE Electric Company* (Fermi Nuclear Power Plant, Unit 3), CLI-15-01, 81 N.R.C. 1, 7 (2015) ("[O]ur rules of practice require contentions to be raised at the earliest possible opportunity. . . . Our rules of practice require a material difference between the information on which the contention is based and the information that was previously available—for example, a difference between the environmental report and the draft EIS or the draft EIS and the final EIS.").

Indeed, when promulgating revised Section 2.309(c)(1), the Commission explained that, "in most cases where the NRC compiles or uses previously available information in a new document, *the previously available information cannot be used as the basis for a new or*

amended contention filed after the deadline." Final Rule, Amendments to Adjudicatory Process Rules and Related Requirements, 77 Fed. Reg. 46,562, 46,566 (Aug. 3, 2012) (emphasis added). This means, for example, that information in a draft environmental impact statement cannot form the basis for a timely new contention when substantially the same information was previously found in an applicant's environmental report or was otherwise previously available.

Further, as the proponent of an order admitting the proposed contention, CASE has the burden of demonstrating that it meets the good cause standards in 10 C.F.R. § 2.309(c)(1). *See* 10 C.F.R. § 2.325. 10 C.F. R. § 2.309(c)(1) requires that the "*participant has demonstrated good cause*" by showing that the standards are met (emphasis added). The failure to comply with these pleading requirements constitutes sufficient grounds for rejecting the petition. *Florida Power & Light Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2, *et al*.), CLI-06-21, 64 N.R.C. 30, 34 (2006). *See also Nuclear Innovation North America LLC* (South Texas Project, Units 3 and 4), LBP-11-7, 73 N.R.C. 254, 279 (2011) ("Longstanding NRC practice dictates that an intervener's failure to affirmatively address the [former] section 2.309(c) factors serves as a sufficient basis for dismissal.") (citing *Calvert Cliffs*, CLI-06-21, 64 N.R.C. at 33-34 and *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 N.R.C. 325, 347-48 (1998) (noting that the Commission has summarily dismissed petitioners who failed to address the factors for a late-filed petition).

2. New Contentions Must Satisfy the Commission's Admissibility Standards Under 10 C.F.R. § 2.309(f)(1).

In addition, timely new contentions, including those based on NRC environmental review documents, must meet the admissibility standards that apply to all contentions under 10 C.F.R. § 2.309(f)(1). Specifically, new contentions 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;

(iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;

(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;

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

(vi) In a proceeding other than one under 10 CFR 52.103, provide 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.[11]

These standards are enforced rigorously. "If any one . . . is not met, a contention must be rejected." *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Unit Nos. 1, 2, and 3), CLI-91-12, 34 N.R.C. 149, 155 (1991) (citation omitted); *USEC, Inc.* (American Centrifuge Plant), CLI-06-9, 63 N.R.C. 433, 437 (2006) ("These requirements are deliberately strict, and we will reject any contention that does not satisfy the requirements." (footnotes omitted)). A licensing board is not to overlook a deficiency in a contention or assume the existence of missing information. *See, e.g.*, *Palo Verde,* CLI-91-12, 34 N.R.C. at 155; *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-09-7, 69 N.R.C. 235, 260 (2009) (noting that the contention admissibility rules "require the petitioner (*not the board*) to

[11] 10 C.F.R. § 2.309(f)(1)(i)-(vi).

supply all of the required elements for a valid intervention petition" (emphasis added) (footnote omitted)).

Under these standards, a petitioner "is obligated to provide the [technical] analyses and expert opinion showing why its bases support its contention." *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 N.R.C. 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 N.R.C. 1, *aff'd in part*, CLI-95-12, 42 N.R.C. 111 (1995). Where a petitioner has failed to do so, "the [Licensing] Board may not make factual inferences on [the] petitioner's behalf." *Id*. (citing *Palo Verde*, CLI-91-12, 34 N.R.C. 149). *See also Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 N.R.C. 142, 180 (1998) (explaining that a "bald assertion that a matter ought to be considered or that a factual dispute exists . . . is not sufficient;" rather, "a petitioner must provide documents or other factual information or expert opinion" "to show why the proffered bases support [a] contention" (citations omitted)).

Further, admissible contentions "must explain, with specificity, particular safety or legal reasons requiring rejection of the contested [application]." *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 N.R.C. 349, 359-60 (2001). In particular, this explanation must demonstrate that the contention is "material" to the NRC's findings and that a genuine dispute on a material issue of law or fact exists. 10 C.F.R. § 2.309(f)(1)(iv), (vi). The Commission has defined a "material" issue as meaning one where "resolution of the dispute *would make a difference in the outcome* of the licensing proceeding." Final Rule, Rules of Practice for Domestic Licensing Proceedings—Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168, 33,172 (Aug. 11, 1989) (emphasis added).

As the Commission has observed, this threshold requirement is consistent with judicial decisions, such as *Connecticut Bankers Association v. Board of Governors*, 627 F.2d 245 (D.C. Cir. 1980), which held that:

> [A] protestant does not become entitled to an evidentiary hearing merely on request, or on a bald or conclusory allegation that . . . a dispute exists. The protestant must make a minimal showing that material facts are in dispute, thereby demonstrating that "an 'inquiry in depth' is appropriate."

627 F.2d at 251 (citation omitted); *see also Baltimore Gas & Electric Co*. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-14, 48 N.R.C. 39, 41, *motion to vacate denied*, CLI-98-15, 48 N.R.C. 45, 56 (1998) ("It is the responsibility of the Petitioner to provide the necessary information to satisfy the basis requirement for the admission of its contentions.").

A contention, therefore, is not to be admitted "where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts." 54 Fed. Reg. at 33,171.[12] As the Commission has emphasized, the contention rules bar contentions where petitioners have what amounts only to generalized suspicions, hoping to substantiate them later, or simply a desire for more time and more information in order to identify a genuine material dispute for litigation. *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2), CLI-03-17, 58 N.R.C. 419, 424 (2003).

Therefore, under the Rules of Practice, a statement "that simply alleges that some matter ought to be considered" does not provide a sufficient basis for a contention. *Sacramento*

---

[12] *See also Duke Power Co., et al.* (Catawba Nuclear Station, Units 1 and 2), ALAB-687, 16 N.R.C. 460, 468 (1982), *vacated in part on other grounds*, CLI-83-19, 17 N.R.C. 1041 (1983) ("[A]n intervention petitioner has an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable [the petitioner] to uncover any information that could serve as the foundation for a specific contention. Stated otherwise, neither Section 189a of the [Atomic Energy] Act nor Section 2.714 [now 2.309] of the Rules of Practice permits the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or staff.").

Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 N.R.C. 200, 246 (1993), *review declined*, CLI-94-2, 39 N.R.C. 91 (1994). Similarly, a "mere reference to documents does not provide an adequate basis for a contention." *Calvert Cliffs*, CLI-98-25, 48 N.R.C. at 348 (citation omitted).

Rather, NRC's pleading standards require a petitioner to read the pertinent portions of the license application, including the safety analysis report and the ER, state the applicant's position and the petitioner's opposing view, and explain why it has a disagreement with the applicant. 54 Fed. Reg. at 33,170-71; *Millstone*, CLI-01-24, 54 N.R.C. at 358. If the petitioner does not believe these materials address a relevant issue, the petitioner is "to explain why the application is deficient." 54 Fed. Reg. at 33,170. *See also Palo Verde*, CLI-91-12, 34 N.R.C. at 156. A contention that does not directly controvert a position taken by the applicant in the license application is subject to dismissal. *See Texas Utilities Electric Co*. (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 N.R.C. 370, 384 (1992), *vacated as moot and appeal dismissed*, CLI-93-10, 37 N.R.C. 192, *stay denied*, CLI-93-11, 37 N.R.C. 251 (1993). Furthermore, "an allegation that some aspect of a license application is 'inadequate' or 'unacceptable' does not give rise to a genuine dispute unless it is supported by facts and a reasoned statement of why the application is unacceptable in some material respect." *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), LBP-06-23, 64 N.R.C. 257, 358 (2005) (citing *Florida Power & Light Co*. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 N.R.C. 509, 521 & n.12 (1990)).

B. NEPA STANDARDS

The National Environmental Policy Act ("NEPA") requires agencies, including the NRC, to take a "hard look" at the environmental impacts of a proposed action and alternatives to that action. *Southern Nuclear Operating Co*. (Early Site Permit for Vogtle ESP Site), LBP-09-07, 69 N.R.C. 613, 719 (2009). This "hard look," however, is subject to a "rule of reason" such that the consideration of environmental impacts must address only those impacts "that are reasonably foreseeable or have some likelihood of occurring." *Id.* The agency has broad discretion over the thoroughness of the analysis, and may decline to examine issues the agency in good faith considers "remote and speculative" or "inconsequentially small." *Id*.; *see also Vermont Yankee Nuclear Power Corp*. (Vermont Yankee Nuclear Power Station), ALAB-919, 30 N.R.C. 29, 44 (1989) (citing *Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719, 739 (3d Cir. 1989)). Furthermore, NEPA does not call for a "worst-case" inquiry because it "creates a distorted picture of a project's impacts and wastes agency resources." *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 N.R.C. 340, 352 (2002) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 354-55) (1989)).

The Commission has found that NEPA serves a dual purpose: to ensure that "officials fully take into account the environmental consequences of a federal action before reaching major decisions, and to inform the public, Congress, and other agencies of those consequences." *Private Fuel Storage, L.L.C.*, CLI-02-25, 56 N.R.C. at 348. NEPA does not mandate particular results, but prescribes the necessary process. *Robertson*, 490 U.S. at 350.

Moreover, "an [EIS] is not intended to be 'a research document.'" *Entergy Nuclear Generation Co. et. al.* (Pilgrim Nuclear Power Station), CLI-10-22, 72 N.R.C. 202, 208 (2010)

(citation omitted). "NEPA does not call for 'examination of every conceivable aspect of federally licensed projects.'" *Private Fuel Storage*, CLI-02-25, 56 N.R.C. at 349 (quoting *Louisiana Energy Services L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 N.R.C. 77, 102-03). Although "there 'will always be more data that could be gathered,' agencies 'must have some discretion to draw the line and move forward with decisionmaking.'" *Entergy Nuclear Generation Co. et. al.* (Pilgrim Nuclear Power Station), CLI-10-11, 71 N.R.C. 287, 315 (2010) (footnote omitted). Accordingly, NEPA does not demand virtually infinite study and resources. *Id.* at 315. As the NRC Staff has stated, "[i]t is not enough for the Intervenors to say more research could have been done, or to point out small mistakes in the FEIS. If there are mistakes in the FEIS, 'in an NRC adjudication it is the Intervenors' burden to show their significance and materiality.'" NRC Staff Rebuttal Statement of Position, Combined License Application for Levy County Nuclear Power Plant, Units 1 and 2 at 5 (July 31, 2012) (ML12213A716).

At bottom, NEPA "does not require [a] crystal ball inquiry." *Natural Res. Def. Council v. Morton*, 458 F.2d 827, 837 (D.C. Cir. 1972) (internal quotations omitted). Nor does it call for certainty or precision. When faced with uncertainty, NEPA requires "reasonable forecasting." *Scientists' Inst. For Pub. Info., Inc. v. AEC*, 481 F.2d 1079, 1092 (D.C. Cir. 1973). An agency is obligated to "examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choices made." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (internal quotation marks omitted).

IV. CASE HAS FAILED TO DEMONSTRATE THAT IT HAS STANDING IN THIS PROCEEDING

The Board should reject CASE's Petition because CASE has failed to demonstrate that it has standing to participate in this proceeding. The Commission's regulations require that CASE state:

> (i) The name, address and telephone number of the requestor or petitioner;
>
> (ii) The nature of the requestor's/petitioner's right under the Act to be made a party to the proceeding;
>
> (iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding; and
>
> (iv) The possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest.

10 C.F.R. § 2.309(d)(1). Commission case law provides that, as an organization, CASE may "base its standing on either immediate or threatened injury to its organizational interests, or to the interests of identified members." *Georgia Tech*, CLI-95-12, 42 N.R.C. at 115 (citations omitted). And "[t]o derive standing from a member, the organization must demonstrate that the individual member has standing to participate, and has authorized the organization to represent his or her interests." *Id.* (citations omitted).

The Petition does not explain how CASE meets these explicit requirements. Instead, CASE claims that, because the Board had previously found that CASE had standing when it petitioned to intervene at the very beginning of this proceeding over six years ago, CASE is not required to demonstrate its standing now.[13] CASE is incorrect. Longstanding Commission precedent holds that "a prospective petitioner has an affirmative duty to demonstrate that it has

[13] Petition at 3.

standing in each proceeding in which it seeks to participate since a petitioner's status can change over time and the bases or its standing in an earlier proceeding may no longer obtain." *Texas Utilities Electric Co. et al.* (Comanche Peak Steam Electric Station, Unit 2) CLI-93-4, 37 N.R.C. 156, 162-63 (1993). *See also PPL Bell Bend, LLC* (Bell Bend Nuclear Power Plant), CLI-10-7, 71 N.R.C. 133, 138 (2010) ("[O]ur case law is clear that a petitioner must make a fresh standing demonstration in *each* proceeding in which intervention is sought because a petitioner's circumstances may change from one proceeding to the next." (emphasis in original) (citing *Comanche Peak*)). As discussed below, this precedent applies to an entity who seeks to re-intervene in the same proceeding at a later date, which is the situation here. CASE has expressly refused to re-demonstrate its standing, and its Petition should be rejected on this ground alone.

The Commission's *Comanche Peak* ruling concerned an "on-again and off-again" petitioner that had petitioned for intervention and was admitted as a party in the Comanche Peak Unit 1 and 2 operating license proceeding in 1979. 37 N.R.C. at 158-59. That intervenor subsequently withdrew from the proceeding three years later. *Id.* at 159. In 1988, the former intervenor "attempt[ed] to re-intervene in the proceeding," which attempt the Commission rejected for its failure to meet the late-intervention criteria. *Id.* at 159. Then, over four years later in 1993, the same entity filed a petition for late re-intervention in the same proceeding. *Id.* In that petition, the entity requested that the Commission "'incorporate by reference [its] previous filings establishing its background and standing . . . .'" *Id.* at 162 (quoting late intervention petition). Because the entity did "not take any other affirmative steps to demonstrate that it has standing to participate in this proceeding," the Commission concluded that the former intervenor's 1993 petition was "deficient" because its "latest filing was in its 1988 attempt to reintervene, well over four years ago, and [it] has not demonstrated that these

documents reflect the status of its current membership or the basis for its current claim of standing." *Id.* at 162-63.

Comanche Peak is directly on point here. CASE was previously admitted as a party to this proceeding; however, CASE has not been a party to this proceeding for over four years. The Board dismissed CASE from the proceeding in March 2012 when it rejected CASE's attempts to admit two newly proffered contentions. LBP-12-7, 75 N.R.C. at 520 ("Because it no longer has a contention or an unresolved pleading pending before this Licensing Board, we *dismiss* CASE from this proceeding." (italics in original)). CASE's subsequent intervention attempts were unsuccessful. Although the Board found that CASE had established standing in its most recent intervention attempt in April 2015, there CASE had affirmatively claimed representational standing on behalf of its members based on the proximity presumption.[14] Indeed, CASE's April 2015 intervention petition devoted six pages to explain its basis for standing.[15] Here, CASE nowhere asserts, let alone demonstrates, in its brief that its prior filings reflect the status of its current membership. Nor does CASE otherwise explain the basis for its claim of standing. Although CASE has submitted affidavits from two of its members along with its Petition, CASE fails to explain in its brief how those affidavits support its basis for standing. As the Commission has succinctly stated,

> We do not expect our adjudicatory Boards, unaided by the parties, to sift through the parties' pleadings to uncover and resolve arguments not advanced by litigants themselves. *The burden of setting forth a clear and coherent argument for standing and intervention is on the petitioner.*

[14] Licensing Board Memorandum and Order (Denying CASE's Petition to Intervene) at 4 (June 25, 2015) (unpublished).

[15] [CASE] Petition to Intervene and Request for Hearing Regarding the Draft EIS for Turkey Point 6 & 7 COL at 5-10 (Apr. 13, 2015).

Commonwealth Edison Co. (Zion Nuclear Power Station, Units 1 and 2), CLI-99-04, 49 N.R.C. 185, 194 (1999) (emphasis added). CASE provides no argument (let alone a clear and coherent one) supporting its standing. Consequently, its petition for re-intervention should be rejected.

In the event the Board determines that CASE has standing, FPL respectfully requests that the Board reject CASE's proposed contentions for the reasons set forth below.

V. CASE FAILS TO OFFER AN ADMISSIBLE CONTENTION

A. PROPOSED CONTENTION 1 IS UNTIMELY AND INADMISSIBLE

CASE's proposed Contention 1 states that "[t]he use of reclaimed waste water for the cooling towers [at Turkey Point] was not fully evaluated and is unlikely due to the high cost of removing nitrogen and phosphorus and the eventual unavailability of reclaimed waste water."[16] CASE posits that, instead of using reclaimed wastewater, Turkey Point will overuse water from its proposed radial collector wells (RCWs).[17] According to Contention 1, reclaimed wastewater will be unavailable either: (1) because the cost of treatment (specifically removing nitrogen and phosphorous) may be prohibitive; or (2) due to increases in salinity or sea level rise.[18] According to Contention 1, this reduction in wastewater will cause FPL to rely completely on its RCWs "all of the time," beyond the 60-day usage limit mentioned in FEIS Section 5.3.2.1.[19]

---

[16] Petition at 8.

[17] *Id.* at 12.

[18] *See id.* at 8-11.

[19] *See id.* at 12. Petitioners include other claims in the basis of Contention 1 that appear to have no relation to the Contention as stated. For example, Petitioners' claim that a hypothetical sea level rise would create a "major national security risk" (*Id.* at 10) has no apparent relation to FPL's use of reclaimed wastewater or radial collector wells. This claim is unrelated to the proposed Contention, and is also inadequately supported, not specific and speculative. It also is outside the scope of this proceeding.

Proposed Contention 1 is inadmissible because it (1) is inexcusably late under 10 C.F.R. § 2.309(c)(1); (2) fails to demonstrate a genuine dispute of material law or fact under 10 C.F.R. § 2.309(f)(1)(vi); and (3) is not supported by facts or expert opinions under 10 C.F.R. § 2.309(f)(1)(v).

1. Proposed Contention 1 Is Untimely.

Contrary to the requirements of 10 C.F.R. § 2.309(c)(1), Contention 1 is based on information that has been available since the release of the DEIS, and in some cases since FPL submitted the ER, rendering Contention 1 inexcusably untimely. Contention 1 primarily disputes FPL's planned sources of cooling water. However, both the ER (submitted as part of FPL's original COLA on June 30, 2009)[20] and the DEIS (issued by the Commission on February 27, 2015)[21] described FPL's plan to use reclaimed wastewater as the primary source of cooling water, with RCWs as the secondary source. In fact, the amount of reclaimed water available for cooling purposes was the source of a proposed contention submitted in this proceeding in 2010 based on the ER.[22] Indeed, in that same year, CASE itself raised the impact of sea level rise on "the ability of the associated cooling complex to function" as an issue in a proposed contention,[23] which the Board found inadmissible in 2011. *See* Board Order, LBP-11-6, 73 N.R.C. at 235-37. Turkey Point's plan to use reclaimed water is not new to this proceeding. CASE's Contention 1 relies on information that was available years ago.

---

[20] *See* Environmental Report, Rev. 0 at 2.3-2 (June 30, 2009).

[21] *See* DEIS at 2-26.

[22] *See* Dan Kipnis, Mark Oncavage, Southern Alliance for Clean Energy, and National Parks Conservation Association's ("Joint Intervenors") Petition for Intervention at 10-15 (Aug. 17, 2010) (discussing the availability of reclaimed water).

[23] CASE Petition to Intervene at 35 (Aug. 17, 2010).

To the extent that Contention 1 challenges the use of RCWs as a fulltime source of makeup water, it again repeats previously proposed contentions[24] rejected by the Board in 2011. *See* Board Order, LBP-11-6, 73 N.R.C. at 175. As the Board noted at that time, "[t]he ER indicates the four wells collectively would be able to provide 100 percent of the cooling water necessary for operation of Units 6 and 7." *Id.* (citing ER at 5.2-17). While CASE now references the FEIS's discussion of how RCW use will be limited to a maximum of 60 days,[25] this reference does not cure the proposed Contention's lateness. The same limit was also previously set forth in the DEIS.[26] Accordingly, even this aspect of Contention 1 does not rely on new information.

For these reasons, the Board should reject Contention 1 as untimely.

2. Proposed Contention 1 Is Inadmissible Because It Lacks Factual or Expert Support and Fails to Show that a Genuine Dispute of Material Law or Fact Exists.

a. CASE's Allegation that the Use of Reclaimed Water Will Become Prohibitively Expensive Lacks Factual or Expert Support.

In addition to being untimely, the Board should reject Contention 1 because it fails to satisfy the Commission's admissibility requirements. In the first subpart of Contention 1, CASE alleges that FPL's costs to build a reclaimed wastewater treatment plant (to further treat wastewater from Miami-Dade's South District Plant) "could be high enough for the applicant to

[24] *See* Joint Intervenors' Petition for Intervention at 10-15 (Aug. 17, 2010).

[25] Petition at 12.

[26] *See, e.g.*, DEIS at 2-26, 5-13, 5-17. This limit first appeared as a condition of certification issued by the FDEP in 2014. *See* State of Florida, "Final Order on Certification, In Re: Florida Power & Light Company Turkey Point Units 6 & 7 Power Plant Siting Application No. PA 03–45A3," Exhibit A at 31 (2014) (ML14345A291).

revert to the back up [sic] use of seawater from the [RCWs]." [27] According to CASE, the estimated cost of building such a treatment plant is $400 million, and "such a plant is not inexpensive to operate."[28] The text of the Contention itself specifically mentions the "high cost of removing nitrogen and phosphorus."[29] However, CASE provides no references to support its assertions regarding a $400 million cost estimate, the potential high cost of a treatment facility generally, or the supposed high cost of removing nitrogen and phosphorus; nor does CASE provide any basis for its claim that the amount of such costs "could" cause FPL to rely on seawater from the RCWs rather than reclaimed wastewater. Indeed, even CASE notes that its own estimate of $400 million is speculative and that the plant could be economical, stating: "[m]ost likely, by the time such a water treatment plant is built, the technology and the cost would make the plant economically feasible to build and to operate."[30]

The lack of support for CASE's speculative claims renders this part of Contention 1 inadmissible under 10 C.F.R. § 2.309(f)(1)(v). It is well-settled that a contention is not to be admitted "where an intervenor has no facts to support its position." 54 Fed. Reg. at 33,171.

b. CASE's Allegation that Increases in Salinity Will Prevent the Use of Reclaimed Water Lacks Factual or Expert Support.

In the second part of Contention 1, CASE alleges that Turkey Point's plan to use reclaimed water "from the nearby water treatment plant," which apparently is a reference to the

---

[27] Petition at 8.

[28] *Id.* at 8.

[29] *Id.* at 8.

[30] *Id.* at 8. CASE admits that "the use of reclaimed waste water … is probably an ideal source of water for the proposed reactors," (*id.* at 8) yet proposed Contention 1 hinges on the assertion that FPL will not use reclaimed wastewater at some unspecified point in time in the future. In essence, CASE speculates, without support, that the cost of wastewater treatment "*could be* high enough for the applicant to revert to the back up [sic] use of seawater from the [RCWs]," or that piping from "the nearby water treatment plant *could be* terminated by the *possible* abandoning or relocation of the [unspecified] plant due to sea level rise and/or the increase in the salinity of water in the Biscayne Aquifer at that point." *Id.* at 8 (emphasis added).

South District Plant, "could be terminated by the possible abandoning or relocation of the plant due to … the increase in salinity of water in the Biscayne Aquifer."[31] CASE, however, has provided no support for that claim. Nor has CASE established how saltwater intrusion in groundwater could possibly affect a wastewater treatment plant's operation. CASE vaguely mentions that saltwater intrusion has caused the Miami-Dade County and Water Sewer Department ("MDWASD") to "abandon some wells in the area,"[32] but CASE fails to (1) specify which wells have closed; (2) support its assertions that wells have closed due to saltwater intrusion; and (3) show how those closures would be relevant to Turkey Point or the South District Plant.

CASE provides only an excerpt of an email from a Dr. Yoder, the Deputy Director of MDWASD. The email excerpt is not a sworn or signed statement and includes no supporting references or context. CASE has provided no qualifications of Dr. Yoder's demonstrating his relevant expertise, aside from his position at the MDWASD. Thus, as an initial matter, the email from Dr. Yoder is not a reliable expert opinion offered in accordance with 10 C.F.R. § 2.309(f)(1)(v).

Additionally, the email excerpt does not support CASE's claim that the South District Plant may have to be abandoned due to concerns over saltwater intrusion. Indeed, the email contradicts CASE's position. After mentioning saltwater intrusion, Dr. Yoder explains that the MDWASD is capable of modifying treatment technologies to deal with an increase in salinity.[33] In addition, Dr. Yodor's email mentions that the "Newton Wellfielde" is in his view the wellfield

[31] Petition at 8.
[32] *Id.* at 9.
[33] *Id.* at 9.

that is "most at risk currently from saltwater intrusion."[34] Dr. Yoder does not provide any additional supporting facts and does not say that the wellfield has been closed (it has not). Nor has CASE established how that wellfield is even relevant to Turkey Point 6 and 7 (it is not) or to CASE's speculation that the South District Plant could be abandoned.

Accordingly, Contention 1's claims that saltwater intrusion could lead to closure of the South District Plant are rife with speculative, unsupported statements that render it inadmissible under 10 C.F.R. § 2.309(f)(1)(v) and (vi) A petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its bases support its contention." *Georgia Tech*, LBP-95-6, 41 N.R.C. at 305. Where a petitioner has failed to do so, "the [Licensing] Board may not make factual inferences on [the] petitioner's behalf." *Id.* (citing *Palo Verde*, CLI-91-12, 34 N.R.C. at 149). "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.'" *Fansteel, Inc.* (Muskogee, Oklahoma, Site), CLI-03-13, 58 N.R.C. 195, 203 (2003) (quoting *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-06, 51 N.R.C. 193, 208 (2000)).

c. CASE's Allegation that Sea Level Rise Will Prevent the Use of Reclaimed Water Lacks Factual or Expert Support and Fails to Raise a Genuine Dispute of Material Fact.

The second part of Contention 1 also alleges that rising sea levels "could" force abandonment or relocation of the South District Plant.[35] CASE includes in its discussion an excerpt of an email from Dr. Harold R. Wanless. The text of the email, however, is largely irrelevant to a contention that focuses on the abandonment or relocation of Miami-Dade's South

[34] Petition at 9.

[35] Petition at 8.

District Plant.[36] To the limited extent the email excerpt could be interpreted as addressing Contention 2's claim that the South District Plant could be abandoned or relocated, thus leading to increased use of the RCWs, that issue is still inadmissible because, as set forth below, the FEIS has analyzed the issue of RCW use and neither CASE or Dr. Wanless challenge that analysis.

In addition, Dr. Wanless's email is not a sworn or signed statement and includes no supporting references or context. CASE has provided no qualifications demonstrating his expertise to challenge the sea-level rise projections of the U.S. Government. And the statements in this latest email vary from his own prior statements in this proceeding.[37] Thus, the email from Dr. Wanless is not a reliable expert opinion offered in accordance with 10 C.F.R. § 2.309(f)(1)(v).

Moreover, many of the claims raised by Dr. Wanless's email directly repeat claims set forth in CASE's initial Contention 5 in this proceeding, which the Board has already found

---

[36] Dr. Wanless claims that within thirty years Turkey Point will be sitting "in the middle of the combined Biscayne Bay – Florida Bay" due to 2 feet of sea level rise where it will become a national security risk; that the cooling canals will become inundated with salt water; that the proposed wastewater pipeline will become vulnerable to storm surge; that the injected wastewater will move northwest and will migrate upwards; and finally that Turkey Point will be sitting "in the middle of the ocean" by 2100 because the U.S. Government's high projection of a 6.6 foot sea level rise "is most certainly low." Petition at 10. Regarding the claim that Turkey Point will become a national security risk: 1) Dr. Wanless does not appear to be an expert in national security or terrorism; 2) it is NRC policy to not address terrorism in NEPA documents in jurisdictions outside of the Ninth Circuit, (*Oyster Creek*, CLI-07-8, 65 N.R.C. 124, 126 (holding that "NEPA demands no terrorism inquiry")); and 3) CASE already unsuccessfully attempted to offer this as a contention in CASE's first Petition to Intervene in these proceedings on August 17, 2010, ([CASE] Petition to Intervene and Request for a Hearing at 35 (Apr. 13, 2015)) which demonstrates that this issue would be untimely, even if it were admissible. If CASE is attempting to use Dr. Wanless's email to raise a safety concern regarding the ability of Turkey Point Units 6 and 7 to operate with "cooling canals that are inundated with salt water," (Petition at 10) CASE is improperly challenging the FEIS. The FEIS is meant to discuss the impact of the proposed action on the environment (10 C.F.R. § 51.45(b)(1)), not to review the plant's safety. Additionally, Units 6 and 7 are not designed to use cooling water canals for either normal plant cooling or emergency cooling, and there are no safety-related cooling water canals or reservoirs related to the operation of Units 6 and 7. *See* Final Safety Evaluation Report for the Turkey Point Units 6 and 7 Combined License Application (Nov. 10, 2016) at 2-171.

[37] In CASE's first Petition to Intervene in these proceedings, submitted on August 17, 2010, Dr. Wanless predicted a sea-level of rise of at least 3-5 feet by 2100. [CASE] Petition to Intervene and Request for a Hearing at 34 (Apr. 13, 2015).

inadmissible. For example, the Board rejected CASE's initial Contention 5 because it failed to address the sea level rise analysis included in the COLA, and because it failed to "demonstrate[] that FPL's unchallenged sea level rise analysis in the FSAR must be supplemented with an analysis in the ER." LBP-11-6, 73 N.R.C. at 236 n.103.[38] CASE's claims regarding sea level rise in proposed Contention 1 here suffer from the same shortcomings. The COLA accounted for sea level rise, and that consideration "led directly to the plant's choice of elevation for its structures,"[39] with the elevations of floor entrances and openings for all safety related facilities at 26 feet NAVD 88,[40] as referenced in FEIS Section 3.1.[41] Yet, CASE (and Dr. Wanless) has again failed to challenge this already existing sea level rise analysis. As was the situation with respect to CASE's initial Contention 5, because Contention 1 "fails directly to controvert FPL's sea level rise analysis," the claim raised is "inadmissible for failing to raise a genuine dispute of material fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi)." Board Order, LBP-11-6, 73 N.R.C. at 237.

In addition, CASE's excerpt of a report from the NOAA describing possible trajectories of global mean sea level rise[42] does not support an admissible contention. The article CASE references is not specific to Southern Florida or the area near Turkey Point, and does not challenge the sea level rise analysis in the FEIS. CASE also has not explained how the sea level rise value in that report applies to the Turkey Point site or to FPL's existing sea level rise

---

[38] Consistent with the presence of the sea level rise analysis in the FSAR, this issue is inappropriate for analysis in an EIS, contrary to CASE's claims (*see* Petition at 11). FPL fully briefed this topic in response to CASE's initial Contention 5. *See* [FPL's] Answer Opposing [CASE's] Revised Petition to Intervene and Request for Hearing In Turkey Point Units 6 and 7 Combined Construction and Operating License Application at 56-58 (Sept. 13, 2010) (hereinafter "FPL's 2010 Answer to CASE").

[39] FPL's 2010 Answer to CASE at 50.

[40] *See* FSAR at 2.4.2-4. NAVD means North American Vertical Datum of 1988.

[41] FEIS at 3-2.

[42] Petition at 10-11.

analysis. The Board has previously reminded petitioners in this proceeding that the "ER need only discuss reasonably foreseeable environmental impacts of a proposed action." Board Order, LBP-11-6, 73 N.R.C. at 217 n.78 (citing *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-2, 71 N.R.C. 27, 46 (Jan. 7, 2010)). This same standard applies to the FEIS. *Levy*, CLI-10-2, 71 N.R.C. at 46 ("With respect to the Staff's environmental review, the EIS must discuss the reasonably foreseeable environmental impacts of the proposed project.").

For these reasons, the sea level rise portion of Contention 1 is inadmissible under 10 C.F.R. § 2.309(f)(1)(v) and (vi).

d. CASE's Allegation that FPL Will Use RCWs Beyond 60 Days a Year Lacks Factual or Expert Support, and Fails to Raise a Genuine Dispute of Material Fact.

The final portion of Contention 1 alleges that, if FPL is unable to obtain wastewater, it may use the RCWs more than 60 days a year.[43] This portion of Contention 1 is inadmissible because it lacks support, is inappropriately speculative, and fails to raise a genuine dispute with the FEIS because the FEIS (and the DEIS and ER before it) already addresses CASE's concern.

As CASE acknowledges, the FEIS states that there is a 60 day limit on the use of RCWs.[44] CASE theorizes that, if FPL is unable to obtain reclaimed water, "[o]ne would assume that the applicant would ask to use the RCW's [sic] all the time."[45] CASE, however, provides no factual or expert support for its theory (as is required under 10 C.F.R. § 2.309(f)(1)(v)), and even acknowledges that under such circumstances "additional operating time [of the RCWs] is not

[43] Petition at 12.

[44] *See id.* at 12.

[45] *See id.* at 12.

guaranteed."[46] The Commission's regulations bar the admission of a contention based on such a speculative sequence of future events.[47] Further, for NEPA purposes, the NRC may properly assume that a licensee will comply with concrete and enforceable conditions and requirements imposed by competent federal, state, or local governmental entities. *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-13-4, 77 N.R.C. 107, 217-18 ("[I]f a federal or state environmental agency issues a permit to the operator of a nuclear power plant that imposes numerical limits on the amount of pollution that the plant may emit, then the NRC's FEIS may reasonably assume that the company's emissions will comply with those numerical limits.").

In addition, the possibility that the RCWs would be used for more than 60 days has been considered and addressed in the FEIS, the DEIS, and the FSAR. Each document included analyses with the conservative assumption of FPL using the radial collector wells continuously (or nonstop) without a 60 day limit.[48] Given the extent of the current analysis, and CASE's failure to substantively challenge it, this portion of Contention 1 fails to raise a material dispute with the FEIS and is therefore inadmissible under 10 C.F.R. § 2.309(f)(1)(vi).

For these reasons, CASE's Contention 1 is inadmissible in its entirety.

---

[46] *See* Petition at 12.

[47] Contentions based on anticipated future actions that are not currently in an application before the NRC are not sufficient to support the admission of a contention. *See Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 N.R.C. 278, 293-94 (2002). "[A]n NRC licensing proceeding is not an occasion for far reaching speculation about unimplemented and uncertain plans of applicants or licensees." *Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 and 2), LBP-08-17, 68 N.R.C. 431, 454-55 (2008) (citing *McGuire/Catawba*, CLI-02-14, 55 N.R.C. at 293) (internal quotations omitted).

[48] *See* FEIS Appendix G, G-28. *See, e.g.*, DEIS at G-28, G-34; FSAR, Rev. 8 at 2CC-33.

B. PROPOSED CONTENTION 2 IS UNTIMELY AND INADMISSIBLE

Petitioners' proposed Contention 2 alleges that the "probable heavy use of water from the Upper Floridan Aquifer using radial collector wells has not been fully evaluated and could result in catastrophic drainage of actual and near freshwater from the Upper Floridan Aquifer required to abate saltwater intrusion and for human use."[49] Petitioners base their assertion that the RCWs have "not been fully evaluated" on the "uncertain impact of drawing 60-90 MGD of water per day from the Biscayne Aquifer for the cooling towers."[50] According to Petitioners, the NRC Staff ignored the uncertainty present in the relevant FPL model described in the FEIS, and ignored the reservations of its own review team.[51] Contention 2 is inadmissible because it is untimely. It is also inadmissible because it lacks adequate support and fails to raise a genuine dispute with a material issue.

1. Proposed Contention 2 Is Untimely.

The Board should reject Contention 2 as untimely. FPL's groundwater model upon which CASE bases this contention was included in the ER, Rev. 0, at pages 5.2-8 to 5.2-9.[52] Accordingly, CASE could have raised its contention about the possibility of the RCW system withdrawing freshwater years ago when FPL submitted the ER. Indeed, in 2010 another party raised a contention in response to the ER on that very topic,[53] which the Board found inadmissible. Board Order, LBP-11-6, 73 N.R.C. at 173-187.

---

[49] Petition at 12.

[50] *Id.* at 13.

[51] *Id.* at 15.

[52] A more detailed description of the model was also included in the FSAR at App. 2CC.

[53] Joint Intervenors' Petition for Intervention at 9-26 (Aug. 17, 2010) ("Contention NEPA 1: The ER fails to adequately address direct, indirect, and cumulative impacts of the radial collector wells on the Biscayne Aquifer and the Biscayne Bay Ecosystem.").

CASE also could have raised Contention 2 in February of 2015 after the Staff released the DEIS. In fact, in April of 2015, the City of Miami submitted a contention challenging some of the same language quoted by CASE.[54] The Board found even that contention to be untimely, because it focused "solely on FPL's base case groundwater model, which has been available for years as a part of FPL's initial application." Board Order, LBP-15-19, 81 N.R.C. 815, 826 (2015). Each quote that Contention 2 cites from the FEIS regarding uncertainty in FPL's groundwater model is *identical* to language included in the DEIS.[55] Thus, every piece of information that forms the basis of CASE's Contention 2 existed at the time of the DEIS. "Petitioners have an obligation to examine the application and publicly available information, and to set forth their claims at the earliest possible moment." *McGuire*, CLI-03-17, 58 N.R.C. at 429. For these reasons, proposed Contention 2 is inexcusably untimely and should be dismissed.

2. Proposed Contention 2 Does Not Satisfy the Commission's Admissibility Standards.

Even if the Board determines that Contention 2 is timely, it is nevertheless inadmissible under 10 C.F.R. § 2.309(f)(1)(v) and (vi).

As an initial matter, Contention 2 fails to raise a genuine dispute with the FEIS because the very premise of the Contention is simply wrong: the RCWs will *not* draw water "from the Upper Floridan Aquifer" as the text of the Contention incorrectly claims.[56] The RCWs will draw

---

[54] *See* Petition by the City of Miami, Florida, for Leave to Intervene in a Hearing on Florida Power & Light Company's Combined Construction and Operating License Application for Turkey Point Units 6 & 7, or in the Alternative Participate as a Non-Party Local Government, at 10-11 (Apr. 13, 2015).

[55] *See* DEIS at G-28 to 29, G-30.

[56] Petition at 12.

water primarily from the Biscayne Bay with a small amount from the Biscayne Aquifer.[57]

Even assuming Contention 2 meant to challenge the RCWs' withdrawal of water from the Biscayne Aquifer,[58] the Contention is still inadmissible. First, CASE's analysis of the FEIS is incomplete. Contention 2 revolves around CASE's belief that the NRC Staff "ignored reservations of the review team" surrounding FPL's groundwater model, specifically regarding uncertainties in the model.[59] But the Staff did not ignore the uncertainties. In Appendix G of the FEIS, and in the DEIS before it,[60] the NRC Staff describes the sensitivity studies that it performed to account for uncertainties in FPL's model.[61] CASE does not even acknowledge those sensitivity studies.

Additionally, while CASE focuses on FPL's model, it does not address the second RCW analysis that the NRC included in the FEIS. Far from "ignoring" the review team's reservations regarding FPL's model,[62] the NRC Staff commissioned the U.S. Geological Survey ("USGS") to develop a second model.[63] The USGS's model studied "the effects of the operation of a proposed RCW system at the Turkey Point site on surface and groundwater salinity."[64] As the FEIS explains, this model included different assumptions than FPL's[65] and, as a model of the salinity in surface water and groundwater,[66] more directly addressed the preservation of freshwater. In

---

[57] *See* FEIS at 5-18.

[58] Petitioners note in their basis for Contention 2 that the RCWs have not been fully evaluated on the "uncertain impact of drawing 60-90 MGD of water per day from the Biscayne Aquifer for the cooling towers." Petition at 13.

[59] *See id.* at 15.

[60] *See* DEIS at G-28 to G-30.

[61] *See* FEIS at G-28 to G-30.

[62] Petition at 15.

[63] FEIS at G-26 to G-27, G-30 to G-45.

[64] *Id.* at G-30 to G-31.

[65] *See id.* at G-26 to G-27.

[66] *See id.* at G-27.

fact, the USGS model ultimately determined that continuous pumping from the RCWs would actually result in a freshening of the groundwater,[67] contrary to CASE's prophecy of a catastrophic reduction in freshwater.[68] The NRC review team then performed a third analysis, to provide further certainty in modeling, and predicted only "minor localized alterations in salinity distribution due to RCW operation."[69]

CASE's failure to address the USGS model and the entirety of its conclusions[70] renders Contention 2 inadmissible. CASE may not ignore portions of the FEIS relevant to its Contentions. CASE must read the pertinent portions of the FEIS, state the applicant's position and CASE's opposing view, and explain why it has a disagreement with the applicant. 54 Fed. Reg. at 33,170-71; *Millstone*, CLI-01-24, 54 N.R.C. at 358. If the petitioner does not believe that a licensing request and supporting documentation address a relevant issue, the petitioner is "to explain why the application is deficient." *Final Rule*, 54 Fed. Reg. at 33,170; *Palo Verde*, CLI-91-12, 34 N.R.C. at 156. A contention that does not directly controvert a position taken by the applicant in the license application is subject to dismissal. *Comanche Peak*, LBP-92-37, 36 N.R.C. at 384.

Because CASE ignores part of the FEIS, and does not contradict or otherwise challenge the Staff's relevant analysis, Contention 2 is inadmissible for failing to raise a genuine dispute of material fact, as is required under 10 C.F.R. § 2.309(f)(1)(vi).

---

[67] FEIS at G-35.

[68] *See* Petition at 13, 15.

[69] FEIS at G-48.

[70] While CASE mentions a "USGS study" and "USGS report," its references do not appear to be the USGS model of the RCWs. *See* Petition at 13-14. CASE appears to be confused about the authorship of Appendix G Section 3.2, attributing most of the language in that Section to the USGS.

In addition, contrary to 10 C.F.R. § 2.309(f)(1)(v), CASE does not raise facts or rely on expert opinions to support Contention 2. CASE repeatedly makes bare assertions regarding the "catastrophic" impacts of diverting freshwater from the "already challenged aquifer," and claims that "any diversion" of freshwater in South Florida is "problematical."[71] But CASE offers no support or analysis to justify these allegations, either generally or specifically with reference to impacts based on the amount of drawdown at issue in the proceeding. While CASE includes a handful of facts in the description of Contention 2, those facts are irrelevant to the Contention itself and are also frequently incorrect.[72]

The entirety of CASE's analysis supporting Contention 2 is also limited to quoting sections of the FEIS that refer to uncertainty, while at the same time CASE argues that the NRC Staff ignored uncertainty. CASE's "support" therefore undercuts its own position. In addition, according to CASE, the description of uncertainties in the FEIS is the problem, because "it appears that the Staff ignored the reservations of the review team."[73] However, the presence of an uncertainty discussion in the FEIS does not render the Staff's analysis inadequate. Indeed, "[w]here adverse environmental impacts are not likely, expensive and time-consuming studies are not necessary," "the agency has fulfilled its mission under NEPA" as long as the "environmental impact statement identifies areas of uncertainty." *Izaak Walton League of America v. Marsh*, 655 F.2d 346, 377 (D.C. Cir. 1981). Where the Staff has "explained its conclusions and identified areas of uncertainty," petitioners' claims of inadequacy in the FEIS

---

[71] Petition at 15.

[72] For example, CASE states that "[t]he review team, at many points in the EIS, describes the uncertain impact of drawing 60 to 90 [million gallons per day (MGD)] of water per day [sic] from the Biscayne Aquifer for the cooling towers." Petition at 13. However, over 95% of the water extracted by the RCWs originates in the Biscayne Bay, not the Biscayne Aquifer. FEIS at 5-17. With an assumed continuous withdrawal of 120 MGD for the RCWs, *see* FEIS at G-28, the predicted withdrawal from the Biscayne Aquifer would be far less than 60 to 90 MGD.

[73] Petition at 15.

must fail. *Id.* Here, the FEIS discusses the uncertainties in FPL's model and describes sensitivity analyses performed to account for those uncertainties.[74] Ultimately, the FEIS notes that the "FPL model provides a *reasonable*, although uncertain, prediction."[75] This satisfies NEPA's requirements. *Entergy Nuclear Operations, Inc.* (Indian Point Nuclear Generating Units 2 and 3), CLI-16-07, 83 N.R.C. __ (May 4, 2016) (slip op. at 0018) ("NEPA is satisfied so long as the analysis that *was* done is reasonable." (emphasis in original)).

For these reasons, CASE's proposed Contention 2 is inadmissible in its entirety.

C. PROPOSED CONTENTION 3 IS UNTIMELY AND INADMISSIBLE

Contention 3 alleges that the "impact of injecting toxic chemicals and liquid radwaste laden water from the reactors directly into the boulder zone was not fully evaluated in the EIS."[76] This Contention includes three subparts: the allegation that the FEIS did not adequately consider the migration of reinjected wastewater from the Boulder Zone to the Biscayne Aquifer;[77] the allegation that the FEIS did not adequately consider the impact of the tritium, cesium-134, cesium-137, strontium-90, and other constituents (including those that are the subject of admitted Contention 2.1);[78] and the allegation that the FEIS did not consider the possibility that the injected wastewater may merge into the Atlantic Ocean.[79]

Contention 3 is inadmissible because it is untimely. It is also inadmissible under 10 C.F.R. § 2.309(f)(1)(v) because CASE failed to properly support it with alleged facts or expert

---

[74] *See* FEIS at G-26 to G-30.
[75] *Id.* at G-28.
[76] Petition at 16.
[77] *See id.* at 16-21.
[78] *See* Petition at 21-29.
[79] *See id.* at 29-31.

opinions, and under 10 C.F.R. § 2.309(f)(1)(vi) because CASE failed to show that a genuine dispute exists on a material issue of law or fact.

1. Proposed Contention 3 Is Untimely.

Proposed Contention 3 is inexcusably untimely. Underlying Contention 3 is a challenge to the wastewater injection that is planned at Turkey Point Units 6 and 7. This is not a new issue. On the contrary, wastewater injection has always been an integral part of the Turkey Point project and its COLA, and was first proposed at the initial stage of this proceeding in Turkey Point's 2009 ER.[80] The first set of contentions in this proceeding, submitted in 2010, included a contention from other parties concerning the environmental impacts of wastewater injection into the Boulder Zone.[81] That contention ultimately became admitted Contention 2.1. CASE cannot now, six years later, raise a new Contention concerning this same topic without first demonstrating good cause under 10 C.F.R. § 2.309(c)(1). CASE has not even attempted to meet the good cause standard, nor could it.

Additionally, none of the references included in CASE's discussion of Contention 3 contain information materially different from that previously available. For example,

- CASE quotes an FPL June 2016 presentation and a related portion of the FEIS at pages 5-26 to 5-27 concerning its analysis of dose from the dispersion of radionuclides.[82] This same information was already described in more detail in an RAI response from 2014.[83]

---

[80] *See, e.g.*, Environmental Report, Rev. 0 at 2.3-2, 3.4-6, 3.9-12 (June 30, 2009).

[81] *See* Joint Intervenors' Petition for Intervention at 26-30 (Aug. 17, 2010).

[82] Petition at 16-17, 25-26. CASE's reference to FEIS at 5-26 to 5-27 was mistakenly labelled 6-26.

[83] *See generally* FPL Response to NRC RAI No. 11.02-6-1(2)(3)(4) (eRAI 6985) (ML14017A019, ML14017A020) (describing 3D model of transport and dose for incorporation into FSAR Section 11.2.3, including the 300 ft vertical migration into the Middle Confining Unit (ML14017A019 at Section 2.2.2)).

- CASE quotes FEIS excerpts[84] from pages 4-24,[85] 3-34,[86] 5-123,[87] 6-9,[88] 5-20,[89] and 3-32 (§ 3.4.2.3),[90] which are identical to text in the DEIS.[91] CASE also quotes an FEIS excerpt at pages 5-115 and 5-116,[92] which is identical to text in the DEIS,[93] except for correcting a typographical error.

- CASE quotes 3-37 (§ 3.4.4.2),[94] which is identical to text in the DEIS,[95] with the exception of a sentence on the additional sampling performed after the advanced treatment of the constituents that are the subject of admitted Contention 2.1.[96] CASE does not address the additional sampling or advanced treatment of these constituents in Contention 3.

- CASE references a paper from Dr. Donald McNeill that was published in 2000,[97] well in advance of this filing and well before the FEIS and DEIS were published.

- CASE quotes an article on tritium that was published in 2006,[98] well in advance of this filing and well before the FEIS and DEIS were published.

- CASE quotes a news article on radioactivity in California's kelp population that was published in 2012,[99] well in advance of this filing and well before the FEIS and DEIS were published.

---

[84] The quotes included in CASE's petition include some additional parentheticals and typographical errors that are not in the FEIS. For example, CASE's reference to "(radiological waste)" in its quote from FEIS page 5-20 is not in the FEIS. As a result, the CASE quotes do not always match the DEIS, even where the DEIS language is identical to the FEIS.

[85] Petition at 18.

[86] *Id.* at 21-22.

[87] *Id.* at 24.

[88] *Id.* at 26.

[89] *Id.* at 28.

[90] *Id.* at 27.

[91] *See, e.g.*, DEIS at 4-29, 3-33 to 34, 5-108, 6-9, 5-16, 3-31 to 32.

[92] Petition at 30-31.

[93] *See* DEIS at 5-101.

[94] Petition at 27-28.

[95] *See* DEIS at 3-36 to 37.

[96] *See* FEIS at 3-37 ("After implementation of advanced treatment at the SDWWTP in FY 2013 (Miami-Dade County 2014-TN4758) additional sampling was performed to determine the concentrations of the constituents, heptachlor, ethylbenzene, tetrachloroethylene, and toluene in treated wastewater (NRC 2015-TN4773).").

[97] Petition at 19.

[98] *Id.* at 22-24.

- CASE references the USGS Ground Water Atlas of the United States (Alabama, Florida, Georgia, South Carolina HA 730-G)[100] that appears to have been published in 1990, [101] well in advance of this filing and well before the FEIS and DEIS were published.

- Finally, CASE references an undated email from a Dr. Stoddard that states that "If / when / where our Boulder Zone water merges with the ocean, sargassum kelp could, conceivably, do the same thing."[102] This email was not provided as an exhibit with the Petition, making it impossible to determine the date of the correspondence. However, Dr. Stoddard bases his claims on information contained in the 2012 news article on California's kelp referenced above.[103] Therefore, with no new information included in the email, the information underlying Dr. Stoddard's claim was in existence long before the publication.

For these reasons, Contention 3 is untimely because it is based on information that has been available for many years.

2. Proposed Contention 3 Is Inadmissible under the Commission's Regulations.

As noted above, Contention 3 includes three subparts: the allegation that the FEIS did not adequately consider the migration of reinjected wastewater from the Boulder Zone to the Biscayne Aquifer; the allegation that the FEIS did not adequately consider the impact of tritium, cesium-134, cesium-137, strontium-90, and other constituents; and the allegation that the FEIS did not consider the possibility that the injected wastewater may merge into the Atlantic Ocean. Even if the Board determines that Contention 3 is timely, for the reasons set forth below Contention 3 is inadmissible in its entirety under 10 C.F.R. § 2.309(f)(1).

---

[99] Petition at 29.

[100] *Id.* at 30.

[101] *See* USGS, *HA 730-G, Ground Water Atlas of the United States: Alabama, Florida, Georgia, and South Carolina*, (published in 1990), https://pubs.usgs.gov/ha/ha730/ch_g/ (quoted language at USGS, *HA 730-G, Floridan Aquifer System*, https://pubs.usgs.gov/ha/ha730/ch_g/G-text6.html).

[102] Petition at 30.

[103] *See id.* at 29-30.

a. The First Part of Proposed Contention 3 Fails to Satisfy the Requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

(i) CASE Mischaracterizes Information to Fit Its Argument.

CASE begins its claims regarding confinement of wastewater in the Boulder Zone by mischaracterizing information contained in the FEIS. In particular, CASE consistently conflates the various aquifers and their confining characteristics. CASE first claims that migration of wastewater 300 feet out of the Boulder Zone and into the Middle Confining Unit is the same as 300 feet of wastewater migration directly into the Upper Floridan Aquifer.[104] On the contrary, as the FEIS describes (and as CASE does not challenge), the Boulder Zone is approximately 1500 feet below the base of the Upper Floridan Aquifer.[105] A migration of 300 feet into the Middle Confining Unit, which is directly above the Boulder Zone, would leave the wastewater almost 700 feet deep into the lower Middle Confining Unit and over 1000 feet below the Upper Floridan Aquifer after 100 years.[106]

Next, CASE references a section of the FEIS describing the Biscayne Aquifer and applies it to the Boulder Zone, incorrectly implying that the Boulder Zone and Biscayne Aquifer are the same.[107] While conflating the two aquifers, CASE also claims the Boulder Zone "was pristine and pure."[108] On the contrary, as the FEIS notes, "[t]he water in the Boulder Zone is very similar

---

[104] Petition at 17.

[105] *See* FEIS at 2-48.

[106] *See id.* at 2-48, 5-27.

[107] Petition at 18. CASE also appears to alternate referring to the Boulder Zone and the Biscayne Aquifer as the "4,000 mile aquifer," or "4,000 square mile aquifer," making it difficult to determine which specific hydrogeological unit CASE intends to reference when discussing the "4,000 mile aquifer." *See id.* at 22, 31.

[108] *Id.* at 18.

to modern seawater both in salinity and temperature… preclud[ing] any interest in the Boulder Zone as a supply of freshwater."[109]

CASE then distorts the evidentiary hearing testimony of an FPL expert, Mr. Andersen, from another proceeding, in an effort to imply that there is upward flow from the Boulder Zone into the Biscayne Aquifer. Citing Mr. Andersen's testimony, CASE claims there is flow upwards "between the ***lower Aquifers***" or "between the lower levels of the aquifer to the upper."[110] Mr. Andersen did not so testify.

As is clear from the quoted testimony, Mr. Andersen was only referring to the direction of flow within the upper Aquifers (i.e., "from the Floridan into the Biscayne") because the Floridan Aquifer is under pressure.[111] Mr. Andersen specifically agreed with[112] the NRC's expert, Mr. Ford, when he noted that the Upper Floridan and Biscayne Aquifers "are not in hydrologic interconnection, that water can't flow between them."[113] Regardless, the flow within the Upper Floridan and Biscayne Aquifers is unrelated to the potential for flow through the additional 1500 foot Middle Confining Unit[114] that lies between the Boulder Zone (where the wastewater will be injected) and the Upper Floridan Aquifer. CASE's mischaracterization of Mr. Anderson's testimony cannot form the basis for admitting a contention.

---

[109] FEIS at 2-54.

[110] Petition at 18-19.

[111] *Id.* at 18-19.

[112] *See* Transcript of January 11, 2016 Hearing re Turkey Point Units 3 and 4, Pages 259-513, with attachments, at 434:1-2 (ML16015A175) ("Mr. Anderson: Yes. I agree with everything Bill [Ford] is saying.").

[113] *Id.* at 433:9-12 (ML16015A175).

[114] *See* FEIS at 2-48.

(ii) CASE Ignores and Fails to Address Portions of the FEIS that Contradict Its Argument.

In addition to mischaracterizing testimony and the FEIS, CASE also ignores and fails to address parts of the FEIS that contradict its argument. This is improper; it is CASE's responsibility to address any analysis contained in the FEIS that controverts its contention that the "impact of injecting toxic chemicals and liquid radwaste laden [sic] water . . . was not fully evaluated."[115] Failing to do so renders proposed Contention 3 inadmissible for failure to raise a genuine dispute within a material fact. 10 C.F.R. § 2.309(f)(1)(vi); Board Order, LBP-11-6, 73 N.R.C. at 234-35 ("A contention of omission may be summarily rejected as inadmissible if . . . the topic that allegedly is omitted is, in fact, included in the application.").

For example, throughout proposed Contention 3, CASE ignores the 2900 foot difference in depth between the Boulder Zone and the Biscayne Aquifer, as described in the FEIS.[116] Instead, CASE argues that "there is no guarantee that the discharges of harsh chemicals into the Boulder Zone will stay put. It is more likely that they will migrate in all directions and, over time pose a threat to the entire Biscayne Aquifer."[117] CASE utterly fails to explain why its position is "more likely," providing no facts or expert opinion to show how chemicals will so easily upwell through the 2900 foot distance between the Boulder Zone and the Biscayne Aquifer. Instead, CASE merely states that its position is correct "despite EIS statements to the contrary."[118]

---

[115] Petition at 16.

[116] *See* FEIS at 2-48 (showing that the Biscayne Aquifer extends to a depth of 140 feet while the Boulder Zone begins at a depth of 3030 feet).

[117] Petition at 20.

[118] *Id.* at 22.

CASE alleges that the FEIS lacks an "in depth" analysis of "upward connectivity."[119] But this allegation is irreconcilable with the FEIS's actual content. The FEIS contains a detailed description of the hydraulic and geological properties of the relevant area.[120] It also contains a detailed description of the confining properties of the geologic layers, directly addressing the possibility of upward migration.[121] It includes a detailed review of the literature on the likelihood of confinement.[122] And it analyzes the potential impacts on groundwater from potential upwelling.[123] Ultimately, based on all of this analysis, the NRC review team "concluded that significant upwelling of injected wastewater is not likely at the Turkey Point site and that, if upwelling did occur it would not noticeably impact overlying USDW aquifers."[124]

CASE does not address this conclusion or the underlying analysis, nor does CASE explain what further information is necessary. Instead, CASE claims that the FEIS discussion is "so convoluted and internally contradictory and self-serving" that an evidentiary hearing is somehow necessary to "separate fact from fiction."[125] CASE cannot simply hide behind such general assertions and demand a hearing. NEPA does not require infinite study of an issue. *Pilgrim*, CLI-10-11, 71 N.R.C. at 315 (footnote omitted). Moreover, it is CASE's duty to "explain the basis for the contention and read the relevant parts of the license application and show where the application is lacking." *Palo Verde*, CLI-91-12, 34 N.R.C. at 156 (referencing 54 Fed. Reg. 33168, 33170). CASE did not meet that obligation and therefore has failed to raise a genuine dispute with the FEIS.

---

[119] Petition at 19.
[120] FEIS at 2-47 to 2-58.
[121] *Id.* at 5-21 to 5-29.
[122] *See id.*at 5-23 to 5-25.
[123] *See id.* at 5-26 to 5-28.
[124] *Id.* at 5-21.
[125] Petition at 20.

(iii) CASE Did Not Raise Facts or Expert Opinions When Broadly Challenging the Migration Analysis in the FEIS, Contrary to the Requirements of 10 C.F.R. § 2.309(f)(1)(v).

CASE also fails to provide facts or expert opinions to support its allegation that the FEIS inadequately considered the potential upward migration of the wastewater. CASE first quotes language from a presentation given by FPL summarizing FSAR Section 11.2, which CASE admits contains information already "seen in the EIS."[126] Merely quoting a presentation that repeats information from the FSAR and EIS does not raise a genuine dispute with the documents.

CASE then turns for support to a section of the FEIS regarding the Biscayne Aquifer and testimony from Mr. Andersen on transmissivity from the Upper Floridan Aquifer to the Biscayne Aquifer.[127] As described previously, CASE takes Mr. Andersen's quotes about the Biscayne Aquifer and mistakenly applies them to the Boulder Zone. In addition, the FEIS language cited by CASE discusses the permeability of the Biscayne Aquifer, and therefore does not address the possibility of fluid migration from the Boulder Zone. Thus, the quotes used by CASE do not support CASE's challenge to the FEIS's thorough migration analysis.

CASE's final attempt to support this part of Contention 3 relies on a report from Dr. Donald McNeill published in 2000. According to CASE:

> Dr. Donald Mcneill [sic] (University Of Miami) wrote a report in 2000 looking at the same question for the South Miami Dade County Water Treatment Plant, the plant from which reclaimed waste water would be drawn. There, the presumed very thick low permeability zone was in fact only about 14 feet in thickness and lay just above the Boulder Zone at a thickness at a depth rising to 2456 to 1443 feet, the lower permeability toward the north west . [sic] Effluent injected from Turkey Point will flow up the surface's gradient to the Northwest and then probably North where it will have many opportunities to encounter breaks in the

[126] Petition at 16.

[127] *Id.* at 18-19.

> permeability barrier in this lateral travel. ([McNeill], Donald F., 2000. A Review of Upward Migration of Effluent to Subsurface Injection at Miami-Dade Water and Sewer South District Plant. Prepared for Sierra Club - Miami Group. 30 Pp).[128]

First, as set forth above, this document has been available since 2000. CASE could have relied on it to form a contention years ago. Second, this document is not reliable expert testimony: it is unsworn, unsigned, and CASE has not shown that Dr. McNeill is qualified to testify as an expert in this proceeding.

In addition, CASE implies that the McNeill paper indicates that "[e]ffluent injected from Turkey Point will flow up the surface's gradient to the Northwest and then probably North where it will have many opportunities to encounter breaks in the permeability barrier in this lateral travel."[129] Mr. McNeill's paper does no such thing. Rather, the paper contains an analysis of well leakage problems at the South District Plant, and makes no mention of the Turkey Point project (which of course did not even exist in 2000 when the paper was written).[130] CASE does not explain how Mr. McNeill's analysis of the South District Plant is applicable to Turkey Point, let alone how it can be used to reach specific conclusions regarding the potential for upward migration or the direction of flow of Turkey Point's injected effluent.

Moreover, the FEIS review team considered Mr. McNeill's paper, and found that upward migration of wastewater which has occurred at the South District Plant "was attributed to enhanced vertical flow likely caused by a well construction problem (Walsh and Price 2010-

[128] Petition at 19.

[129] *Id.* at 19.

[130] *See generally* McNeill, Donald F., A Review of Upward Migration of Effluent to Subsurface Injection at Miami-Dade Water and Sewer South District Plant, (2000) (this document is copyrighted and available through the NRC Staff at NRC ADAMS Accession No. ML16343A225).

TN3656; McNeill 2000-TN4572; McNeill 2002-TN4571)."[131] The FEIS then determined that "[s]uch a construction problem is not expected at the Turkey Point site."[132] Neither CASE nor Mr. McNeill contradicts this conclusion. Accordingly, the McNeill paper and CASE's bare assertions do not support the first part of Contention 3.

b. The Second Part of Proposed Contention 3 Fails to Satisfy the Requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

The second part of Contention 3 asserts that the FEIS did not adequately consider the impact of "liquid radioactive waste" (i.e., tritium, cesium-134, cesium-137, and strontium-90) and other constituents.[133] The Board should reject this part of Contention 3, as CASE again fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

(i) CASE Does Not Establish a Genuine Dispute of Material Fact with the FEIS.

CASE's allegations regarding the impacts of radionuclides fail to address the already existing analyses in the FEIS. CASE alleges that the FEIS did not fully evaluate the impact of the "tritium, cesium and strontium 90."[134] On the contrary, as the FEIS describes, FPL modelled three dose scenarios in the FSAR and ER to address the possibility of inadvertent radioactive exposure from these radionuclides.[135] The NRC Staff evaluated these possible exposure pathways, even performing its own independent assessment of dose estimates from deep-well injection,[136] and "found them to be acceptable."[137] CASE makes a general claim criticizing the

---

[131] FEIS at 5-40.
[132] *Id.* at 5-40.
[133] *See* Petition at 21-29.
[134] *Id.* at 26.
[135] FEIS at 5-115 to 5-118; ER, Rev. 6, at 5.4-2 to 5.4-4.
[136] FEIS at G-4 to G-6.
[137] *Id.* at 5-118.

FEIS's adequacy, but fails to address or take issue with any specific part of these analyses. CASE's bare assertions are insufficient to support a contention and do not raise a material dispute with the FEIS.

CASE provides a general fact sheet by Ms. Cindy Folkers from the "Nuclear Information and Resource Service" on the potential impact of tritium.[138] As explained above, this fact sheet was available in 2006, and CASE could have relied on it to form a contention years ago. In addition, CASE provides no information to establish Ms. Folkers' credentials as a credible expert in the field of radiological health. Her fact sheet is inherently unreliable when it claims that no dose of tritium is acceptable, because that directly contradicts established NRC regulations on allowable dose,[139] as well as EPA regulations on the acceptable tritium concentration in water.[140] Most importantly, this fact sheet is totally unrelated to the Turkey Point project, which was not even in existence when the fact sheet was written. Accordingly, the fact sheet says nothing about the potential impacts of tritium in effluent at Turkey Point, nor does it criticize the relevant FEIS analysis. For these reasons, the Folkers document does not provide the required factual or expert support for Contention 3's claims regarding tritium, nor does it raise a genuine dispute with the FEIS.

The impact of radiological constituents in Turkey Point's wastewater has also already been the subject of a proposed contention in this proceeding. In Contention 2.1, the Joint Intervenors alleged that "the ER fails to adequately discuss or analyze the potential environmental impacts of migration of radioactive effluent from the Lower Floridan Aquifer into

---

[138] Petition at 22-24.

[139] *See* 10 C.F.R. § 20.1301(a)(1); 10 C.F.R. § 20.1301(e).

[140] *See* 40 C.F.R. § 141.66.

USDWs or Biscayne Bay."[141] This portion of Contention 2.1 was not admitted by the Board as the ER "contains the discussion on radiological constituents *and radiological impacts* that Joint Petitioners claim is missing." Board Order, LBP-11-6, 73 N.R.C. at 189-190 (emphasis added).

To the extent that Contention 3 also challenges the FEIS's analysis of other chemical effluents included in the Turkey Point wastewater,[142] CASE fails to address the existing analysis of those constituents in the FEIS. In FEIS Section 5.2.1.3, the NRC Staff describes the wastewater treatment that will reduce chemical effluents to the point that it "will provide protection to the USDW even in the event of upwelling."[143] Yet, CASE fails to provide facts or expert opinions disputing the analysis described in the FEIS. By ignoring the content of the FEIS, CASE has again failed to establish a genuine dispute with the document.

Contention 3 also makes no attempt to demonstrate that these additional chemical effluents will have any impact on the public health or the environment. To the contrary, CASE admits these other effluents are "present in dilute concentrations so only small amounts of dilution water are required to reach concentration levels that are within established standards."[144] CASE does not attempt to establish the impact of dilution, the expected migration of the constituents, or the specific levels of these constituents that would be harmful to the public health or environment. Instead, CASE relies on speculative assertions that the "chemicals will be introduced into the Boulder Zone and will eventually concentrate to [sic] otherwise illegal levels to wreak havoc on the South Florida ecology,"[145] while providing no factual or expert support.

---

[141] Joint Intervenors' Petition for Intervention at 30 (Aug. 17, 2010).

[142] Petition at 27-28. The extent of CASE's challenge to the other chemical effluents is limited to quoting portions of the FEIS and emphasizing the names of those effluents with a bold typeface. No further discussion is included.

[143] FEIS at 5-21.

[144] Petition at 26 (quoting FEIS at 6-9).

[145] Petition at 27.

As the Commission has stated, "[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.'" *Fansteel*, CLI-03-13, 58 N.R.C. at 203.

Accordingly, the second part of proposed Contention 3 is inadmissible under 10 C.F.R. § 2.309(f)(1)(v) and (vi).

c. The Third Part of Proposed Contention 3 Fails to Satisfy the Requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

(i) CASE Does Not Establish a Genuine Dispute of Material Fact with the FEIS.

The third part of Contention 3 hinges on CASE's argument that the wastewater may migrate into the Atlantic Ocean through a supposed connection with the Boulder Zone 25 miles east of Miami, and that the EIS failed to analyze that possibility.[146] CASE is incorrect. The FEIS analyzed the possibility of migration and found it would be very limited, and CASE provides no alternative facts or analysis to establish otherwise. As such, CASE has again failed to raise a genuine dispute on a material issue of law or fact.

As CASE acknowledges, the FEIS contains an analysis of the vertical and horizontal migration of the injected wastewater.[147] This analysis determined that the injected wastewater would migrate horizontally no more than 4 miles within 100 years after the start of injection.[148] CASE does not challenge the accuracy of this analysis.[149] And throughout those 100 years,

---

[146] Petition at 30.
[147] *See id.* at 25-26.
[148] *See* FEIS at 5-27.
[149] *See* Petition at 25-26.

radionuclide concentrations are expected to be at inconsequential levels.[150] Nevertheless, CASE speculates that the wastewater may migrate to, and have environmental impacts upon, the Atlantic Ocean because the Boulder Zone may connect to the Ocean about 25 miles east of Miami.[151] CASE, however, offers no factual or expert support to establish how it is reasonably foreseeable for wastewater—which the FEIS projects could travel, at most, 4 miles from the Turkey Point site over the next 100 years—to reach an area 25 miles east of Miami (if indeed such a pathway exists – which CASE also has not adequately supported). Thus, CASE has failed to establish a genuine dispute with the FEIS on this issue.[152]

For these reasons, the Board should reject proposed Contention 3 in its entirety.

D. PROPOSED CONTENTION 4 IS UNTIMELY AND INADMISSIBLE

In proposed Contention 4, CASE asserts that "NEPA was not fully honored in spirit or letter by the NRC Staff which approved measures harmful to the environment," and alleges that "many NEPA requirements were either not fully considered or were ignored totally in the EIS."[153] Proposed Contention 4 is short on specifics but appears to make the following three claims: (1) the FEIS inappropriately relies on computer modeling for many of its environmental

---

[150] FEIS at 5-27.

[151] *See* Petition at 30.

[152] CASE quotes a news article on the contamination of kelp off the coast of California post-Fukushima in support of this Contention. However, it is unclear what relevance this article has to the issues raised by CASE in this Contention, as there is no apparent link between the contamination of kelp and the wastewater injection into the Boulder Zone at Turkey Point. Without a clear explanation of relevance, this article does not help CASE establish a genuine issue of material fact:

> It is simply insufficient . . . for a petitioner to point to an Internet Web site or article and expect the Board on its own to discern what particular issue a petitioner is raising, including what section of the application, if any, is being challenged as deficient and why. A contention must make clear why cited references provide a basis for a contention.

USEC, Inc. (American Centrifuge Plant), CLI-06-10, 63 N.R.C. 451, 457 (2006).

[153] Petition at 31-32.

impacts analyses, and should have used field research and studies;[154] (2) the NRC inappropriately "condone[d] the injection of toxic chemicals and liquid radiological waste into a the rate [sic] and precious Boulder Zone in South Florida;"[155] and (3) the NRC failed to conduct an adequate energy alternatives analysis.[156] In addition, CASE generally questions whether the production of energy is "worth" the environmental impacts that may result from the construction and operation of the Turkey Point units, and requests admission of the Contention to "prevent a serious mistake and save CASE's members' [sic] from harm while restoring and preserving this slice of Paradise for their descendants."[157]

As discussed below, all of these claims should be rejected in the first instance because they are untimely. The issues CASE seeks to raise in proposed Contention 4 could have been raised long before the Staff issued the FEIS, based on information previously available in the February 2015 DEIS, if not earlier. In addition, even if the Board finds that the claims raised in proposed Contention 4 are timely, the Board should find the Contention otherwise inadmissible because it is not specific, seeks to raise issues outside the scope of this proceeding, is not supported by facts or expert opinion, and fails to raise a genuine dispute on a material issue of law or fact, all of which the Contention must do to be admissible under 10 C.F.R. § 2.309(f)(1)(i), (iii), (v), and (vi), respectively.

[154] Petition at 32.
[155] *Id.* at 33.
[156] *Id.* at 34-36.
[157] *Id.* at 38-39.

1. CASE's Claims Regarding the Use of Computer Modeling Are Untimely.

According to CASE, the FEIS inappropriately relies on computer modeling, rather than on "field research or studies," for conducting environmental analyses.[158] CASE, however, could have previously raised such concerns, in particular when the DEIS was published in February of 2015, if not earlier.

CASE does not identify any specific computer model at issue—this fact alone should render its computer modeling concerns inadmissible under 10 C.F.R. § 2.309(f)(1)(i)—but only vaguely refers to statements previously made in the Petition concerning uncertainty in computer models' results.[159] It appears, however, that CASE purports to challenge, for example, the use of computer modeling for assessing the water withdrawal from operation of the RCWs, which CASE discusses in proposed Contention 2,[160] or the groundwater modeling of radionuclide concentrations resulting from deep well injections of radiological waste, which CASE discusses in proposed Contention 3.[161]

CASE's concerns with respect to computer modeling and any associated uncertainty could have been raised long before now. The RCW-water withdrawal modeling and deep well injection-related groundwater modeling were previously discussed in the DEIS. For example, DEIS Appendix G, Section G.3.2, describes the groundwater modeling performed to help evaluate the effects of excavation dewatering and RCW operation on the Biscayne aquifer. The DEIS explains that FPL conducted its own groundwater model, while the NRC Staff retained the

[158] Petition at 32.
[159] *Id.* at 32.
[160] *See id.* at 13-14.
[161] *See id.* at 24-26.

U.S. Geological Survey to conduct additional modeling.[162] The DEIS further explained that the estimates obtained from both models were "imperfect due to a number of uncertainties."[163] In addition, DEIS Appendix G Section G.2.1 evaluates radiological dose estimates from the modeling of the deep-well injection exposure scenario. As explained in the DEIS, the "NRC staff calculated the postulated liquid pathway doses from the so-called child and driller conceptual scenario using a personal computer (PC) version of the LADTAP II code—NRCDose, Version 2.3.10 (CNS 2006-TN102)—obtained through the Oak Ridge Radiation Safety Information Computational Center."[164] In short, any concerns CASE had with computer modeling or the uncertainty that can accompany such modeling should have been raised at the very latest over 20 months go upon issuance of the DEIS, if not earlier.[165] Raising these claims now is untimely.

2. CASE's Claims Regarding Computer Modeling Fail to Satisfy the Commission's Admissibility Requirements

Even if CASE's concerns with computer modeling were timely raised (they were not), the concerns would be inadmissible for multiple other reasons. First, as previously noted, CASE's concerns with computer modeling lack specificity and thus fail to satsify10 C.F.R. § 2.309(f)(1)(i). Contention 4 as drafted does not challenge any particular model or the results from any model or study, but rather makes a broad and vague assertion essentially against all computer modeling used in the FEIS. Second, CASE's assertion that the Staff must conduct

[162] DEIS at G-26.

[163] *Id.*

[164] *Id.* at G-5.

[165] Similar information was also first presented in the 2009 ER (Rev. 0) submitted by FPL. *See* ER (Rev. 0) at 5.2-8 (explaining that "groundwater modeling was performed to simulate the steady-state conditions resulting from operation of the radial collector wells") and 5.4-3 (describing use of the LADTAP II computer program to calculate dose to an individual from liquid effluents).

additional field research or studies is a bare assertion unsupported by any fact or expert opinion, and thus fails to satisfy 10 C.F.R. § 2.309(f)(1)(v). Nowhere does CASE explain what specific field research or studies ought to be performed, or what they might show, and how that information might differ from what is presented in the FEIS.

Further, the assertion is not properly within the scope of this proceeding under 10 C.F.R. § 2.309(f)(1)(iii) because it amounts to an improper request that the Staff perform additional research projects to support its environmental analyses. NEPA imposes no such requirement on the Staff, and only requires that the chosen methodology for performing the environmental analysis be reasonable.

Just last week, the Commission rejected a similar claim made by CASE in the Turkey Point Units 3 and 4 license amendment proceeding. *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), CLI-16-18, __ N.R.C. __, slip op. at 7-9 (2016). The NRC Staff had approved a license amendment increasing the ultimate heat sink temperature in the Units 3 and 4 cooling canals, and CASE intervened to challenge the adequacy of the Staff's environmental review supporting the amendment. On appeal before the Commission, CASE challenged a licensing board decision for its "asserted failure to explore the underlying cause of the conditions being experienced in the cooling canal system." *Id.* at 7. The Commission rejected the challenge, ruling that "NEPA does not mandate that an agency undertake studies to obtain information that is not already available." *Id.* at 8. Applied to CASE's claims in this proceeding, the Commission's ruling means that NEPA cannot mandate that the Staff conduct field research or other studies to supplement any purported shortcomings in the computer modeling relied on in the FEIS.

Moreover, it is well-established in Commission and Federal Court case law that an EIS is not intended to be a research document. *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 N.R.C. 301, 341 (2012); *Pilgrim*, CLI-10-11, 71 N.R.C. at 315; *Pilgrim*, CLI-10-22, 72 N.R.C. at 208; *Town of Winthrop v. FAA*, 535 F.3d 1, 13 (1st Cir. 2008) ("'Agencies are entitled to select their own methodology as long as that methodology is reasonable. The reviewing court must give deference' to that decision."). The Commission in *Pilgrim*, for example, found that the appropriate NEPA inquiry is not whether there are alternative models that could have been used, or whether refinements could be made to an analysis, but whether the agency's chosen methodology is reasonable. *Pilgrim*, CLI-10-11, 71 N.R.C. at 315-316. Indeed, "while there 'will always be more data that could be gathered,' agencies complying with NEPA must have some discretion to "'draw the line'" on the amount of information that must be collected. *Pilgrim*, CLI-10-11, 71 N.R.C. at 315 (citing *Town of Winthrop*, 535 F.3d at 11).

Moreover, CASE's categorical assertion that "[n]o field research or studies specifically related to this monumental project were reported"[166] is simply wrong, and thus fails to raise a genuine dispute on a material issue under 10 C.F.R. § 2.309(f)(1)(vi). A contention fails to raise a genuine dispute on a material issue if it ignores or misstates the content of the licensing documents. *See, e.g., Carolina Power& Light Co.* (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 N.R.C. 2069, 2076 (1982); *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), LBP-82-107A, 16 N.R.C. 1791, 1804 (1982); *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), LBP-82-43A, 15 N.R.C. 1423, 1504-05 (1982).

FPL performed, and the FEIS relies on, dozens of field data reports, including for example, exploratory well tests and aquifer performance tests that appear to be central to

[166] Petition at 32.

CASE's concerns, and numerous other tests including use of meteorological tower data reports, a seagrass survey, a fish and shellfish abundance report, a tree survey, a cultural resources survey, a botanical survey for transmission lines, an avian survey, a mammal and herpetology survey, and a threatened and endangered species fauna survey. And there were dozens of field data reports performed by others on which the NRC relied, such as reports on the geologic features relevant for hydrogeological confinement. Examples of these field studies, as cited in Section 11 of the FEIS, are listed in Attachment A to this Response. CASE's allegation that field work and studies were not performed does not withstand the barest of scrutiny.

3. CASE's Claims that the NRC Staff Approved Harmful Measures Are Untimely.

In proposed Contention 4, CASE claims that the NRC Staff violated NEPA because it "approved measures harmful to the environment," such as the deep well injection of blow down water and other liquid wastes from the proposed Turkey Point units.[167] CASE therefore requests admission of this Contention so that the purported environmental harm can be prevented.[168]

These claims are untimely and should not be considered. CASE could have sought to raise this claim at the latest upon publication of the DEIS, where the Staff's evaluation of the environmental impact from the deep well injection of liquid wastes (and other actions) was first presented.[169] The DEIS explained that FPL studies showed that the maximum postulated radiological dose incurred would be below applicable design objectives, and that the Staff "performed an independent confirmatory evaluation of these hypothetical liquid pathways and

---

[167] Petition at 31. *See also id.* at 33, 38.

[168] *See id.* at 38-39.

[169] *See, e.g.*, DEIS Section 5.9.2.1, Liquid Effluent Pathway, and Section 5.9.3.3, Deep-Well Injection Scenarios – Postulated Doses.

concluded that FPL's analysis was appropriate."[170] There is nothing new or materially different, nor has CASE alleged anything new or different, in the FEIS's discussion of these topics. CASE's failure raise this issue until now renders this aspect of Contention 4 untimely and thus unsuitable for consideration in this proceeding.[171]

4. CASE's Claims that the NRC Staff Approved Harmful Measures Fail to Satisfy the Commission's Admissibility Requirements

Moreover, even if the Board finds CASE's claims to be timely, allegations that the NRC "approved measures" that are harmful to the environment are inapt. The NRC Staff's NEPA review has not "approved" anything. Rather, it has evaluated the expected environmental impacts from the proposed Turkey Point units. While NEPA requires the NRC to take a "hard look" at the expected environmental impacts of a proposed action, NEPA, "as a procedural statute, does not require any particular substantive result." *Turkey Point Units 3&4*, CLI-16-18, slip op. at 9. Just as the Commission rejected CASE's claims in the Turkey Point Units 3 and 4 license amendment proceeding that the NRC's NEPA review there did "not remedy its members' potential for injury because the Biscayne Aquifer and surrounding waters are still being affected," *id.*, so must the Board reject CASE's claims here. NEPA nowhere prescribes that the NRC must deny or condition a license to protect environmental interests. CASE's claims here are thus outside the scope of this proceeding and inadmissible under 10 C.F.R. § 2.309(f)(1)(iii).

In *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, the Supreme Court held that, unlike other environmental protection statutes imposing substantive obligations to avoid

---

[170] DEIS at 5-108 to 5-109.

[171] FPL's plan to dispose of treated liquid waste in the Boulder Zone through deep injection wells, and FPL's evaluation of potential environmental impacts from such disposal, were detailed in the 2009 ER (Rev. 0) submitted with the Turkey Point Units 6 and 7 license application. *See, e.g.*, ER (Rev. 0) at 5.4-1 to 5.4-3. Therefore, CASE could have raised any challenges to this plan, and the evaluation of the environmental impacts of this plan, years ago.

environmental harm, NEPA is a purely procedural statute designed to improve agency decision-making. *See* 490 U.S. at 350-51 & n.14 (comparing NEPA with the Endangered Species Act, among others). As the Court explained, NEPA does not require administrative agencies to strike a particular balance between environmental interests and other interests; indeed, so long as the agency has identified and evaluated the environmental effects, an agency is free to decide that other interests outweigh the entirety of the environmental interest at stake. *See id.* at 350-51 (finding that NEPA tolerated a 100% loss of certain animal populations evaluated in the EIS at issue). *See also Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 N.R.C. 31, 55 (2001) (noting that NEPA does not require the selection of the most "environmentally benign" alternative). That the particular balance chosen by an agency seemed inappropriate, the Court held, was irrelevant to the issue of compliance with NEPA, as NEPA prohibits uninformed — but not unwise — agency action. *Robertson*, 490 U.S. at 350-51. *See also Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), LBP-96-25, 44 N.R.C. 331, 342 (1996) (quoting *Matsumoto v. Brinegar*, 568 F.2d 1289, 1290 (9th Cir. 1978) (noting that NEPA even tolerates a project that is a "complete blunder" so long as it is a "knowledgeable blunder"), *reversed in part on other grounds*, CLI-97-15, 46 N.R.C. 294 (1997). Consequently, CASE's primary claim here—that the proposed Contention must be admitted to prevent environmental harm from occurring—is far outside the appropriate bounds of the NRC Staff's NEPA review and thus inadmissible.

Lastly, CASE's claims here are unsupported by fact or expert opinion and fail to raise a genuine dispute on a material issue as required under 10 C.F.R. § 2.309(f)(1)(v) and (vi). CASE fails to support its assertions regarding deep well injection with any specific factual support or expert opinion. Furthermore, CASE nowhere specifically challenges the analyses presented in

the FEIS. The FEIS discusses the impacts from injecting blowdown water and other liquid waste in various places, most prominently at pages 5-39 to 5-42. After a detailed analysis of the potential impacts, the FEIS concludes:

> Because of the evidence of adequate isolation of the Boulder Zone from the overlying USDW by layers of low-permeability rock, the potential effect of advanced treatment received by reclaimed wastewater before leaving the SDWWTP, the evaluation of the extent and fate of injected effluent at the Turkey Point site, risk assessments of deep well disposal, and the UIC monitoring requirements, the review team determined that the Upper Floridan aquifer USDW would be protected from degradation.[172]

Further, the FEIS reviews the potential radiation doses to the public through the liquid effluent pathway of deep well injection – i.e., whether after deep well injection, any of the effluent could have a postulated pathway to the surface, such as through a drinking water well.[173] The FEIS states that the "NRC staff has reviewed the proposed pathway scenarios for the radioactive liquid effluent injectate and found them to be acceptable."[174] CASE nowhere even mentions, much less disputes, the Staff's analysis or conclusions, and thus fails to raise a genuine dispute on these issues.

5. CASE's Alternative Energy Claims are Untimely.

In proposed Contention 4, CASE asserts that the evaluation of energy alternatives in the FEIS was insufficient.[175] These claims are untimely and therefore should not be entertained.

The NRC Staff's evaluation of energy alternatives in the FEIS is neither new nor materially different from that presented in the DEIS. Therefore, CASE's concerns here could

---

[172] FEIS at 5-41 to 5-42.
[173] *Id.* at 5-118.
[174] *Id.*
[175] Petition at 34-37.

have and should have been raised long ago. DEIS Section 9.2, Energy Alternatives, discusses potential environmental impacts associated with alternatives to construction of a new baseload nuclear power plant. DEIS Sections 9.2.3.2, 9.2.3.3, and 9.2.3.5 respectively discuss the potential for wind power, solar power, and geothermal energy—the three alternative energy sources cited in proposed Contention 4,[176]—to replace the 2,200 megawatts of electricity to be produced by the proposed Turkey Point units. This discussion of these three alternatives in the DEIS is nearly identical and substantively unchanged in the FEIS.[177] Consequently, any concerns CASE had with respect to the NRC Staff's consideration of alternative energy sources could have and should have been raised over 20 months ago following publication of the DEIS.[178]

6. CASE's Alternative Energy Claims Fail to Satisfy the Commission's Admissibility Requirements

Even if CASE's alternative energy concerns were not inexcusably late (they are), they are inadmissible because they are bare assertions unsupported by fact or expert opinion. Furthermore, CASE's claims fail to raise a genuine dispute with the FEIS because they fail to undercut the Staff's extensive energy alternatives analysis in the FEIS.

While NEPA and the Commission's implementing regulations dictate that the NRC must consider alternatives to a proposed action,[179] there are limits upon the range of alternatives that

---

[176] Petition at 36.

[177] *See* FEIS at §§ 9.2.3.2, 9.2.3.3, 9.2.3.5.

[178] The 2009 ER (Rev. 0) contained a detailed discussion of energy alternatives, including wind (ER (Rev. 0) at 9.2-9 to 9.2-12), solar (*id.*, at 9.2-12 to 9.2-16), geothermal (*id.* at 9.2-19 to 9.2-21), and a combination of competitive alternatives (*id.* at 9.2-36). Consequently, CASE could have raised its alternative energy-related claims at the very outset of this proceeding.

[179] Under the NRC's Part 51 regulations, which govern the NRC Staff's NEPA review, the Staff's draft environmental impact statement must discuss the matters covered in Section 51.45, including alternatives to the proposed action under Section 51.45(b)(3). *See* 10 C.F.R. § 51.71(a). The final environmental impact statement

must be considered. The Commission repeatedly has held that its EISs "need only discuss those alternatives that 'will bring about the ends' of the proposed action." *NextEra Energy Seabrook, LLC* (Seabrook Station, Unit 1), CLI-12-5, 75 N.R.C. 301, 339 (2012) (quoting *Hydro Resources*, CLI-01-4, 53 N.R.C. at 55 (quoting *Citizens Against Burlington v. Busey*, 938 F.2d 190, 195 (D.C. Cir.), *cert. denied*, 502 U.S. 994 (1991)). *See also Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), CLI-93-3, 37 N.R.C. 135, 144-45 (1993) (noting that the NRC must only "consider the range of alternatives 'reasonably related' to the scope and goals of the proposed action"). Further, the Commission holds that reasonable alternatives are those that are "currently commercially viable, or will become so in the relatively near term." *Seabrook*, CLI-12-5, 75 N.R.C. at 342.

In addition, in defining the ends of a proposed action, where a federal agency is not a project's sponsor, the "consideration of alternatives may accord substantial weight to the preferences of the applicant and/or sponsor." *City of Grapevine v. DOT*, 17 F.3d 1502, 1506 (D.C. Cir.), *cert. denied*, 513 U.S. 1043 (1994). The Commission follows this practice with its licensing actions. *Seabrook*, CLI-12-05, 75 N.R.C. at 339 ("We give substantial weight to the preferences of the applicant and/or sponsor." (quotation and citation omitted)). *See also Hydro Resources*, CLI-01-4, 53 N.R.C. at 55; *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 N.R.C. 125, 146 (2004); *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant) LBP-05-31, 62 N.R.C. 735, 753 n.83 (2005), *aff'd*, CLI-06-06, 63 N.R.C. 161 (2006).

---

must address any comments on the draft statement, including the draft alternatives discussion and any alternatives not previously given serious consideration. *Id.* at § 51.91(a).

The purpose and need for the proposed Turkey Point Units 6 and 7 is to provide an additional 2200 megawatts of baseload electrical generation capacity for use in FPL's current markets.[180] FEIS Section 9.2.3 presents the Staff's consideration of the feasibility of replacing the proposed baseload nuclear generation with generation from solar, wind, geothermal, and other sources.[181] Consistent with Federal Court and Commission precedent summarized above, the Staff found that these alternatives were "not reasonable alternatives to two new nuclear units that would provide baseload power."[182] The NRC Staff also noted that the Florida Public Service Commission also determined that "renewable generation available today or in the foreseeable future cannot provide enough baseload capacity to avoid the need for the addition of proposed Turkey Point Units 6 and 7."[183]

More specifically, with respect to wind power, the FEIS concludes:

> Because (1) the wind resource in Florida is not optimal for utility-scale generation, (2) the DOE/EIA projects no growth in wind energy in Florida, (3) the capacity factor of wind power is too low for baseload applications, and (4) the offshore area needed (and the associated environmental impacts) would be very large, the NRC staff concludes that a wind-energy facility at the Turkey Point site or elsewhere within FPL's ROI would not be a reasonable alternative to construction of a 2,200 MW(e) nuclear power-generation facility that would be operated as a baseload plant.[184]

With respect to solar power, the FEIS concludes:

> Because (1) the projections for growth in solar energy in Florida are limited, (2) the area needed (and the associated environmental impacts) would be very large, and (3) the capacity factor of solar power is too low for baseload applications, the NRC staff concludes that a solar-energy facility at or in the vicinity of the Turkey

[180] FEIS at 9-2 to 9-3.
[181] *Id.* at 9-22 to 9-28.
[182] *Id.* at 9-23.
[183] *Id.*
[184] *Id.* at 9-24.

> Point site would not be a reasonable alternative to construction of a 2,200 MW(e) nuclear power-generation facility that would be operated as a baseload plant.[185]

The FEIS adds that geothermal energy would not be a reasonable alternative to constructing a 2,200 megawatt nuclear generation baseload facility.[186] Referencing a 2010 Department of Energy study, the Staff concluded that "Florida has high-temperature geothermal resources that are suitable for space heating applications, but not for baseload power generation."[187] In addition, the Staff referred to a University of Florida Geophysical Laboratory investigation, which found that "[t]hermal gradients found in the majority of the wells drilled in Florida were below average to average, indicating little promise of a significant geothermal resource."[188]

The FEIS also considered a combination of alternative energy sources including solar energy.[189] The Staff noted that a fossil fuel energy source—most likely natural gas or coal—would need to be a significant contributor to any reasonable energy combination, and found that such a combination reliant on natural gas would have similar environmental impacts to a natural gas-only alternative.[190]

CASE's assertions in proposed Contention 4 fail to provide alleged facts or expert opinion sufficient to raise a genuine dispute with the FEIS's comprehensive discussion of energy alternatives. CASE baldly asserts that the FEIS failed to consider "decentralized distributed

---

[185] FEIS at 9-25.
[186] *Id.* at 9-26.
[187] *Id.*
[188] *Id.*
[189] *Id.* at 9-28.
[190] *Id.* at 9-28 – 9-29.

production of energy at the point of use including solar, wind, and geothermal energy."[191] CASE claims that the installation of these technologies is increasing while their costs are decreasing as their technology advances.[192] CASE, however, offers no factual support or expert opinion supporting its assertions here, as it is required to do under the Commission's regulations.

Moreover, CASE's bare, unsupported assertions fail to raise a genuine dispute on a material issue because they do not challenge the renewable alternatives analysis in the FEIS. *South Carolina Elec. & Gas Co. and South Carolina Public Service Authority* (Virgil C. Summer Nuclear Station, Units 2 and 3) CLI-10-1, 71 N.R.C. 1, 21-22 (2010). In *Summer*, the Commission upheld a licensing board ruling rejecting a portion of a proposed contention on energy alternatives where the applicant's environmental report included a discussion considering whether renewable energy sources could generate sufficient baseload power, or whether a mix of alternatives might be cost-effective to generate 2214 megawatts of electricity. *Id.* The licensing board ruled that the applicant's environmental report "considered and examined precisely those renewable sources of power that Petitioner extols here (wind, solar, and biomass) and determined that those sources, individually or in combination, cannot meet the identified purpose of the proposed action, which is to develop approximately 2000 megawatts of baseload electrical generation." *South Carolina Elec. & Gas Co. and South Carolina Public Service Authority* (Virgil C. Summer Nuclear Station, Units 2 and 3) LBP-09-2, 69 N.R.C. 87, 110 (2009).

Thus, the licensing board ruled that there was no omission in the applicant's analysis, petitioner failed to identify any specific error in the analysis, and petitioner had failed to challenge applicant's analysis. *Id.* The licensing board also found that the applicant had

[191] Petition at 36.
[192] *Id.*

reviewed a variety of alternative combinations of energy sources, and that it was the petitioner's obligation to specify other alternatives and indicate why they would be appropriate. *Id.* at 111. The Commission upheld the licensing board rulings because the petitioners merely put forward "general assertions, without some effort to show why the assertions undercut findings or analyses in the ER," and had failed to contradict applicant's discussion of alternate combinations, "with a discussion of why such alternate combinations would constitute reasonable alternatives." *Summer,* CLI-10-1, 70 N.R.C. at 22.

That is essentially the situation here. CASE's unsupported assertions fail to undercut the Staff's findings that renewables cannot replace the proposed 2200 megawatts of nuclear baseload generation from proposed Turkey Point Units 6 and 7. Nor do they challenge the Staff's conclusion that any combination of alternatives would have to rely on a substantial natural gas component, whose overall impacts would be substantially similar to the natural-gas only alternative. CASE does not propose any different combination of alternatives and provide a discussion of why that combination would be reasonable—i.e., capable of producing 2200 megawatts of baseload electricity.

Nor is the Staff required to evaluate more potential energy alternative combinations. As previously noted, "while there 'will always be more data that could be gathered,'" the NRC has the discretion to "'draw the line'" on the amount of information that must be collected. *Pilgrim*, CLI-10-11, 71 N.R.C. at 315 (citing *Town of Winthrop*, 535 F.3d at 11).

Finally, CASE itself states that the renewable energy sources it advocates—point of use wind, solar, and geothermal power—are "emerging and evolving technologies."[193] Without any

[193] Petition at 36.

showing that such technologies are "currently commercially viable, or will become so in the relatively near term," they are not required to be considered in the FEIS. *Seabrook*, CLI-12-5, 75 N.R.C. at 342.

For these reasons, proposed Contention 4 is inadmissible in its entirety.

VI. CONCLUSION

For the foregoing reasons, FPL respectfully requests that the Board reject CASE's Petition because: (1) CASE has failed to establish standing; (2) all of CASE's proposed contentions are untimely; and/or (3) CASE's proposed contentions do not satisfy the Commission's standards for admissibility.

Respectfully submitted,

/Signed electronically by Anne R Leidich/

Steven Hamrick
FLORIDA POWER & LIGHT COMPANY
801 Pennsylvania Avenue, N.W. Suite 220
Washington, DC 20004
Telephone: 202-349-3496
Facsimile: 202-347-7076
steven.hamrick@fpl.com

Michael G. Lepre
Timothy J.V. Walsh
Anne R. Leidich
PILLSBURY WINTHROP SHAW PITTMAN LLP
1200 Seventeenth Street, NW
Washington, DC 20036
Telephone: 202-663-8707
Facsimile: 202-663-8007
michael.lepre@pillsburylaw.com
timothy.walsh@pillsburylaw.com
anne.leidich@pillsburylaw.com

December 19, 2016

Counsel for FLORIDA POWER & LIGHT COMPANY

Attachment A – Examples of Field Data and Studies Relied on in the FEIS

EAI (Ecological Associates, Inc.). 2009. *Turkey Point Peninsula Seagrass Survey*. Jensen Beach, Florida. Accession No. ML12240A279. TN153.

EAI (Ecological Associates, Inc.). 2009. *Species and Relative Abundances of Fish and Shellfish in the Vicinity of the Turkey Point Plant Based on Recent Collections.* Jensen Beach, Florida. Accession No. ML12240A280. TN154.

FPL (Florida Power & Light Company). 2009. Letter from M. Gettler to NRC, dated August 7, 2009, regarding "Supplemental Meteorological Data in Support of Application for Combined License." L-2009-146, Juno Beach, Florida. Accession No. ML092250585. TN1230.

FPL (Florida Power & Light Company). 2009. *Turkey Point Exploratory Drilling and Aquifer Performance Test Program*. HDR Engineering, Inc., West Palm Beach, Florida. Accession No. ML110820053. TN1263.

FPL (Florida Power & Light Company). 2009. *Avian Surveys of the Turkey Point Property Associated with Units 6 & 7, June 23–24, 2009*. L-2011-163, Tetra Tech NUS, Inc., Aiken, South Carolina. Accession Nos. ML11118A175, ML111180713. TN1334.

FPL (Florida Power & Light Company). 2009. *Mammal Trapping and Herpetology Report Turkey Point Property Associated with Units 6 & 7, April 13–16, 2009*. L-2011-163, Tetra Tech NUS, Inc., Aiken, South Carolina. Accession Nos. ML11118A175, ML111180713. TN1444.

FPL (Florida Power & Light Company). 2009. *Threatened and Endangered Fauna Species Survey of Planned Transmission Corridors Levee to Pennsuco and Davis to Miami Turkey Point Property Associated with Units 6 & 7.* L-2011-163, Tetra Tech NUS, Inc., Aiken, South

Carolina. Accession Nos. ML11118A175, ML111180713. TN1449. FPL (Florida Power & Light Company). 2009. *Cultural Resource Assessment Survey Work Plan for the Turkey Point Units 6 & 7 Site and Associated Non-Linear Facilities*. L-2011-095, Janus Research, Tampa, Florida. Accession No. ML11109A021. TN1513.

FPL (Florida Power & Light Company). 2009. *Preliminary Cultural Resources Report for the Turkey Point Units 6 & 7 Associated Linear Facilities [Redacted]*. L-2011-095, Janus Research, Tampa, Florida. Accession No. ML11109A022. TN1514.

FPL (Florida Power & Light Company). 2009. *Cultural Resource Assessment Survey Work Plan for the Turkey Point Units 6 & 7 Associated Linear Facilities [Redacted]*. L-2011-095, Janus Research, Tampa, Florida. Accession No. ML11109A022. TN1515

FPL (Florida Power & Light Company). 2010. *FPL Turkey Point Plant Annual American Crocodile (*Crocodylus acutus*) Report.* L-2011-218, Federal Permit TE092945-1, State Permits WS06468a and WX06467a, Juno Beach, Florida. Accession No. ML11180A084. TN211.

FPL (Florida Power & Light Company). 2011. "Table 4-MDC-D-11: Tree Survey." Golder Associates, Inc., Jacksonville, Florida. Accession No. ML14287A752. TN1471.

FPL (Florida Power & Light Company). 2011. *Cultural Resource Assessment Survey for the Turkey Point Units 6 & 7 Site, Associated Non-Linear Facilities, and Spoils Areas on Plant Property*. L-2011-095, Janus Research, Tampa, Florida. Accession Nos. ML11109A019, ML11109A017. TN1512.

FPL (Florida Power & Light Company). 2011. Letter from J. Lindsay to E. Haubold, dated December 30, 2011, regarding "Annual American Crocodile (*Crocodylus acutus*) Report, Federal Permit TE092945-2, State Permits WS06462a and WX06467a." Juno Beach, Florida. Accession No. ML14336A335. TN2471

FPL (Florida Power & Light Company). 2012. *Report on the Construction and Testing of Class V Exploratory Well EW-1 at the Florida Power & Light Company Turkey Point Units 6 & 7*. McNabb Hydrogeologic Consulting, Inc., Jupiter, Florida. Accession No. ML14336A337. TN1577.

FPL (Florida Power & Light Company). 2012. *Turkey Point Plant Comprehensive Pre-Uprate Monitoring Report, Units 3 and 4 Uprate Project*. Ecology and Environment, Inc., Lancaster, New York. Accession No. ML15026A503. TN3439.

FPL (Florida Power & Light Company). 2012. *Report on the Construction and Testing of Dual-Zone Monitor Well DZMW-1 at the Florida Power & Light Company, Turkey Point Units 6 & 7*. McNabb Hydrogeologic Consulting, Inc., Jupiter, Florida. Accession No. ML14342A010. TN4053.

FPL (Florida Power & Light Company). 2015. *Turkey Point Units 3 and 4 2014 Annual Radioactive Effluent Release Report.* L-2015-038, Homestead, Florida. Accession No. ML15072A014. TN4407.

FPL (Florida Power & Light Company). 2015. *Turkey Point Units 3 and 4 2014 Annual Radiological Environmental Operating Report*. L-2015-102, Homestead, Florida. Accession No. ML15147A515. TN4408.

FPL (Florida Power & Light Company). 2016. *Florida Power & Light Company Turkey Point Plant Annual American Crocodile* (Crocodylus acutus) *Report*. Federal Permit TE092945-3, Juno Beach, Florida. Accession No. ML16216A228. TN4606.

FPL (Florida Power & Light Company). 2016. *Turkey Point Plant Comprehensive Post-Uprate Monitoring Report, Units 3 and 4 Uprate Project.* Ecology and Environment, Inc., Lancaster, New York. Accession No. ML16216A230. TN4615.

FPL (Florida Power & Light Company). 2016. *Turkey Point Units 3 and 4 2015 Annual Radioactive Effluent Release Report.* L-2016-029, Homestead, Florida. Accession No. ML16109A044. TN4617.

FPL (Florida Power & Light Company). 2016. *Turkey Point Units 3 and 4 2015 Annual Radiological Environmental Operating Report*. L-2016-106, Homestead, Florida. Accession No. ML16144A790. TN4618.

MHC (McNabb Hydrogeologic Consulting, Inc.). 2014. Letter from D. McNabb to Florida Department of Environmental Protection, dated April 1, 2014, regarding "Florida Power & Light Company Turkey Point Units 6 & 7 Class I Injection Well DIW-1 Short-Term Injection Test Technical Memorandum; Permit #293962-002-UC." Jupiter, Florida. Accession No. ML14342A026. TN4052.

Cunningham, K.J. 2013. Integrating Seismic-Reflection and Sequence-Stratigraphic Methods to Characterize the Hydrogeology of the Floridan Aquifer System in Southeast Florida. U.S. Geological Survey Open File Report 2013-1181, Reston, Virginia. Accession No. ML16172A124. TN4573.

Cunningham, K.J. 2014. *Integration of Seismic-Reflection and Well Data to Assess the Potential Impact of Stratigraphic and Structural Features on Sustainable Water Supply from the Floridan Aquifer System*. Open-File Report 2014–1136, U.S. Geological Survey, Davie, Florida. Accession No. ML14342A048. TN4051.

Cunningham, K.J. 2015. *Seismic-Sequence Stratigraphy and Geologic Structure of the Floridan Aquifer System Near "Boulder Zone" Deep Wells in Miami-Dade County, Florida.* U.S. Geological Survey Scientific Investigations Report 2015-5013, Reston, Virginia. Accession No. ML16172A125. TN4574.

Cunningham, K.J. and M.C. Sukop. 2011. *Multiple Technologies Applied to Characterization of the Porosity and Permeability of the Biscayne Aquifer, Florida.* U.S. Geological Survey, Report 2011–1037, Fort Lauderdale, Florida. Accession No. ML14223A029. TN1339.

Cunningham, K.J., C. Walker, and R.L. Westcott. 2012. "Near-Surface, Marine Seismic-Reflection Data Define Potential Hydrogeologic Confinement Bypass in the Carbonate Floridan Aquifer System, Southeastern Florida." In *SEG Technical Program Expanded Abstracts 2012*, Society of Exploration Physicists, Tulsa, Oklahoma. Available at http://library.seg.org/doi/abs/10.1190/segam2012-0638.1. TN4576.

December 19, 2016

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of	)		
	)	Docket Nos.	52-040-COL
Florida Power & Light Company	)		52-041-COL
	)		
Turkey Point Units 6 and 7	)	ASLBP No.	10-903-02-COL
(Combined License Application)	)		

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Answer Opposing Citizens Allied For Safe Energy's Petition to Intervene and Request for Hearing Regarding The Final EIS for Turkey Point 6 & 7 has been served through the EFiling system on the participants in the above-captioned proceeding this 19th day of December, 2016.

/signed electronically by Anne R Leidich/
Anne R Leidich