

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
)
FLORIDA POWER AND LIGHT COMPANY) Docket Nos. 52-040 & 52-041
)
)
(Turkey Point Nuclear Plant, Units 6 & 7))

NRC STAFF'S ANSWER TO "PETITION FOR INTERVENTION" OF
MARK ONCAVAGE, DAN KIPNIS, SOUTHERN ALLIANCE FOR CLEAN ENERGY,
AND NATIONAL PARKS CONSERVATION ASSOCIATION

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INTRODUCTION

Pursuant to 10 C.F.R. § 2.309(h)(1), the staff of the U.S. Nuclear Regulatory Commission (Staff) hereby answers the "Petition for Intervention" submitted by Mark Oncavage, Dan Kipnis, Southern Alliance for Clean Energy (SACE), and National Parks Conservation Association (NPCA) ("Petition"). The Staff agrees that Mark Oncavage, Dan Kipnis, SACE, and NPCA ("Petitioners") have presented information sufficient to support their standing in this proceeding. However, the Petitioners have not submitted at least one admissible contention. Accordingly, the Petition should be denied.

BACKGROUND

On June 30, 2009, Florida Power and Light Company ("Applicant"), pursuant to the Atomic Energy Act of 1954, as amended (AEA) and the Commission's regulations, submitted an application for combined licenses (COL) for two AP1000 Pressurized Water Reactors (PWRs) to be located adjacent to the existing Turkey Point Units 1 through 5, at the Turkey Point site near Homestead, Florida ("Application"). See Letter from Mano K. Nazar, Florida Power & Light, to Michael Johnson, NRC Office of New Reactors, dated June 30, 2009 (ADAMS Accession No. ML091830589). The Application references the standard design certification (DCD) issued to

Westinghouse Electric Company, as amended, including Revisions 16 and 17. The proposed units would be known as Turkey Point, Units 6 & 7.

On August 3, 2009, the Staff published a notice of the receipt and availability of the Application in the *Federal Register*. 74 Fed. Reg. 38,477 (Aug. 3, 2009). The Application was accepted for docketing on September 4, 2009. 74 Fed. Reg. 51,621 (Oct. 7, 2009). On June 18, 2010, the NRC published a Notice of Hearing and Opportunity to Petition for Leave to Intervene, which provided members of the public sixty days from the date of publication to file a petition for leave to intervene in this proceeding. See "Florida Power & Light Company, Combined License Application for the Turkey Point Units 6 & 7, Notice of Hearing, Opportunity for Leave to Petition to Intervene and Associated Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information for Contention Preparation," 75 Fed. Reg. 34,777 (June 18, 2010). In response to the Notice of Hearing, the Petitioners submitted their Petition, through which they seek to intervene in this proceeding, on August 17, 2010. On August 31, 2010, this Atomic Safety and Licensing Board was established to preside over the proceeding. See 75 Fed. Reg. 54,400 (Sept. 7, 2010).

DISCUSSION

In their Petition, Mark Oncavage, Dan Kipnis, Southern Alliance for Clean Energy (SACE), and National Parks Conservation Association (NPCA), assert that they have standing to intervene on behalf of themselves or on behalf of their members located within 50 miles of the proposed facility. Petition at 2-5. The Petitioners further proffer nine contentions. *Id.* at 8-65. For reasons explained below, the Staff does not oppose the Petitioners' standing to intervene as a party. However, the Petitioners have not submitted at least one admissible contention. Accordingly, the Petition should be denied.

I. LEGAL STANDARDS

A. Standing to Intervene

In accordance with the Commission's Rules of Practice:

[a]ny person whose interest may be affected by a proceeding and who desires to participate as a party must file a written request for hearing or petition for leave to intervene and a specification of the contentions that the person seeks to have litigated in the hearing.

10 C.F.R. § 2.309(a). The regulations further provide that the Licensing Board:

will grant the [petition] if it determines that the [petitioner] has standing under the provisions of [10 C.F.R. § 2.309(d)] and has proposed at least one admissible contention that meets the requirements of [10 C.F.R. § 2.309(f)].

Id.

Under the general standing requirements set forth in 10 C.F.R. § 2.309(d)(1), a request for hearing or petition for leave to intervene must 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 [AEA] 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).

As the Commission has observed:

[a]t the heart of the standing inquiry is whether the petitioner has "alleged such a personal stake in the outcome of the controversy" as to demonstrate that a concrete adverseness exists which will sharpen the presentation of issues.

Sequoyah Fuels Corp. and Gen. Atomics (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 71 (1994) (citing *Duke Power Co. v. Carolina Envtl. Study Group, Inc.*, 438 U.S. 59, 72 (1978), and quoting *Baker v. Carr*, 369 U.S. 186, 204 (1962)).

To demonstrate such a "personal stake," the Commission applies contemporaneous judicial concepts of standing. Accordingly, petitioner

must (1) allege an “injury in fact” that is (2) “fairly traceable to the challenged action” and (3) is “likely” to be “redressed by a favorable decision.”

Sequoyah Fuels, 40 NRC at 71-72 (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992) (citations and internal quotations omitted) and citing *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993)). See also *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 323 (1999).

In reactor licensing proceedings, licensing boards have typically applied a “proximity” presumption to persons “who reside in or frequent the area within a 50-mile radius” of the proposed plant. See, e.g., *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 148 (2001). The Commission noted this practice with approval, stating that:

We have held that living within a specific distance from the plant is enough to confer standing on an individual or group in proceedings for construction permits, operating licenses, or significant amendments thereto[.] See, e.g. *Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), ALAB-522, 9 NRC 54 (1979). . . . [T]hose cases involved the construction or operation of the reactor itself, with clear implications for the offsite environment[.] See, e.g., *Gulf States Utilities Co.* (River Bend Station, Units 1 and 2), ALAB-183, 8 [sic, 7] AEC 222, 226 (1974).

Fla. Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989). The proximity presumption establishes standing without the need to establish the elements of injury, causation, or redress. *Turkey Point*, LBP-01-6, 53 NRC at 150. The Commission has recently affirmed that the 50-mile proximity presumption applies to applications for new nuclear power plants, including combined license applications. *Calvert Cliffs 3 Nuclear Project LLC & Unistar Nuclear Operating Services, LLC* (Combined License Application for Calvert Cliffs, Unit 3), CLI-09-20, 70 NRC ___ (slip op. at 5-8) (Oct. 13, 2009).

An organization may establish its standing to intervene based upon a theory of organizational standing (showing that its own organizational interests could be adversely

affected by the proceeding), or representational standing (based upon the standing of its members).

To demonstrate organizational standing, an organization must be able to intervene in its own right. "Organizations seeking to intervene in their own right must satisfy the same standing requirements as individuals seeking to intervene . . . because an organization, like an individual, is considered a 'person' as we have defined that word in 10 C.F.R. § 2.4 and as we have used it in 10 C.F.R. § 2.309 regarding standing." *Consumers Energy Co.* (Palisades Nuclear Power Plant), CLI-07-18, 65 NRC 399, 411 (2007). Thus, to establish organizational standing, an organization "must demonstrate a palpable injury in fact to its organizational interests that is within the zone of interests protected by the AEA or NEPA." *Crow Butte Resources, Inc.* (License Amendment for the North Trend Expansion Project), LBP-08-6, 67 NRC 241, 271 (2008).

Where an organization seeks to establish representational standing, it must show that at least one of its members may be affected by the proceeding, it must identify that member by name and address and it must show that the member "has authorized the organization to represent him or her and to request a hearing on his or her behalf." See, e.g., *Palisades*, CLI-07-18, 65 NRC at 409; *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), LBP-06-07, 63 NRC 188, 195 (2006) (citing *GPU Nuclear Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 202 (2000)). Further, for the organization to establish representational standing, the member seeking representation must qualify for standing in his or her own right, the interests that the organization seeks to protect must be germane to its own purpose, and neither the asserted claim nor the requested relief may require an individual member to participate in the organization's legal action. *Palisades*, CLI-07-18, 65 NRC at 409; *Private Fuel Storage*, CLI-99-10, 49 NRC at 323 (citing *Hunt v. Wash. State Apple Advertising Comm'n*, 432 U.S. 333, 343 (1977)).

B. Legal Requirements for Contentions

The legal requirements governing the admissibility of contentions are well established and are currently set forth in 10 C.F.R. § 2.309(f) of the Commission's Rules of Practice.

The standards in 10 C.F.R. § 2.309(f)(1) may be summarized as follows. An admissible contention must: (1) provide a specific statement of the legal or factual issue sought to be raised; (2) provide a brief explanation of the basis for the contention; (3) demonstrate that the issue raised is within the scope of the proceeding; (4) demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding; (5) provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at the hearing; and (6) provide sufficient information to show that a genuine dispute with the Applicant exists with regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief. See 10 C.F.R. § 2.309(f).¹

¹ Section 2.309(f) provides:

(f) Contentions.

(1) A request for hearing or petition for leave to intervene must set forth with particularity the contentions sought to be raised. For each contention, the request or petition must:

(i) Provide a specific statement of the issue of law or fact to be raised or controverted;

(ii) Provide a brief explanation of the basis for the contention;

(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

(Continued...)

Sound legal and policy considerations underlie the Commission's contention requirements. The purpose of the contention rule is to "focus litigation on concrete issues and result in a clearer and more focused record for decision." 69 Fed. Reg. at 2202; *see also Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 553-54 (1978); *BPI v. AEC*, 502 F.2d 424, 428 (D.C. Cir. 1974); *Phila. Elec. Co. (Peach Bottom Atomic Power Station, Units 2 and 3)*, ALAB-216, 8 AEC 13, 20 (1974). The Commission has stated that it "should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing." 69 Fed. Reg. at 2202. The Commission has emphasized that the rules on contention admissibility are "strict by design." *Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3)*, CLI-01-24, 54 NRC 349, 358 (2001), *pet. for reconsideration denied*, CLI-02-01, 55 NRC 1 (2002). Failure to comply with any of these requirements is grounds for the dismissal of a contention. 69 Fed. Reg. at 2221; *see also, Private Fuel Storage, L.L.C.*, CLI-99-10, 49 NRC at 325; *Ariz. Pub. Serv. Co. et al.* (Palo

(Continued . . .)

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

(vi) 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.

(vii) [omitted]

(2) Contentions must be based on documents or other information available at the time the petition is to be filed, such as the application, supporting safety analysis report, environmental report or other supporting document filed by an applicant or licensee, or otherwise available to a petitioner. On issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant's environmental report.

10 C.F.R. § 2.309(f)(1) - (f)(2).

Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991).

“Mere ‘notice pleading’ does not suffice.” *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006).

Finally, it is well established that the purpose for requiring a would-be intervener to establish the basis of each proposed contention is: (1) to assure that the contention raises a matter appropriate for adjudication in a particular proceeding; (2) to establish a sufficient foundation for the contention to warrant further inquiry into the assertion; and (3) to put other parties sufficiently on notice of the issues so that they will know generally what they will have to defend against or oppose. *Peach Bottom*, ALAB-216, 8 AEC at 20-21; *Ariz. Pub. Serv. Co., et al.* (Palo Verde Nuclear Generating Station, Units 1, 2 and 3), LBP-91-19, 33 NRC 397, 400 (1991). The *Peach Bottom* decision requires that a contention be rejected if:

- (1) it constitutes an attack on applicable statutory requirements;
- (2) it challenges the basic structure of the Commission’s regulatory process or is an attack on the regulations;
- (3) it is nothing more than a generalization regarding the petitioner’s view of what applicable policies ought to be;
- (4) it seeks to raise an issue which is not proper for adjudication in the proceeding or does not apply to the facility in question; or
- (5) it seeks to raise an issue which is not concrete or litigable.

Peach Bottom, 8 AEC at 20-21.

These rules focus the hearing process on real disputes susceptible to resolution in an adjudication. See *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999). For example, “a petitioner may not demand an adjudicatory hearing to attack generic NRC requirements or regulations or to express generalized grievances about NRC policies.” *Id.* Specifically, NRC regulations do not allow a contention to attack a regulation unless the proponent requests a waiver from the Commission. See 10 C.F.R. § 2.335; *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13, 17-18 and n.15 (2007) (citing *Millstone*, CLI-01-24, 54 NRC at 364).

II. EACH OF THE PETITIONERS HAS ESTABLISHED STANDING.

In support of their standing in this proceeding, the Petitioners provide declarations demonstrating “that (1) Petitioners Kipnis and Oncavage live within 50 miles of the Turkey Point site, and (2) Petitioners SACE and NPCA have members who live within 50 miles of the Turkey Point site.” Petition at 4.²

The Staff agrees that because their residences appear to be within 50 miles of the Turkey Point site, Petitioners Kipnis and Oncavage enjoy presumptive standing by virtue of their proximity to the Turkey Point site.³ See *Calvert Cliffs*, CLI-09-20, 70 NRC __ (slip op. at 5-8).

Both SACE and NPCA assert representational standing to intervene in this proceeding by identifying members of their organizations who live within 50 miles of the proposed site and who have authorized SACE or NPCA, as applicable, to represent them in this proceeding. Petition at 4. Joint Petitioners state that these members “have presumptive standing by virtue of their proximity to the new nuclear reactors that may be constructed on the Turkey Point Site.” *Id.* at 4-5.

The Staff agrees that both SACE and NPCA have established representational standing by demonstrating that their members would otherwise have standing to participate in their own right and that at least one of their members have authorized them to represent the member’s interests. See *Palisades*, CLI-07-18, 65 NRC at 409. All of the named members, except Mr.

² The Petition names eleven individuals, four of whom are identified as SACE members and five of whom are identified as NPCA members. However, Petitioners’ Exhibit 1 is not consistent with the Petition in two respects. Mr. Bruce Matheson, named as a NPCA member, has no declaration included in the exhibit. Additionally, a declaration has been provided for Ms. Jessica Okaty, but she is not named in the Petition.

³ Petitioners Kipnis’ and Oncavage’s address locations were reviewed using Microsoft *Streets and Trips*.

Bruce Matheson, have provided declarations, which were filed with the Petition as Exhibit 1, that identify the location of the declarant's residence. Each of SACE's four named members, and four of NPCA's five named members, have established standing to intervene in his or her own right by satisfying the proximity presumption.⁴ Further, all of these same individuals have authorized SACE or NPCA, as appropriate, to represent their interests in the instant proceeding. Accordingly, both SACE and NPCA have satisfied the standards for representational standing. See *Palisades*, CLI-07-18, 65 NRC at 409.

For the foregoing reasons, the Staff agrees that Petitioners Kipnis and Oncavage have established individual standing and that SACE and NPCA have established representational standing to intervene in this proceeding.

III. CONTENTIONS

The Petition proffers nine contentions. For the reasons explained below, none of the proffered contentions is admissible.

A. PROPOSED CONTENTION NEPA 1:

The [Environmental Report (ER)] fails to adequately address direct, indirect, and cumulative impacts of the radial collector wells on the Biscayne Aquifer and the Biscayne Bay Ecosystem.

Petition at 9. In challenging the ER's analysis of impacts from radial collector wells, Petitioners assert five general bases for the contention. *Id.* at 9-10. The Petitioners label each individual basis as NEPA 1.1 through NEPA 1.5. *Id.* at 10-26.

Staff Response: As explained below, Proposed Contention NEPA 1 is inadmissible.

Because the contention is organized around bases described in the above five subparts, the

⁴ The address provided in the declaration of Ms. Sara Fain did not include the City, State, and Zip Code. However, there is a street address matching the one provided by Ms. Fain in Miami, Florida. The distance from the plant and that street address approximates the distance stated in the declaration and is within 50 miles of the Turkey Point site. Address locations were reviewed using the Microsoft *Streets and Trips* and Google Maps.

Staff response will summarize and address the admissibility of each subpart separately, before assessing the extent to which the subparts support the admissibility of the contention as a whole. *Cf. Crow Butte Resources, Inc.* (North Trend Expansion Area), CLI-09-12, 69 NRC 535, 553 (2009) (the scope of an admitted contention is defined by its bases); *see also Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 379 (2002).

Summary of Proposed Contention NEPA 1.1

1. Proposed Contention NEPA 1.1

The ER provides insufficient data to aid the Commission in assessing the impacts of the radial collector well system to the Biscayne Bay ecosystem due to the ER's failure to specify the frequency and amount of water the radial collector wells will withdraw from the Biscayne Aquifer.

Petition at 10. In Proposed Contention NEPA 1.1, the Petition notes that water to replace cooling tower blowdown for Units 6 & 7 would come from two sources. It refers to the ER's explanation that the primary source would be reclaimed water conveyed via pipelines from the Miami-Dade Water and Sewer Department (MDWASD), and that when reclaimed water cannot supply the necessary amount or quality of water, the plant would obtain water via radial collector wells withdrawing water from under Biscayne Bay. *Id.* at 10. According to the Petition, "[w]ithout any information on the amount of water that will be withdrawn and how often it will be withdrawn, FPL cannot provide the Commission with adequate information to assess the radial well's impacts to the Biscayne Bay ecosystem or whether there are other reasonable alternatives." *Id.* at 11.

The Petition characterizes the ER as asserting "that the operation of radial wells would have minor impacts to the salinity of the Bay based on the predicted amount of withdrawal versus the natural recharge" and that, for that reason, the ER does not discuss "the radial well's potential impacts to the salinity regime of the Bay and the benthic flora and fauna that may be adversely affected by a disruption of this regime." *Id.* at 11-12. The Petition then asserts that

FPL's position "is based on incorrect and unproven assumptions about the baseline conditions of the Biscayne Aquifer and Biscayne Bay and the extent to which the radial wells will impact the Aquifer and Bay." *Id.* at 12. The Petition states that "if the radial wells are withdrawing fresh water from the aquifer, the Bay, or both, this could have significant impacts to the Bay ecosystem... [which] may include impacts to the freshwater input to the Bay and impacts to flora and fauna that may be sensitive to disruptions in the Bay's salinity regime." *Id.* at 13.

In addition, the Petition contends that the amount and frequency of water withdrawals from the radial wells "must be considered given that the wells have the potential for withdrawing large quantities of freshwater from the Bay and/or the Aquifer and the loss of this freshwater could permanently disrupt the ecosystem's sensitive saltwater regime." *Id.* at 14-15. Finally, the Petition asserts that "the lack of a commitment by MDWASD to reserve 90 million gallons of reclaimed water a day and the uncertainty of whether MDWASD actually has the capability to do so, casts serious doubt upon FPL's assertions that the radial collector wells will be a feasible, secondary source of cooling water and compels the need for a discussion and assessment of alternative sources of cooling water... [which] may include a surface water intake from a canal connected to Card Sound, wells in the upper and/or lower Floridan Aquifer, and potentially other sources." *Id.* at 15.

Staff Response to Proposed Contention NEPA 1.1: As explained below, Proposed Contention NEPA 1.1 is inadmissible because it fails to explain why the issue raised is material to the findings that the NRC must make in this proceeding; is insufficiently supported by alleged facts or expert opinion; and fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

The central assertion of Proposed Contention NEPA 1.1 appears to be that the ER's discussion of the proposed radial collector wells is inadequate because if operation of the wells were to affect salinity levels in Biscayne Bay, such changes could result in impacts to flora and

fauna in the Bay. See Petition at 12, 13. The Petition accordingly asserts that the ER must specify the frequency and amount of water the radial collector wells will withdraw. *Id.* at 11, 14.

As a threshold matter, Proposed Contention NEPA 1.1 fails to explain how this assertion contradicts the Applicant's reasoning and conclusion in the ER. In its analysis of water quality impacts of the radial collector wells, the ER states that "[a]lthough recharge would occur from the bay, it is estimated to be a small percentage of natural freshwater recharge" and that accordingly "[e]ffects on salinity of the bay, based on the predicted amount of withdrawal versus the natural recharge, would be minimal." Application, Part 3, "Environmental Report" ("ER") at 5.2-21. In its analysis of water use impacts of the radial collector wells, the ER states that the "amount of saltwater used (up to approximately 124 mgd if 100 percent saltwater) compared to the size of the saltwater resource available would be insignificant." *Id.* at 5.2-17. Thus the ER concludes that effects of radial well operations on the salinity of Biscayne Bay would be minimal based on the predicted amount of withdrawal versus the natural recharge, even under circumstances where the radial wells are serving as the sole source of cooling water. *Id.* at 5.2-21.

The Petition states the possibility that the radial wells may extract some fresh water from the aquifer, Petition at 13-14, and cites sources for the proposition that the Bay is a system with "temporal and spatial variations in salinity" and that the ecosystem is "extremely sensitive to changes and timing of salinity." *Id.* at 12.⁵ Yet the Petition's description of the variations in (and sensitivity of) the Bay's salinity regime simply does not directly controvert the ER's claim that the contemplated withdrawals, even of the postulated maximum quantities, would be insignificant

⁵ The ER acknowledges variations in salinity in Biscayne Bay. See, e.g., ER §§ 2.3.1.1.3; 2.3.3.1.1. Indeed, the Petition quotes the ER for the proposition that salinities vary widely in the South Bay. See Petition at 13.

due to the size of the water resource. In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421, 433 (citing *Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)). Accordingly, Proposed Contention NEPA 1.1 does not establish a genuine dispute with the application on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

Furthermore, neither the text nor the references cited in Proposed Contention NEPA 1.1 explain the factual basis for the Petitioners’ conclusion that significant impacts to the flora and fauna in the Bay could result from an anticipated change in salinity due to the proposed well operations. Consistent with NEPA, an ER (or an EIS) need only consider environmental impacts that are “reasonably foreseeable.” *Private Fuel Storage LLC* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348-9 (2002); see also *Louisiana Energy Services, LP* (National Enrichment Facility), CLI-05-20, 62 NRC 523, 536 (2005) (“NEPA...does not call for certainty or precision, but an *estimate* of anticipated (not unduly speculative) impacts.” (emphasis in original)). Moreover, NRC regulations indicate that in an ER, impacts should only be discussed “in proportion to their significance.” See 10 C.F.R. § 51.45(b)(1). Consequently, even if an environmental impact may be reasonably foreseeable, to demonstrate an admissible contention a petitioner must show why analysis of the asserted impact could make a difference in the outcome of the proceeding. See 10 C.F.R. § 2.309(f)(1)(iv); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999) (citing 54 Fed. Reg. at 33,172) (A “dispute at issue is ‘material’ if its resolution would ‘make a difference in the outcome of the licensing proceeding.’”); see also *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 748-49 (2005) (“‘Materiality’ requires that the petitioner show why the alleged error or omission is of possible

significance to the result of the proceeding. This means that there must be some significant link between the claimed deficiency and either health and safety of the public, or the environment.”). The Petition asserts that the ecosystem “is extremely sensitive to the changes and timing of salinity.” Petition at 12, 13. However, the cited portions of documents the Petitioners reference for this proposition⁶ do not explain what impacts to flora and fauna the Petition is alleging could occur, nor why such impacts are reasonably foreseeable rather than simply speculative. Likewise, even if such impacts were to occur, the Petition does not explain why these impacts would be sufficiently significant that the ER’s failure to analyze them could make a difference in the outcome of the proceeding and thus be material to the NRC’s findings. See *Oconee*, CLI-99-11, 49 NRC at 333-34. Other than general references to the Bay ecosystem and to “flora and fauna,” Proposed Contention NEPA 1.1 does not identify particular species or habitats that it alleges would be adversely affected by changes in salinity, whether attributable to the radial well operation or other influences on the Bay’s salinity.⁷

Accordingly, even if the Petition were correct that proposed well operations could affect salinity in at least some portion of the Bay, Proposed Contention NEPA 1.1 does not make clear what anticipated impacts to species or habitats have not been addressed in the ER. Moreover, the Petitioners do not articulate why those effects would likely be significant, either to particular species or to the ecosystem as a whole. To support a contention, “a petitioner must provide documents or other factual information or expert opinion that set forth the necessary technical analysis to show why the proffered bases support its contention.” *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180 (1998) (*citing*

⁶ See Petition at 12-13 (citing Exhibit 2 at 3; Exhibit 3 at 25; Exhibit 4 at 19; Exhibit 5 at 2).

⁷ For example, at least one source Petitioners cite in support of Proposed Contention NEPA 1.1 seems instead to emphasize the adaptability and evolution of natural systems over time. See Petition at 12-13 (citing Exhibit 4 at 19).

Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff'd in part*, CLI-95-12, 42 NRC 111 (1995) (A petitioner is obligated “to provide the [technical] analyses and expert opinion” or other information “showing why its bases support its contention.”)). In Proposed Contention NEPA 1.1, while the Petitioners explain their assertion that there is the “possibility” or “potential” for the radial wells to withdraw freshwater from the Bay, they do not explain the factual or expert support for their conclusion that any resulting influence on salinity would be significant or likely to result in significant impacts to flora and fauna, contrary to 10 C.F.R. § 2.309(f)(1)(iv), (v). Consequently, the Petition does not provide support, factual or otherwise, for its assertions that changes attributable to radial well operation would have “significant impacts to the Bay ecosystem” or “permanently disrupt the ecosystem’s saltwater regime.” Petition at 13. 10 C.F.R. § 2.309(f)(1)(v). Without having explained the rationale for asserting the environmental significance of these potential effects, Proposed Contention NEPA 1.1 likewise fails to identify a genuine dispute with the ER’s conclusions that impacts to water quality or aquatic resources would be small, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

In sum, even if the Petition were correct in asserting that operation of the wells could affect salinity at locations in the Bay, it has neither contradicted the rationale stated in the ER for why impacts would be small nor identified the factual or expert support for its claim that the ER has failed to address a significant concern with respect to water quality or associated impacts to flora and fauna. Since this is the essence of the alleged dispute in Proposed Contention NEPA 1.1, it fails to meet § 2.309(f)(1)(iv), (v) and (vi) and thus does not support the admissibility of Contention 1.

In addition, the last portion of Proposed Contention NEPA 1.1 appears to raise a separate issue, namely that “the lack of a commitment by MDWASD to reserve 90 million gallons of reclaimed water a day and the uncertainty of whether MDWASD actually has the

capability to do so, casts serious doubt upon FPL's assertions that the radial collector wells will be a feasible, secondary source of cooling water[.]” Petition at 15. Petitioners assert that this “compels the need for a discussion and assessment of alternative sources of cooling water... [which] may include a surface water intake from a canal connected to Card Sound, wells in the upper and/or lower Floridan Aquifer, and potentially other sources.” *Id.* Since this assertion does not appear to relate directly to the alleged impacts of radial collector well operation, the Staff responds to it here as a distinct sub-contention.

Although Proposed Contention NEPA 1.1 appears to assume that alternative sources of cooling water have not been discussed or assessed in the ER, the ER contains a discussion of alternative sources of cooling water. See ER § 9.4.2.3. The discussion in Proposed Contention NEPA 1.1 fails to identify a dispute with any aspect of the analysis in this section and thus fails to identify a genuine dispute with the application contrary to 10 C.F.R. § 2.309(f)(1)(vi). Furthermore, it is well established that consistent with NEPA, “[a]gencies need only discuss those alternatives that are reasonable and ‘will bring about the ends’ of the proposed action.” *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 55 (2001)(citing *Citizens Against Burlington v. Busey*, 938 F.2d 190, 195 (D.C. Cir. 1991), *cert. denied*, 52 U.S. 994 (1991)(internal citations omitted)); *see also Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-92-2, 33 NRC 61, 71 (1991)(an agency’s environmental review need not consider “every *possible* alternative, but every *reasonable* alternative” (emphasis added)). To the extent Petitioners are asserting that any of the “alternatives” listed in Proposed Contention NEPA 1.1 should have been considered in the ER but were not, they provide no factual or expert support to define these alternatives, let alone explain why they would be reasonable and thus warrant analysis. See *Rancho Seco*, LBP-93-23, 38 NRC at 246 (“A contention that simply alleges that some matter ought to be considered does not provide the basis for an admissible contention.”). For these reasons, this portion of Proposed Contention NEPA 1.1 fails to meet § 2.309(f)(1)(v) and (vi) and thus does not support

the admissibility of Contention 1 or constitute an admissible independent contention.

Summary of Proposed Contention NEPA 1.2

2. Proposed Contention NEPA 1.2

The ER provides insufficient data to aid the Commission in assessing the impacts of the radial collector well system on the Biscayne Bay ecosystem due to the ER's failure to provide sufficient aquifer testing and groundwater modeling to support the ER's conclusions.

Petition at 15. In Proposed Contention NEPA 1.2, the Petition asserts that "the groundwater modeling and testing that has been performed by FPL to support its conclusions in the ER is inadequate." *Id.* The Petition challenges FPL's reliance on the results of an Aquifer Performance Test ("APT"), asserting that "FPL fails to discuss how the results of the APT will be utilized to account for the significantly larger scale at which the radial wells will be pumping." *Id.* at 15-16. The Petition recites a number of "additional shortcomings associated with the APT" relating to "geological interpretations of the Biscayne Aquifer," the exploratory drilling for the APT, and the use of rock cuttings. *Id.* at 16. The Petition also asserts that "the groundwater modeling FPL relies on is insufficient to support its conclusion that the project will not have adverse impacts to the Biscayne Aquifer and Biscayne Bay." *Id.* at 18. The Petition states that the "model's assumption of a constant head, constant density, and steady state, does not assess the changes in salinity over time and space in the Bay as a result of the radial wells." *Id.* at 19-20.

Staff Response to Proposed Contention NEPA 1.2: As explained below, Proposed Contention NEPA 1.2 is inadmissible because it fails to explain why the issues raised are material to the findings that the NRC must make in this proceeding; is insufficiently supported by alleged facts or expert opinion; and fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

The Petitioners in Proposed Contention NEPA 1.2 assert that there may be "shortcomings" in the APT and the Applicant's surface water monitoring, that water quality

sampling “may not be adequate to fully capture water quality changes to the Bay, and that the groundwater model is not “comprehensive” and does not “assess the changes in salinity over time and space in the Bay as a result of the radial wells. Petition at 16-19. It also asserts that interactions between the cooling canal system and the Bay and Aquifer “may have an effect on the local hydrology as well as the flora and fauna occurring within the Bay.” *Id.* at 19.

However, as in Proposed Contention NEPA 1.1, the Petitioners do not explain the factual or expert support for their conclusion that any environmental impacts (including impacts to flora and fauna) that have not been assessed or disclosed in the ER due to these alleged deficiencies would likely be significant, contrary to 10 C.F.R. § 2.309(f)(1)(v), (vi). For example, the Petition alleges that the increase in pumpage of actual operations as compared to the APT could result in “major hydrologic effects,” but neither the Petition nor the referenced portion of the cited Exhibit state what those “major hydrologic effects” would be, let alone how they contradict the Applicant’s assessment of small impacts. Petition at 16 (citing Exhibit 3 at 21).

Likewise, the Petition recites and relies on an array of comments and questions apparently provided to FPL by State and local resource agencies in the context of FPL’s separate Site Certification Application. *See id.* at 16-20 (citing Exhibit 3 at 21-25, Exhibit 6 at 3). Yet the Petition does not explain why another agency’s comments or requests for additional information on a separate application before that agency would necessarily be material to the adequacy under NEPA of an ER for a COL application.⁸ 10 C.F.R. § 2.309(f)(1)(iv). In an analogous situation, the Commission has emphasized that the Staff’s issuance of requests for

⁸ This is not to say that an agency’s comments or concerns raised in the context of its own separate regulatory review cannot be material to a NEPA analysis. It is only to note that because other agencies are determining compliance with a different set of legal and technical standards, it is not presumed that the type and detail of information needed for another agency’s safety or environmental review would likewise be necessary for a NEPA review of a COL application, and it is the Petitioner’s obligation to demonstrate “that the issue raised in the contention is material to the findings that the NRC must make to support the action that is involved in the proceeding.” 10 C.F.R. § 2.309(f)(1)(iv)(emphasis added).

additional information (“RAIs”) to an applicant on a particular matter during its licensing review does not in and of itself constitute the basis for an admissible contention. *See Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 164 (2006) (“we have held repeatedly that the mere issuance of a Staff RAI does not establish grounds for a litigable contention”); *Oconee*, CLI-99-11, 49 NRC at 336-37. For similar reasons, the fact that another agency has requested information to support its own review of a separate application does not, by itself, demonstrate that there is a material deficiency in a license application before the NRC.

Furthermore, neither the Petition nor the portions of these agency comments/requests referenced in the Petition⁹ explain how any potentially unaddressed environmental impacts resulting from these “deficiencies” would likely be significant for the purpose of a NEPA review, and thus contrary to the conclusions in the ER. *See, e.g.*, 10 C.F.R. 51.45(b)(1) (In an ER, “[i]mpacts shall be discussed in proportion to their significance.”) Additionally, contrary to 10 C.F.R. § 2.309(f)(1)(v), the Petition does not provide support, factual or otherwise, for its conclusion that any of the various asserted “shortcomings” or “informational deficiencies,” Petition at 16-20, in the APT or groundwater model would make the ER insufficient for assessing the anticipated environmental impacts of the proposed action. *See Exelon Generating Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 811 (2005) (“There may, of course, be mistakes in the DEIS, but in an NRC adjudication, it is Intervenor’s burden to show their significance and materiality. ‘Our boards do not sit to ‘flyspeck’

⁹ The portions of documents referenced under Proposed Contention NEPA 1.2 that are not from State or local agencies likewise do not appear to address the environmental significance of potential effects from the radial wells on hydrology or salinity, or the significance of potential corresponding impacts to the ecosystem, nor does the Petition explain how these sources do so. *See* Petition at 19 (referencing Exhibit 7 at 861-62; Exhibit 8). For example, although the Petition cites Exhibit 8 in connection with its assertion that hydrological connections between the cooling canal system and the Bay may have an effect on salinity, Exhibit 8 discusses the effects of thermal effluent discharge, not of water withdrawals.

environmental documents or to add details or nuances. If the ER (or EIS) on its face ‘comes to grips with all important considerations’ nothing more need be done.’”) (quoting *Systems Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005)); see also *PFS*, CLI-02-25, 56 NRC at 349 (“NEPA does not call for examination of every conceivable aspect of federally licensed projects” (internal quotes omitted)). Without having explained its rationale for asserting the environmental significance of these potential deficiencies (or unaddressed potential impacts), Proposed Contention NEPA 1.2 fails to explain the materiality of the Petitioners’ claims and to identify a genuine dispute with the ER’s conclusions that impacts to water quality or aquatic resources would be small, contrary to 10 C.F.R. § 2.309(f)(1)(iv), (vi).

In sum, even if the Petition were correct in asserting that there are deficiencies in the APT and groundwater model and that operation of the radial wells could have hydrologic effects or affect salinity in the Bay or Aquifer, it has neither contradicted the rationale stated in the ER for why impacts to these resources would be small nor identified the factual or expert support for its claim that the ER has failed to address a significant concern with respect to impacts to flora and fauna. Since this is the essence of the alleged dispute in Proposed Contention NEPA 1.2, it fails to meet § 2.309(f)(1)(iv), (v), and (vi) and thus does not support the admissibility of Contention 1.

Summary of Proposed Contention NEPA 1.3

3. Proposed Contention NEPA 1.3

The ER provides insufficient data on the current species diversity, abundance, and habitat utilization in Biscayne Bay, and particularly in the vicinity of the radial wells, to aid the Commission in assessing the impacts of the radial collector well system to the Biscayne Bay ecosystem.

Petition at 20. The Petition asserts that “[d]espite the tremendous wildlife that occurs in and around Biscayne Bay, and the potential for the proposed radial collector wells to impact these species, the ER contains no comprehensive, seasonally based biological studies on both wildlife

utilization (including birds, insects, fish, reptiles, amphibians, mammals, and aquatic invertebrates) and plant cover and species abundance for the area within and surrounding the proposed radial wells.” *Id.* According to the Petition, “[w]ithout this data, the ER fails to establish an environmental baseline that is the basis for evaluating impacts and alternatives.” *Id.* at 22.

Staff Response to Proposed Contention NEPA 1.3: As explained below, Proposed Contention NEPA 1.3 is inadmissible because it fails to explain why the issues raised are material to the findings that the NRC must make in this proceeding; is insufficiently supported by alleged facts or expert opinion and fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

In Proposed Contention NEPA 1.3, the Petitioners assert the insufficiency of data and surveys in the ER for determining potential impacts on the Biscayne Bay ecosystem from operation of the proposed radial collector wells. Like Proposed Contentions NEPA 1.1 and NEPA 1.2, Proposed Contention NEPA 1.3 refers in part to comments and questions apparently provided to FPL by State and local resource agencies in the context of FPL’s separate Site Certification Application or applications for other State and local permits. See Petition at 21 (citing Exhibits 2, 3, and 6). However, as noted previously in the Staff’s response to Proposed Contention NEPA 1.2, *supra*, the Petition does not explain why another agency’s comments or requests for additional information on a separate application before that agency would necessarily be material to the adequacy under NEPA of an ER for a COL application. 10 C.F.R. § 2.309(f)(1)(iv); *cf. Monticello*, CLI-06-6, 63 NRC at 164; *Oconee*, CLI-99-11, 49 NRC at 336-37.¹⁰ Particularly where another agency has not made any final determination on its license or

¹⁰ For example, one portion of Exhibit 3 cited in the Petition states that “information regarding flora and fauna including seasonal variations is required to evaluate this project for *conformance with nonprocedural requirements of Miami-Dade County*.” Exhibit 3 at 10 (emphasis added).

permit, it is not apparent that such comments or requests demonstrate a substantive deficiency in the application before that agency, let alone in the COL application.

Furthermore, as already discussed *supra* in the Staff's response to Proposed Contentions NEPA 1.1 and NEPA 1.2, the Petitioners do not explain the factual or expert support for their conclusion that any environmental impacts (including impacts to flora and fauna) that have not been assessed or disclosed in the ER due to these alleged deficiencies would likely be significant, contrary to 10 C.F.R. § 2.309(f)(1)(iv), (v). Without explaining to what extent the potential impacts are likely to be significant to the hydrology and salinity of the Bay, let alone why any corresponding impacts to particular flora and fauna would be expected to be significant, the Petition does not provide support for its assertion that the ecological data relied on in the ER is therefore insufficient. See *Clinton ESP*, CLI-05-29, 62 NRC at 811; *Monticello*, LBP-05-31, 62 NRC at 748-49. Because the Petition does not explain the nature or potential significance of the impacts to flora and fauna that it is alleging could occur, it fails to identify a genuine dispute with the ER conclusion that impacts from radial well operation would be small, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

Proposed Contention NEPA 1.3 likewise provides no factual or expert support for the claim that additional data "on the current species diversity, abundance, and habitat utilization" is necessary, much less that the ER must contain "comprehensive, seasonally-based biological studies," in order to assess the likely impacts to the ecosystem from the proposed action.¹¹ See Petition at 20, 21. For example, the Petition asserts the need for additional information

¹¹ Some of the cited exhibits do not appear to even refer to potential impacts on flora or fauna; none explains the anticipated significance of any postulated impacts to flora and fauna other than to generally assert that "concerns remain" regarding unknown impacts. See Exhibit 2 at 3; see also Exhibit 3 at 9-10; Exhibit 6 at 3; Exhibit 7 at 863. "A document put forth by an intervenor as the basis for a contention is subject to scrutiny both for what it does and does not show." *Yankee Atomic Electric Co.*, (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1996); *rev'd in part on other grounds*, CLI-96-7, 43 NRC 235 (1996).

regarding bird species. See *id.* at 21-22. Yet neither the Petition nor any of the portions of documents that it cites explain in what way any potential impacts attributable to *radial well operation* would be likely to adversely affect “feeding, roosting, nesting, and breeding behavior” of any bird species. *Id.* at 21. The Petition does not describe any existing bird survey or study that it contends has been omitted from the analysis, nor does it explain how that information if considered would affect the analysis of the impacts of the radial wells.¹² In determining contention admissibility, 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 that set forth the necessary technical analysis to show why the proffered bases support its contention.” *PFS*, LBP-98-7, 47 NRC at 180. Here the Petitioners offer no factual or expert support for the claim that the ER has failed to identify significant impacts to bird species due to radial well operation, contrary to 10 C.F.R. § 2.309(f)(1)(v), and thus do not identify a genuine dispute with the ER’s analysis on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

The Petition also asserts that “sensitive seagrasses could be significantly impacted by the loss of fresh water that currently provides nutrients to these communities.” Petition at 21. Yet the referenced portions of the documents cited in support of this claim either do not refer to seagrasses (see Exhibit 6 at 3) or state generically that Biscayne Bay seagrasses require “a consistent...salinity regime and appropriate water quality[.]” See Exhibit 7 at 863. Likewise, it is unclear how either exhibit supports the Petition’s implication that “[h]ypersaline conditions” would result “from the withdrawal of freshwater via radial wells.” Petition at 22. “A document put forth by an intervenor as the basis for a contention is subject to scrutiny both for what it does

¹² The only bird species the Petition even identifies by name is the “wood stork,” but the Petitioners provide no information as to why that species would be adversely affected by radial well operation.

and does not show.” *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1996); *rev’d in part on other grounds*, CLI-96-7, 43 NRC 235 (1996). The Petitioners do not explain how these references support their assertion that significant impacts to seagrasses would be likely to result from effects to water quality attributable to radial well operation and thus represent a material inadequacy in the ER. 10 C.F.R. § 2.309(f)(1)(iv), (v), (vi). For the foregoing reasons, Proposed Contention NEPA 1.3 does not support the admissibility of Contention 1.

Summary of Proposed Contention NEPA 1.4

4. Proposed Contention NEPA 1.4

The ER provides insufficient data on the habitat conditions and habitat requirements in the Biscayne Bay, and particularly in the vicinity of the radial wells, to aid the Commission in assessing the impacts of the radial collector well system to the Biscayne Bay ecosystem.

Petition at 22. According to the Petition, “[s]uch data is necessary to determine the extent to which the radial wells’ disruption of the Bay’s salinity regime may impact specific species and their habitats.” *Id.* It asserts that “[f]or instance, sensitive seagrasses require a variable salinity regime with estuarine conditions” and that “[h]ypersaline conditions resulting from the withdrawal of freshwater via radial wells may adversely affect those seagrass communities.” *Id.*

Staff Response to Proposed Contention NEPA 1.4: As explained below, Proposed Contention NEPA 1.4 is inadmissible because it is unsupported by alleged facts or expert opinion and fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(v)-(vi).

As a threshold matter, the Petition does not explain whether by “habitat conditions and habitat requirements” it is referring to descriptions of the ecological environment for particular species or instead to regulatory conditions or requirements. It is therefore unclear how the

Petitioners believe the alleged omission is material to the findings the Staff must make in its environmental review of the COL application. 10 C.F.R. § 2.309(f)(1)(iv).¹³

In any event, in Proposed Contention NEPA 1.4 the Petition cites generally to an 18-page section of the ER, see Petition at 22, but otherwise identifies no support, factual or otherwise, for its assertion that data in the ER is insufficient with respect to “habitat conditions and habitat requirements.” 10 C.F.R. § 2.309(f)(1)(v). The Petitioners make a single vague assertion that “sensitive seagrasses” may be adversely affected by “[h]ypersaline conditions resulting from the withdrawal of freshwater via radial wells[.]” Petition at 22. However, the Petitioners fail to provide any facts or expert support for this assertion, contrary to 10 C.F.R. § 2.309(f)(1)(v), nor explain why, even if any such impacts were reasonably foreseeable, that they would represent a significant environmental impact and therefore be material to the proceeding. 10 C.F.R. § 2.309(f)(1)(iv); *PFS*, CLI-02-25, 56 NRC at 348-9; *Monticello*, LBP-05-31, 62 NRC at 748-49.

Other than this general and conclusory statement regarding seagrasses, the Petition does not identify any specific data, survey, or study with respect to “habitat conditions and habitat requirements” that it contends has been omitted from the analysis, nor do the Petitioners explain how that information if considered would affect the analysis of the impacts of the radial wells. In short, in Proposed Contention NEPA 1.4, the Petitioners offer no factual or expert support for the claim that the ER has failed to identify significant impacts due to radial well operation, contrary to 10 C.F.R. § 2.309(f)(1)(v), and do not identify a genuine dispute with the ER’s analysis on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(iv), (vi). For the foregoing reasons, Contention NEPA 1.4 does not support the admissibility of Contention 1.

¹³ It is also unclear in what way the Petitioners seek to distinguish between Proposed Contention NEPA 1.3 (which refers to, among other things, insufficient data regarding species’ “habitat utilization”) and Proposed Contention NEPA 1.4 (which refers to “habitat conditions and habitat requirements”).

Summary of Proposed Contention NEPA 1.5

5. Proposed Contention NEPA 1.5

The ER provides insufficient data on the direct, indirect and cumulative impacts of the radial collector wells.

Petition at 23. The Petition states that “[a]s discussed earlier, the ER fails to assess the potential impacts to groundwater (Biscayne Aquifer) and surface water (Biscayne Bay) resources” and that “[t]here is no discussion of the wells’ potential disruption of the saltwater regime and its effects on the benthic flora and fauna.” *Id.* The Petition also asserts that the ER does not mention “the existing hyper-saline plume emanating from the current cooling canal operations associated with Units 3 & 4.” *Id.* The Petition further states that the ER “fails to discuss how the radial wells may adversely affect the successful implementation of [the Comprehensive Everglades Restoration Plan (CERP)], and specifically the Biscayne Bay Coastal Wetland (“BBCW”) Project.” *Id.* at 24. Finally, the Petition asserts that the ER “fails to discuss the potential impacts of sea level rise on the radial well collector system.” *Id.* at 25.

Staff Response to Proposed Contention NEPA 1.5: As explained below, Proposed Contention NEPA 1.5 is inadmissible because it fails to explain why this issue is material to the findings that the NRC must make in this proceeding; is unsupported by alleged facts or expert opinion; and fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

With respect to its initial statement that the ER “fails to assess the potential impacts to groundwater (Biscayne Aquifer) and surface water (Biscayne Bay) resources” and that “[t]here is no discussion of the wells’ potential disruption of the saltwater regime and its effects on the benthic flora and fauna[.]” the Petition appears to simply rely on its claims in connection with

previous subparts of Contention 1.¹⁴ Petition at 23. The Staff has already discussed *supra* in its response to those bases why those claims do not meet the contention admissibility criteria and do not support the admissibility of Contention 1. Namely, even if the Petition were correct in asserting that operation of the wells could affect salinity at locations in the Bay, it has neither contradicted the rationale stated in the ER for why impacts would be small nor identified the factual or expert support for its claim that the ER has failed to address a significant concern with respect to water quality or associated impacts to flora and fauna, contrary to § 2.309(f)(1)(iv), (v) and (vi).

a. Disturbance to Benthic Community

Proposed Contention NEPA 1.5 also asserts a series of four issues that it alleges the ER does not discuss, including “the potential for the radial wells to disturb the overlying benthic community (seagrass, hard bottom communities, etc.) during installation, the potential for a frac-out and the potential impacts to the submerged bottoms, whether sediments fauna [sic], and biota could enter the well, and whether sediments and nutrients could be depleted in the surrounding area due to a downward flow of water in the area.” Petition at 23. The Petition

¹⁴ The Petitioners include a citation to a page from the previously-referenced Exhibit 7, quoting it as stating that “benthic communities are directly impacted by the volume and intensity of freshwater inflow and the range and rapidity of its variation.” Petition at 23 (quoting Exhibit 7 at 864). However, the referenced material only says that flora or fauna in the Bay may generally be “impacted” by changes in salinity; indeed, the referenced passage does not appear to concern impacts from water withdrawals or general salinity variation but specifically “[p]oint-source *discharges* of fresh water into the bay” that may produce “*large...salinity fluctuations.*” Exhibit 7 at 864 (emphasis added).

For the same reasons discussed *supra* in the staff response to Proposed Contentions NEPA 1.2 and NEPA 1.3, such statements do not explain either what changes in salinity would be expected to produce adverse consequences to these organisms, or whether those changes would be likely to result from radial well operations. Without such an explanation in either the Petition or the referenced documents, the Petitioners fail to provide factual support for their assertion that significant impacts to such organisms would be likely to result from any effects to water quality attributable to radial well operation and thus represent an inadequacy in the ER. Accordingly, Proposed Contention NEPA 1.5 does not identify additional arguments or factual support relating to the earlier bases of Contention 1 and provides no additional support for their admissibility.

does not explicitly explain why any of these events or impacts would be reasonably foreseeable, nor does it state the Petitioners' reasons for believing that such impacts, were they to occur, would be significant and therefore warrant discussion in the ER. See, e.g., 10 C.F.R. 51.45(b)(1) (In an ER, "[i]mpacts shall be discussed in proportion to their significance."); *PFS*, CLI-02-25, 56 NRC at 348-9; *Monticello*, LBP-05-31, 62 NRC at 748-49.

The sole support referenced for this statement is a document from the Florida Department of Environmental Protection (DEP) requesting additional or clarifying information from FPL, apparently in connection with FPL's separate State and local permit applications. Petition at 23 (citing Exhibit 5 at 13). However, the cited portion of the DEP document appears to consist of questions (e.g., "Will the overlying benthic community...be disturbed as a result of installation of the system?"), rather than assertions that the issues described represent likely or significant adverse impacts. See *id.* As Licensing Boards have held, merely posing a question in a petition is not sufficient support to admit a contention. See *PPL Susquehanna, LLC* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-4, 65 NRC 281, 324 (2007). That rationale applies equally to a petition's reliance on a question from a third party, where that reference is unaccompanied by some explanation or determination as to why the issue would be significant. Furthermore, as noted previously in the Staff's response to Proposed Contentions NEPA 1.2 and 1.3, *supra*, the Petition does not explain why another agency's comments or requests for additional information on a separate application before that agency would necessarily be material to the adequacy of an ER for a COL application under NEPA. 10 C.F.R. § 2.309(f)(1)(iv); cf. *Monticello*, CLI-06-6, 63 NRC at 164; *Oconee*, CLI-99-11, 49 NRC at 336-37. Particularly where another agency has not made any final determination on its license or permit, it is not apparent that such comments or requests demonstrate a substantive deficiency in the application before that agency, let alone in the COL application.

In short, the potential nature, extent, and environmental significance of these four postulated impacts are not explained in either the Petition or the cited document. 10 C.F.R. §

2.309(f)(1)(iv); see *Rancho Seco*, LBP-93-23, 38 NRC at 246; *PFS*, CLI-02-25, 56 NRC at 348-9. Petitioners offer no factual or expert support for the claim that these listed issues would be foreseeable or significant impacts of radial well operation, contrary to 10 C.F.R. § 2.309(f)(1)(v), and accordingly do not identify a genuine dispute with the ER's analysis on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

b. Units 3 & 4 Saline Plume

Next, Proposed Contention NEPA 1.5 asserts that the ER fails to mention “the existing hyper-saline plume emanating from the current cooling canal operations associated with Units 3 & 4.” Petition at 23. The Petition states that the proposed radial wells “would be located within or adjacent to this groundwater plume” and that the ER does not discuss “how the wells could capture, redirect, or otherwise affect groundwater from the existing plume” and contains “no discussion of the potential impacts of inducing ground water flow towards the proposed radial wells.” *Id.* at 23, 24.

However, the ER acknowledges that the “Biscayne aquifer beneath the Turkey Point plant property is connected hydrologically to both Biscayne Bay and the cooling canals of the industrial wastewater facility.” ER § 5.2.3.2.1. The ER also states, in part of its discussion regarding radial collector wells, that a portion of the recharge to the wells “would be from groundwater beneath the plant property[.]” *Id.* at § 5.2.3.2.3. The ER therefore concludes that “impacts to groundwater quality as a result of radial collector well operations would be SMALL and not require mitigation.” *Id.* The ER asserts that “the existing units use of groundwater does not overlap with the uses for operation of Units 6 & 7” and concludes that “cumulative impacts to groundwater quality would not result.” ER § 5.11.2.3.

The Petition does not cite to any of these portions of the ER, nor do Petitioners explain how their reference to an existing groundwater plume contradicts the ER's conclusions with respect to the existing and anticipated groundwater quality in the vicinity of the Turkey Point plant. Furthermore, neither the Petition nor the referenced document from Miami-Dade

County¹⁵ explains why the well's capture or redirection of groundwater whose quality has been influenced by the existing units, even if it were to occur, would be significant to the ER's conclusion regarding groundwater quality. 10 C.F.R. § 2.309(f)(1)(iv); *Monticello*, LBP-05-31, 62 NRC at 748-49. In determining contention admissibility, "[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed." See *Millstone*, LBP-08-9, 67 NRC at 433. The Petition's only cited documentary support on this topic does not explain the claim that any significant impacts of radial well operation have been omitted, contrary to 10 C.F.R. § 2.309(f)(1)(v). Moreover, the Petition does not clearly contradict the aforementioned sections of the ER and thus has failed to identify a genuine dispute with the ER's analysis on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

c. *CERP*

Next, the Petition asserts that the ER "fails to discuss how the radial wells may adversely affect the successful implementation of CERP, and specifically the Biscayne Bay Coastal Wetland ("BBCW") Project." Petition at 24. It asserts that "[t]he use of radial wells as a cooling water source could be detrimental to CERP objectives of restoring more fresh water flow to Biscayne Bay." *Id.*

Although the Petition states that "CERP contains 68 project components" aimed at a variety of objectives, neither of the sources referenced in support of this basis identifies which projects within CERP could be adversely affected as a result of radial well operations. See

¹⁵ The referenced Exhibit 3 appears to be Miami-Dade County's comments and additional information requests in connection with FPL's separate Site Certification Application. As noted earlier in the Staff's response to Proposed Contention NEPA 1.5 and previously in response to Proposed Contentions NEPA 1.2 and 1.3, *supra*, the Petition does not explain why another agency's comments or requests for additional information on a separate application before that agency would necessarily be material to the adequacy of an ER for a COL application under NEPA. 10 C.F.R. § 2.309(f)(1)(iv).

Petition at 24, 25; Exhibit 10 at 4, Exhibit 5 at 2. The cited portion of Exhibit 10 contains a single sentence that the use of the radial wells could be “detrimental to CERP’s objectives of restoring more fresh water flow to Biscayne Bay,” but does not further explain the basis for that assertion. Petition at 24 (citing Exhibit 10 at 4). The Petition refers to the BBCW Project, but does not state in what way the provisions of that project could be affected by radial well operation. *Id.* at 24. In any event, as explained *supra* in the Staff response to earlier bases for Contention 1, the Petition ultimately fails in Contention 1 to explain the alleged significance of the effects of the radial wells potentially withdrawing freshwater during operations. Accordingly, even if the Petition were correct that effects of the radial wells could potentially be “detrimental” to implementation of CERP and the BBCW Project, it does not explain the basis for an assertion that such a conflict would be environmentally significant.

Furthermore, several sections of the ER discuss CERP, including the Applicant’s analysis of cumulative impacts. See, e.g., ER §§ 2.3.1.1.1; 2.3.1.1.5; 4.7; 5.11. For example, with respect to its Chapter 5 analysis of cumulative impacts of operation, the ER states that it considered the Biscayne Bay Coastal Wetlands and C-111 Spreader Canal projects “as a result of their closeness to Turkey Point[.]” *Id.* at 5.11-2. In its analysis of cumulative surface water effects, the ER states that the “CERPs would rehydrate wetlands that provide water flow into Biscayne Bay, positively impacting Biscayne Bay.” *Id.* at 5.11-5. After discussing potential cumulative impacts from Everglades Mitigation Bank (EMB) and reiterating its earlier conclusion that impacts “on Biscayne Bay from operation of the radial collector wells would be SMALL” the ER concludes that “the cumulative impact on Biscayne Bay would be SMALL.” *Id.* at 5.11-5. In its analysis of cumulative groundwater effects, the ER states that “other projects considered for cumulative impacts, EMB and CERPs, would not withdraw groundwater and would not have groundwater injection wells. The wetlands involved in these projects would likely positively impact groundwater resources since they would promote recharge to groundwater rather than runoff.” *Id.* at 5.11-6. Subsequently, the ER states that “[c]onsidering the impact from the radial

collector wells and the impacts to groundwater resources from the other projects considered for cumulative impacts, the cumulative impact to groundwater resources would be SMALL. *Id.*

With respect to water quality, the ER states that the “non-Turkey Point projects considered for cumulative impacts, CERPs and EMB, would not withdraw water from surface water or groundwater sources. The CERPs would provide stormwater treatment to minimize negative impacts to waters ultimately receiving the treated stormwater, such as the Biscayne Bay and underlying groundwater. Therefore, adverse impacts to surface water or groundwater resources from these projects are not expected.” *Id.* at 5.11-6, -7. The ER subsequently concludes that “[c]onsidering that the existing units use of groundwater does not overlap with the uses for operation of Units 6 & 7 [cite omitted] and that the non-Turkey Point projects would have positive impacts to water quality, cumulative impacts to groundwater quality would not result.” *Id.* at 5.11-7.

The Petition does not cite to any of these portions of the ER, nor do Petitioners contradict the application’s reasoning and conclusions with respect to the anticipated positive impacts of CERP with regard to cumulative impacts. According to the ER, because the Applicant does not anticipate adverse cumulative impacts to water quality from implementation of CERP, CERP would not result in adverse cumulative impacts when considered together with the impacts of the proposed action. *See, e.g.*, ER § 5.11.2. In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” *See Millstone*, LBP-08-9, 67 NRC at 433. While the Petition asserts that the operation of radial wells could itself have effects on water quality, it does not appear to allege that any effects of CERP would ultimately be detrimental when considered together with any impacts of the radial wells. Accordingly, the Petition fails to demonstrate a dispute with the ER’s conclusion regarding cumulative impacts.

In sum, beyond asserting its general conclusion that radial well operations “may extract

fresh water” from the aquifer, the Petition does not explain the factual basis for its assertion that the likely effects from such withdrawals could thereby “adversely impact the successful implementation of CERP” generally or any CERP program in particular, contrary to 10 C.F.R. § 2.309(f)(1)(v). Moreover, the Petition does not directly contradict the ER’s conclusion that the CERP would have “positive impacts to water quality” and thus that the effects of CERP when considered in conjunction with the effects of proposed Units 6 and 7 would not result in any adverse “cumulative” impacts. Accordingly, this assertion does not identify a genuine dispute with the ER’s analysis on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

d. Sea Level Rise

Finally, the Petition asserts that the ER “fails to discuss the potential impacts of sea level rise on the radial collector well system.” Petition at 25. It asserts that future increased sea levels are “likely to raise the general groundwater levels in the region” and that “sea level rise should be considered when evaluating the future health and salinity regime of Biscayne Bay.” *Id.* According to the Petition, “[a]side from the ER’s complete failure to address how saltwater intrusion due to sea level rise could affect plant operations...the ER does not discuss how sea level rise could affect these radial well operations.” *Id.* The Petition states that this “is an important issue given that the radial wells have the potential of withdrawing large amounts of freshwater from the Aquifer and/or the Bay during a time when the ecosystem will be subject to increased saltwater intrusion.” *Id.* at 25-26.

Although this portion of Proposed Contention NEPA 1.5 alleges inadequate analysis in the ER of “the potential impacts of sea level rise on the radial collector well system,” it does not actually specify what “direct, indirect and cumulative” impacts to the well system have been omitted. *Id.* at 25, 26. While the Petition asserts that groundwater levels in the region may rise and that Biscayne Bay “appears to be evolving toward a more marine environment,” it does not explain what effect it believes these developments would have on the radial well operations. *Id.* at 25. To the extent the Petition is contending that anticipated sea level rise would interfere with

the ability of the radial wells to function, it provides no support, factual or otherwise, for this claim, contrary to 10 C.F.R. § 2.309(f)(1)(v). It also does not explain in what way such interference, were it to occur, would be expected to affect any conclusion in the ER, and thus does not identify any material dispute with the application, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

Alternatively, to the extent the Petition is asserting that the asserted sea level rise would affect the potential for the radial wells to withdraw freshwater from the Biscayne Aquifer or Biscayne Bay (or that sea level rise would change the environmental significance of such withdrawals), it likewise fails to explain the basis for that claim. For example, the Petition does not explain whether it is alleging that the Bay's evolution toward "a more marine environment" would make it more likely or less likely that the proposed Unit 6 & 7 radial wells would withdraw freshwater during operation. Moreover, it does not explain how either scenario would affect the ER's conclusions with respect to the cumulative environmental significance attributable to the proposed action, rather than simply the potential significance attributable to sea level rise entirely independent of the proposed action. The Petition likewise does not explain why any of the referenced documents support an assertion that sea level rise (including any associated effects on salinity) would either mitigate or exacerbate impacts from radial well operation.¹⁶ See 10 C.F.R. § 2.309(f)(1)(v).

In sum, while the Petition asserts that sea level rise "should be factored into the planning process," it provides no explanation of what "direct, indirect, or cumulative impact" has been

¹⁶ For example, one of the cited sources states that "[a] number of potential factors could explain the increase in salinity in Biscayne Bay: decreases in runoff entering the bay due to canal construction and water management practices, decreases in rainfall, decreases in groundwater upwelling, increases in evaporation, and a rising sea level. We are currently working on refining our age models and correlating results to known events affecting the bay." Exhibit 4 at 19. The assertion that these other factors, including sea level rise, are primary influences on salinity in the Bay, does not address in what way radial well operation would be expected to have a significant cumulative impact requiring discussion in the ER.

omitted from the ER and why such an omission would be environmentally significant and thus material to the outcome of the proceeding. See 10 C.F.R. § 2.309(f)(1)(iv); *Clinton ESP*, CLI-05-29, 62 NRC at 811; see also *PFS*, CLI-02-25, 56 NRC at 349. Without such an explanation, this assertion does not identify a genuine dispute with the ER's analysis on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi). See *Rancho Seco*, LBP-93-23, 38 NRC at 246. For the foregoing reasons, Proposed Contention NEPA 1.5 does not support the admissibility of Contention 1.

Summary of Staff Response to Contention NEPA 1: As explained above, Contention 1 is inadmissible because with respect to each of its constituent bases it either fails to explain why this issue is material to the findings that the NRC must make in this proceeding; is unsupported by alleged facts or expert opinion; or fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi). Although each of the five Proposed Contention NEPA 1 bases asserts inadequacies with respect to the ER's analysis of the impacts of radial collector wells, each basis appears to focus on separate failings. The Staff has identified no assertions with cumulative force that would support the admissibility of the "parent" contention (Petition at 9) despite the inadmissibility of the individual NEPA 1 bases.

B. PROPOSED CONTENTION NEPA 2:

The ER fails to adequately address the direct, indirect, and cumulative impacts of the reclaimed wastewater system on groundwater, air, surface water, wetlands, and CERP.

Petition at 26.¹⁷ In challenging the ER's analysis of impacts from the reclaimed wastewater system, Petitioners assert three general bases for the contention: (1) "[t]he ER fails to

¹⁷ The Petitioners' short statement of the contention refers to impacts of the reclaimed water system on "air," Petition at 26. However, other than a single unexplained reference to discharges "from the facility" as "cooling tower drift, the Petitioners do not explain (or provide factual or expert support for) (Continued...)

adequately identify, analyze, and discuss the potential impacts on groundwater quality of injecting polluted wastewater into the Floridan Aquifer via underground injection wells”; (2) “[t]he ER fails to discuss the impacts associated with the construction of pipelines to convey the reclaimed wastewater to the plant’s wastewater treatment facility”; and (3) “[t]he ER fails to discuss the impacts to CERP associated with the use of reclaimed wastewater to cool Units 6 & 7.” Petition at 26, 30, 31. Thus, the Petition asserts that “[t]he ER fails to address the direct, indirect, and cumulative impacts of this reclaimed water system on groundwater, air, surface water, wetlands, and CERP as required by 10 C.F.R. § 51.45.” *Id.* at 26-31.

Staff Response: As explained below, Proposed Contention 2 is inadmissible. Because the contention is organized around bases described in the above three subparts, the Staff response will address the admissibility of each subpart separately.

Summary of Proposed Contention NEPA 2.1

1. Proposed Contention NEPA 2.1

The ER fails to adequately identify, analyze, and discuss the potential impacts on groundwater quality of injecting polluted wastewater into the Floridan Aquifer via underground injection wells.

Petition at 26. In Proposed Contention NEPA 2.1, the Petition asserts that “[t]he ER fails to adequately address the impacts associated with the disposal of plant liquid effluents, including chemical and radioactive waste, into the Lower Floridan Aquifer via Class I underground injection wells.” Petition at 26.

(Continued . . .)

what impacts to “air” they are alleging could occur, describe in what way such impacts would be significant, or identify why the potential for these impacts contradicts any analysis or conclusion in the ER. See *id.* at 29. To the extent Petitioners intend impacts to “air” to be within the scope of their contention, they have accordingly failed to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

The Petitioners assert that the ER “ fails to provide a complete characterization of the chemical and radiological constituents of each liquid waste stream (circulating water system, liquid radwaste treatment, sanitary waste treatment plant, service water system, low volume wastes)” and does not discuss potential impacts to groundwater quality of discharging radioactive materials into the Lower Floridan Aquifer. *Id.* at 27 (referencing ER at 5.4-2), 30.

Staff Response to Proposed Contention NEPA 2.1: As explained below, Proposed Contention NEPA 2.1 is inadmissible because it fails to explain why the issue raised is material to the findings that the NRC must make in this proceeding; lacks adequate factual or expert support; and fails to demonstrate the existence of a genuine dispute with the applicant on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

Petitioners make a number of assertions in support of Proposed Contention NEPA 2.1. Each of these appear to be offered as bases for the Petitioners’ overarching claim that the Applicant does not acknowledge the likelihood of upward migration of injected water, and does not adequately identify waste stream constituents and their impact on underground sources of drinking water or Biscayne Bay.

First, the Petition asserts that “the ER fails to mention the potential for upward migration of injectate and infiltration of contaminants into the Lower Floridan Aquifer.”¹⁸ Petition at 26. The Petitioners assert that the “ER presumes that the Boulder Zone of the Lower Floridan Aquifer in southern Florida is isolated from the overlying Upper Floridan Aquifer by thick confining units,” contrary to information which the Petitioners state can be found in their Exhibit 12. Petition at 27. Petitioners further state that the ER “fails to provide a complete

¹⁸ The NRC Staff notes that contrary to the Petitioners’ statement, the Lower Floridan Aquifer is not classified as an Underground Source of Drinking Water (USDW). For the purposes of responding to Proposed Contention NEPA 2, the Staff assumes that this is a typographical error and that the Petitioners intended to indicate that the Upper Floridan Aquifer is a USDW and that their concern is related to upward migration of injected water from the Boulder Zone into the Upper Floridan Aquifer.

characterization of the chemical and radiological constituents of each liquid waste stream (circulating water system, liquid radwaste treatment, sanitary waste treatment plant, service water system, low volume wastes). Petition at 27. Petitioners then assert that “the ER fails to analyze the fate and transport of the injected effluent into the Boulder Zone, and fails to assess health and environmental risks associated with the liquid effluent pathway. *Id.* Petitioners also assert that the ER “does not identify the radioisotopes present in the effluent” and “fails to adequately discuss or analyze the potential environmental impacts of migration of radioactive effluent from the Lower Floridan Aquifer into USDWs or Biscayne Bay.” *Id.* at 30.

However, Petitioners fail to acknowledge that several sections of the ER discuss the potential for groundwater impacts from operation of the deep injection wells, as well as address the Florida Department of Environmental Protection permitting process and operational monitoring program required as part of an underground injection control (UIC) permit. *See, e.g.*, ER §§ 2.3.2.2.2.2; 5.2.1.1.9; 5.2.3.2.4; 6.3.3.2; 6.3.4. For example, with respect to its Chapter 2 analysis of groundwater use, the ER states that “all Class I injection wells are required to have a dual-zone monitoring system that consists of a zone open below the deepest USDW and a zone located in the USDW for geochemical and pressure monitoring.” *Id.* at 2.3-47. In its discussion regarding the “Operation of Deep Injection Wells,” ER 5.2.1.1.9, the ER acknowledges that deep injection wells utilized by Miami-Dade County have been evaluated by the EPA due to water quality issues. ER at 5.2-11. The ER further states that:

The injection wells would be installed in accordance with an FDEP underground injection well permit and local permit requirements. The injection casing in the deep injection wells for Units 6 & 7 would be seated at a greater depth than other regional injection wells to maximize the thickness of the confining strata between the injection zone and base of the USDW. The current standard practice of grouting the pilot hole would also be employed to prevent the possible development of the double borehole conditions. The data collected during drilling and testing of the exploratory well would be used to evaluate the proposed system and would be submitted to the FDEP in support of the Class I injection well construction permit application for the Units 6 & 7 deep injection wells.

Water quality and pressure monitoring would be conducted in two separate intervals in the Floridan aquifer as mandated by the UIC permit. General UIC permit requirements include monthly reporting of the average, minimum, and maximum injection pressure, flow rate, volume, and annular pressure. The UIC permit would also require mechanical integrity tests in the injection wells to be performed every 5 years. The monitoring program objective would be to detect vertical migration of injected fluids into the Upper Floridan aquifer through the confining layer overlying the Boulder Zone. Sections 6.3 and 6.6 describe the operational monitoring of the deep injection wells.

Id. Furthermore, a description of the monitoring program required as part of the FDEP UIC permit is provided in ER Section 6.3.4.2, which states that “[a]s presented in Section 5.2, wastewater and cooling tower blowdown would be discharged to the Boulder Zone of the Lower Floridan aquifer via deep injection wells. Twelve deep injection wells and six dual-zone monitoring wells would be operated.” ER at 6.3-5. Additionally, the ER states that “[c]hemical monitoring would be a continuation of preconstruction/construction groundwater and surface water monitoring, as applicable. These activities would include characterization monitoring of the wells in the Upper Floridan aquifer to monitor the potential hydrologic, thermal, and chemical impacts from the deep injection wells. Preliminary frequency and chemical criteria are outlined [in] Section 6.3 and 6.6.” ER at 6.7-3. Based on this monitoring program, the ER concludes that “potential impacts from the operation of the deep well injection wells to groundwater would be SMALL and not warrant mitigation beyond that described previously.” ER at 5.2-11.

The Petitioners do not address these statements in the ER, nor explain why the well installation and groundwater monitoring details are inadequate to address the potential for upward migration at the injection wells. “Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421, 433 (citing *Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)). Because the contention fails to address any alleged inadequacy of the portion of the ER analysis relevant to the potential for upward migration of injected

wastewater, it fails to demonstrate a genuine dispute with the application on a material issue, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

Furthermore, in light of the installation and monitoring requirements described in the ER, even if the ER does not specifically address potential impacts from the “upward migration” that the Petitioners assert has occurred in some parts of southern Florida from wastewater injection into the Boulder Zone, neither the Petitioners nor the referenced exhibits postulate what environmental or health impacts may result from upward migration of water injected into the Boulder Zone at the Turkey Point facility, nor why those effects would be potentially significant so as to warrant further analysis in the ER. Consistent with NEPA, an ER (or an EIS) need only consider environmental impacts that are “reasonably foreseeable.” *Private Fuel Storage LLC* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348-9 (2002); see also *Louisiana Energy Services, LP* (National Enrichment Facility), CLI-05-20, 62 NRC 523, 536 (2005) (“NEPA...does not call for certainty or precision, but an *estimate* of anticipated (not unduly speculative) impacts.” (emphasis in original)). Moreover, NRC regulations indicate that in an ER, impacts should only be discussed “in proportion to their significance.” See 10 C.F.R. § 51.45(b)(1). Additionally, contrary to 10 C.F.R. § 2.309(f)(1)(v), the Petition does not provide support, factual or otherwise, for its conclusion that this failure would make the ER insufficient for assessing the anticipated environmental impacts of the proposed action. See *Exelon Generating Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 811 (2005) (“There may, of course, be mistakes in the DEIS, but in an NRC adjudication, it is Intervenor’s burden to show their significance and materiality. ‘Our boards do not sit to ‘flyspeck’ environmental documents or to add details or nuances. If the ER (or EIS) on its face ‘comes to grips with all important considerations’ nothing more need be done.’”) (quoting *Systems Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005)); see also *PFS*, CLI-02-25, 56 NRC at 349 (“NEPA does not call for examination

of every conceivable aspect of federally licensed projects” (internal quotes omitted)). Without having explained its rationale for asserting the environmental significance of these unaddressed potential impacts, Proposed Contention NEPA 2.1 fails to explain the materiality of the Petitioners’ claims and to identify a genuine dispute with the ER’s conclusions that impacts to water quality would be small, contrary to 10 C.F.R. § 2.309(f)(1)(iv), (vi).

Second, with respect to the applicant’s use of treated wastewater, Petitioners state that the ER “fails to mention or discuss the myriad other chemical constituents of treated municipal wastewater, including arsenic, cadmium, copper, lead, manganese, mercury, nickel, silver, and zinc.” Petition at 28 (citing Exhibit 13). However, the Petition subsequently acknowledges that many of these constituents are listed in ER Table 3.6-2, including arsenic, cadmium, copper, lead, manganese, mercury, nickel, silver, zinc, selenium and thallium, instead asserting that the source of their estimated concentrations is unknown. Petition at 29. The Petitioners list additional chemical constituents which they assert can be found in “treated wastewater from wastewater treatment plants in South Florida” including “heptachlor, ethylbenzene, toluene, selenium, thallium, and tetrachloroethylene, to name just a few.” *Id.* at 28 (citing Exhibit 14). The Petition also asserts that “ER Table 3.6-1 lists chemicals added to liquid effluent streams within the plant, but provides no information on the fate and transport of these chemicals after addition to various processes,” and that additional “chemical treatments are identified as proprietary, and no further information about their formulation or toxicity is provided.” Petition at 29. Petitioners also state that “the tables do not include constituents of the liquid radwaste effluent, the sanitary waste treatment plant effluent, the circulating water system blowdown, the service water system blowdown, or other miscellaneous waste streams.” *Id.* at 29-30.

The cited portions of Exhibits 13 and 14 are tables listing chemical constituents found in samples of treated wastewater from several locations in Florida. Yet neither exhibit indicates

what environmental or health impacts, if any, the Petitioners contend could be expected from injection of these chemical constituents into deep injection wells. In addition, as noted in ER Section 5.4.1.1, “[t]he Boulder Zone is currently not a source for potable water and there is no viable pathway for the injection well releases to reach potable water. Hence, there is no liquid effluent pathway dose due to normal plant operations.” ER at 5.4-2. Consequently, even if the Petitioners’ assertions regarding the completeness of the lists of chemical constituents in ER Tables 3.6-1 and 3.6-2 are true, neither the referenced exhibits nor the Petitioners explain why it would be reasonably foreseeable that any environmental or health impacts could result from injection of any of the chemicals into the Boulder Zone of the Lower Floridan Aquifer via deep injection wells. See 10 C.F.R. § 2.309(f)(1)(iv); *PFS*, CLI-02-25, 56 NRC at 348-9; see also *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1988); *rev’d in part on other grounds*, CLI-96-7, 43 NRC 235 (1996) (“A document put forth by an intervenor as the basis for a contention is subject to scrutiny both for what it does and does not show.”). Nor do they explain why, even if such impacts were to occur, they would be sufficiently significant so as to warrant further analysis in the ER. See 10 C.F.R. § 2.309(f)(1)(iv); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999) (citing 54 Fed. Reg. at 33,172) (A “dispute at issue is ‘material’ if its resolution would ‘make a difference in the outcome of the licensing proceeding.’”); see also *Nuclear Management Co.* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 748-49 (2005). To support a contention, “a petitioner must provide documents or other factual information or expert opinion that set forth the necessary technical analysis to show why the proffered bases support its contention.” *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180 (1998) (citing *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff’d in part*, CLI-95-12,

42 NRC 111 (1995) (A petitioner is obligated “to provide the [technical] analyses and expert opinion” or other information “showing why its bases support its contention.”)).

Therefore, without providing more information than a list of potential substances and general speculation as to their “fate upon entering the reclaimed water treatment facility,” Petitioners have failed to specify what foreseeable environmental or health effects it contends have been overlooked, much less why the application is inadequate for not addressing them. See 10 C.F.R. § 2.309(f)(1)(iv); *Oconee*, CLI-99-11, 49 NRC at 333-34; see also *Monticello*, LBP-05-31, 62 NRC at 748-49. Having failed to explain why the mere potential for such effects would contradict the aforementioned discussion in the ER, this basis does not articulate a concrete, material dispute for litigation and thus does not support the admissibility of Proposed Contention NEPA 2.1, contrary to 10 C.F.R. § 2.309(f)(1)(vi). See *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 246 (1993) (“A contention that simply alleges that some matter ought to be considered does not provide the basis for an admissible contention.”).

In addition, the Petitioners indicate that pharmaceuticals and personal care products (“PPCPs”) are also “routinely found in treated municipal wastewater.” Petition at 29. Section 2.309(f)(1)(vi) requires that, “if the petitioner believes that the application fails to contain information on a relevant matter as required by law,” the Petitioner must identify “each failure and the supporting reasons for the petitioner’s belief.” 10 C.F.R. § 2.309(f)(1)(vi). Because the Petition lists no specific chemicals of concern which can be found in PPCPs, and fails to indicate what environmental or health impacts the Petitioners believe could result from their injection into the Boulder Zone of the Lower Floridan Aquifer via deep injection wells, the Petitioners have not explained why it would make a difference to the outcome of the proceeding and thus be material to the Staff’s findings on the application. See 10 C.F.R. §

2.309(f)(1)(iv); *Oconee*, CLI-99-11, 49 NRC at 333-34; see also *Monticello*, LBP-05-31, 62 NRC at 748-49.

Third, the Petition appears to rely on ER Table 3.6-2 when it asserts that “[t]he ER does not identify the radioisotopes present in the effluent, nor does it discuss potential impacts to groundwater quality of discharging radioactive materials into the Lower Floridan Aquifer.” Petition at 30. However, with respect to this assertion, the Petitioners fail to address the information provided in ER Sections 3.5.1 and 5.4.1.1. Section 3.5.1, “Liquid Radioactive Waste Management System” indicates that the radioisotopes present in liquid effluents can be found in the DCD, stating that: “[t]he annual average release of radionuclides from the plant is determined using the PWR-GALE code. The PWR-GALE code models releases that use source terms derived from data obtained from the experience of operating PWRs. The code input parameters used in the analysis are listed in DCD Table 11.2-6. The annual releases for a single unit are presented in DCD Table 11.2-7.” ER at 3.5-6. Section 5.4.1.1 of the ER discusses radiological impacts from liquid exposure pathways for treated liquid radioactive waste from operation of the proposed new units which is released to the Boulder Zone via the deep injection wells. ER at 5.4-1 to -3. Included in this Section are the results of “a conceptual receptor exposure scenario ... that considers the Boulder Zone for potable water use.” ER at 5.4-2. In this receptor exposure scenario, the “LADTAP II computer program [] was used to calculate doses to an individual” ... “from liquid effluents. ER at 5.4-3. According to the ER, a conceptual receptor was “created by the drilling of a water supply well into the Boulder Zone for potable water use. An initial evaluation of receptor distance from the injection wells was performed to determine the most realistic location of the receptor, based on distance from the Turkey Point Plant property and any potential land use constraints at each location.” ER at 5.4-2. The ER further states “this scenario is considered to bound any other potential exposure scenarios, such as vertical migration from the Boulder Zone to potable water aquifers despite the presence of dual zone monitoring wells,” and concludes that “[t]he resulting maximum doses

per unit are 2.5 mrem to the total body, 2.4 mrem to the thyroid, and 3.1 mrem to the liver of a child.” ER at 5.4-2, -3.

The Petition does not appear to address this analysis, let alone explain why its assessment of radiological impacts is deficient, contrary to 10 C.F.R. § 2.309(f)(1)(vi). “Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” See *Millstone*, LBP-08-9, 67 NRC at 433.

For the foregoing reasons, Proposed Contention NEPA 2.1 is inadmissible.

Summary of Proposed Contention NEPA 2.2

2. Proposed Contention NEPA 2.2

The ER fails to discuss the impacts associated with the construction of pipelines to convey the reclaimed wastewater to the plant’s wastewater treatment facility.

Petition at 30. According to the Petition, “FPL plans on utilizing an approximately nine mile long corridor to accommodate the pipelines that will be used to convey the reclaimed water from the South District Water Treatment Plant.” *Id.* It asserts that “[t]he area south of SW 256 Street contains large wetland expanses ... and there is no discussion in the ER as to how the construction and operation of pipelines within this area will impact these wetlands, how FPL intends to avoid or minimize impacting these wetlands, or whether practical alternatives exist to siting the pipelines in these wetland areas.” *Id.* The Petition also states that “[t]he ER fails to discuss how the construction and operation of pipelines within the nearly 5 mile long segment of the corridor that is collocated with the existing FPL transmission right-of-way will impact the extensive mangrove wetlands in these areas” and “does not discuss how FPL could avoid or minimize impacts to these mangrove wetlands and whether there are practical alternatives to siting the pipelines through these areas.” *Id.* at 30-31.

Petitioners also state that “the South Florida Water Management District will be constructing culverts on the east side of the L-31 E right-of-way for the CERP BBCW Project,

but it appears that FPL is contemplating using this right-of-way to accommodate the proposed 42" wide, 3.75 mile long reclaimed water pipeline. There is no mention in the ER of the potential conflict the placement of these pipelines poses to the CERP BBCW Project." *Id.* at 31.

Petitioners assert that "[g]iven the extensive loss of wetlands in the area around Turkey Point and Biscayne Bay and the federal and state government's commitment to restoring the wetland resources in these areas, it is important that the ER discuss how its construction and operation of approximately nine miles of pipelines will impact these resources and whether there are less damaging alternatives." *Id.*

Staff Response to Proposed Contention NEPA 2.2: As explained below, Proposed Contention NEPA 2.2 is inadmissible because it fails to explain why the issue raised is material to the findings that the NRC must make in this proceeding; is insufficiently supported by alleged facts or expert opinion; and fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

As an initial matter, although the Petitioners assert that the ER should "mention" "the potential conflict" between culverts being installed by the South Florida Water Management District for the CERP BBCW Project and FPL's installation of the reclaimed water pipeline, the Petitioners have alleged no environmental impacts which can be expected to result from such a conflict. Petition at 31. Accordingly, the Petition fails to demonstrate that the issue is material to the findings that the NRC must make to support its environmental review, contrary to 10 C.F.R. § 2.309(f)(1)(iv). See *Oconee*, CLI-99-11, 49 NRC at 333-34; see also *Monticello*, LBP-05-31, 62 NRC at 748-49.

In addition, Petitioners have failed to provide adequate factual or expert support for their apparent assertion that a conflict could occur that might result in impacts to the CERP BBCW. Petition at 31. In asserting the potential conflict, Petitioners cite their Exhibit 15, the SFWMD Third Completeness Comments, FPL Turkey Point Units 6 & 7, Site Certification Application Power Plant & Associated Facilities. See Exhibit 15 at 14. While Exhibit 15 does address

construction of both the CERP and FPL pipelines in the “SFWMD’S L-31E Canal right-of-way,” it also states “[i]f [narrowing the pipeline corridor] is not possible, please provide documentation demonstrating that the use of the L-31E Canal right-of-way is unavoidable and that the pipeline project will be designed, installed, operated, and maintained in such a way as to avoid impacts to SFWMD operations and maintenance needs and the CERP Biscayne Bay Coastal Wetlands Project or other SFWMD projects that may be proposed on these lands.” *Id.* at 14. Thus the Exhibit itself appears to indicate that FPL’s use of this right-of-way could be accomplished without impacts to the CERP BBCW project. Therefore, Petitioners have failed to cite any factual or expert demonstrating that it is reasonably foreseeable, rather than simply speculative, that installation of the reclaimed water pipeline would actually result in a conflict. 10 C.F.R. § 2.309(f)(1)(v); *see PFS*, CLI-02-25, 56 NRC at 348-9; *Yankee*, LBP-96-2, 43 NRC at 90.

Furthermore, even if the Petitioners were correct that there was a potential conflict, neither the Petition nor the Exhibit explain what the impacts from such a conflict would be or why their environmental significance would contradict the ER’s conclusions with respect to any particular resource, contrary to 10 C.F.R. § 2.309(f)(1)(vi). In determining contention admissibility, 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 that set forth the necessary technical analysis to show why the proffered bases support its contention.” *PFS*, LBP-98-7, 47 NRC at 180.

Similarly, with respect to its claim that the ER contains no information regarding the impacts that construction and operation of the pipelines within the area south of SW 256 Street would have on these wetlands or how FPL will avoid or minimize the impact on these wetlands, or whether there are practical alternatives to siting the pipelines, the Petition does not identify a genuine material dispute with the application, contrary to 10 C.F.R. 2.309(f)(1)(iv). *See* Petition at 30. The Petition again cites comments to FPL from Miami-Dade County as support for the claim that the area south of SW 256 Street contains large wetland expanses. *Id.* (citing Exhibit

3 at 16). Although the Petition asserts that there “is no discussion in the ER as to how the construction and operation of pipelines within this area will impact these wetlands” the ER does contain an analysis of impacts to wetlands which are related to the construction and operation of the reclaimed water pipeline. At Section 4.3.1.1.4, “Wetlands,” with respect to terrestrial ecosystems impacts, the ER states:

Overall, approximately 330 acres of wetland habitats would be impacted by construction of Units 6 & 7 and ancillary facilities. Additional wetland acres may be impacted, although these impacts would be temporary and mitigated to the extent practical by environmental best management practices. Although much of this wetland habitat exists as harsh, hypersaline mudflats with minimal value as wildlife habitat, the impacts of construction on wetland habitats would be MODERATE. A three-pronged approach to wetland mitigation would be used. The first option would be active mitigation (e.g., creation of crocodile habitat, establishment of culverts under existing roadbeds to allow sheet flow of water, etc.). The second option would be “land swapping” (e.g., providing relatively natural land as a preserve, etc.). The third option would be purchase of wetland credits from the Everglades Mitigation Bank.

ER at 4.3-9. At Section 4.3.1.2.1 “Reclaimed Water Pipelines,” the ER states more specifically:

Reclaimed water pipelines (72-inch diameter or equivalent) would extend approximately 9 miles to bring reclaimed water from the SDWWTP to the FPL reclaimed water treatment facility. For about 6.5 miles of their length, the pipelines would be collocated with the existing Clear Sky-to-Davis transmission line right-of-way and adjacent road and canal rights-of-way, although most of the route is classified as wetland habitat. The pipelines would generally be trenched beneath an existing access road on the west side of the transmission line right-of-way. Upon completion, the disturbed portions of the corridor would be graded to the contours of the surrounding landscape and allowed to revegetate or returned to previous land uses where appropriate. Clearing of new corridors and/or expansion of existing corridors would include use of standard industry construction practices to reduce impacts to sensitive habitats. Standard industry construction practices would include employing silt fences, mulching, slope texturing, vegetated buffer strips, reseeding areas of disturbed soils, and avoiding wetlands and other sensitive habitats to the extent practical. Endangered manatees may exist in any of the SFWMD canals crossed by this pipeline corridor. Any required mitigation for wetland loss would likely include wetland enhancement, land swapping, and/or purchase of EMB credits (see description in Subsection 4.3.1.1.4).

In summary, given that the pipelines would be collocated with existing rights-of-way along much (approximately 6.5 miles) of its route, disturbed soils would be revegetated, and standard industry construction practices would be employed during the clearing/expansion of the corridors and construction of the pipelines, impacts of the reclaimed water pipelines on terrestrial resources would be SMALL.

ER at 4.3-10. Therefore, even if the Petition were correct that impacts to a specific subset of wetlands were not discussed in detail, neither the Petition nor the referenced SFWMD

comments explain how these assertions demonstrate that any environmental impact attributable to the proposed action has been inadequately discussed, let alone identify a dispute with the conclusions in the ER. “A contention must ... identify the disputed portion of the application, and provide ‘supporting reasons’ for the challenge to the application. Similarly, if a petitioner believes that an application fails to contain information on a ‘relevant matter as required by law,’ the contention must identify each failure and the supporting reasons for the petitioner’s belief.” *USEC, Inc. (American Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 456 (2006). The Petition has failed to contradict the analysis of wetlands impacts in the ER and has not provided support for its claim that the ER has omitted any significant environmental issue, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

For the foregoing reasons, Proposed Contention NEPA 2.2 is inadmissible.

Summary of Proposed Contention NEPA 2.3

3. Proposed Contention NEPA 2.3

The ER fails to discuss the impacts to CERP associated with the use of reclaimed wastewater to cool Units 6 & 7.

Petition at 31. In Proposed Contention NEPA 2.3, the Petitioners assert that the “ER fails to discuss whether the reservation and use of reclaimed wastewater from the South District Water Treatment Plant would have adverse impacts to CERP, and specifically the BBCW restoration project.” *Id.*

The Petition states that: “[t]he objective of BBCW is to restore fresh water flows in and around the littoral zone of Biscayne Bay” and that “[t]his would be accomplished by the conveyance of fresh water, including possibly treated wastewater from Miami Dade County via spreader canals.” *Id.* at 31-32 (citing Exhibits 16 and 40). According to the Petition, “[t]he ER fails to discuss the potential adverse impacts that would stem from using as many as 90 million gallons of reclaimed water per day, which otherwise could be used to supply fresh water to the BBCW project” and “[t]here is no discussion of what other available sources of water could be

used instead of reclaimed water or what other sources of water might be available as a guaranteed, reliable source for the BBCW restoration project.” *Id.* at 32.

Staff Response to Proposed Contention NEPA 2.3: As explained below, Proposed Contention NEPA 2.3 is inadmissible because the Petition fails to demonstrate that it is material to the findings that the NRC must make to support its environmental review; it is insufficiently supported by alleged facts or expert opinion; and it fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

The central assertion of Proposed Contention NEPA 2.3 appears to be that the ER’s discussion of the cumulative impacts of water use is inadequate because, if the Turkey Point facility uses 90 million gallons of treated wastewater from Miami Dade County every day, this could result in impacts to the BBCW restoration project and CERP. See Petition at 31, 32. Accordingly, the Petition asserts that the ER must discuss whether the reservation and use of reclaimed wastewater from the South District Water Treatment Plant would have adverse impacts to CERP, and specifically the BBCW restoration project. *Id.* at 31. The Petition also appears to assert that the Applicant is required to identify other sources of cooling water for the proposed new units or should identify “what other sources of water might be available as a guaranteed, reliable source for the BBCW restoration project.” *Id.* at 32.

As a threshold matter, the Petitioners appear to suggest that the Applicant is responsible for identifying alternative water sources not only for the proposed new units but also alternative water sources for use in the CERP BBCW project. Petition at 32. The only regulatory requirement cited in connection with Proposed Contention NEPA 2.3 is 10 C.F.R. § 51.45, see *id.* at 26, but Petitioners do not explain why that regulation would encompass a requirement to examine alternative water sources available for implementation of a project other than the proposed action. Accordingly, the Petition does not explain what specific environmental requirement has not been met or why the ER is inadequate for failing to contain such a discussion, contrary to 10 C.F.R. § 2.309(f)(1)(iv).

The Petitioners have also provided no factual or expert support for the proposition that the Applicant's use of treated wastewater from Miami Dade County would impact the ability of the County to also supply fresh water to the CERP BBCW project, contrary to 10 C.F.R. § 2.309(f)(1)(v). In support of this contention Petitioners reference both the "Central and Southern Florida Project, Comprehensive Everglades Restoration Plan, Project Management Plan, Biscayne Bay Coastal Wetlands" (Exhibit 16) and the "MWH Biscayne Bay Coastal Wetlands Rehydration Pilot Project, *Preliminary Engineering Report*" (Exhibit 40). However, neither of these exhibits appears to assert that the Applicant's use of treated wastewater would have any impact on the CERP BBCW project. In fact, contrary to the Petitioners apparent assertion that the BBCW project is wholly dependent on treated wastewater from Miami Dade County, Exhibit 16 states that "due to water quality issues ... other potential sources of water to provide required freshwater flows to southern and central Biscayne Bay should be investigated before pursuing the reuse facility as a source [for BBCW]." Exhibit 16 at 16. "A document put forth by an intervenor as the basis for a contention is subject to scrutiny both for what it does and does not show." See *Yankee*, LBP-96-2, 43 NRC at 90. The document cited by the Petition does not indicate that the reclaimed water would be a viable water source for BBCW, or that the use of that water by the proposed Turkey Point units would thereby conflict with the availability of water for CERP. See 10 C.F.R. § 2.309(f)(1)(v). Likewise, neither the Petition nor either of the documents that it cites explains in what way any potential impacts attributable to the Applicant's use of treated wastewater would be likely to adversely affect the implementation or objectives of the CERP BBCW. See *id.* In determining contention admissibility, 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 that set forth the necessary technical analysis to show why the proffered bases support its contention." See *PFS*, LBP-98-7, 47 NRC at 180.

Having failed to explain the potential impact of the use of treated wastewater by the proposed new units on the CERP BBCW project, Petitioners have failed to demonstrate that any such impact would be material to the findings the NRC must make in this proceeding. Even if such impacts were “reasonably foreseeable,” the Petition does not explain why the effects on CERP would be potentially significant so as to warrant analysis in the ER. See *PFS*, CLI-02-25, 56 NRC at 348-9; *Monticello*, LBP-05-31, 62 NRC at 748-49. The Petition asserts that the ER “fails to discuss the potential adverse impacts that would stem from using as many as 90 million gallons of reclaimed water per day, which otherwise could be used to supply fresh water to the BBCW project” yet fails to indicate what those impacts might be. Petition at 32 (citing Exhibit 40). Accordingly, the Petition does not demonstrate that these “potential adverse impacts” could make a difference in the outcome of the proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iv).

Similarly, Proposed Contention NEPA 2.3 also fails to identify a genuine dispute with the application regarding a material issue of law or fact. While the contention asserts that the ER fails to discuss “what other available sources of water could be used instead of reclaimed water,” Petitioners do not acknowledge the portions of the ER in which other available sources of water are discussed. See Petition at 32; see also ER § 9.4.2.3; ER § 3.3 (discussing use of radial collector wells). As stated in ER Section 9.4.2.3: “[p]otential [circulating water system] sources were identified and organized into five categories based on the original source of the makeup water supply. These identified potential alternative makeup water sources are those water bodies or water sources within proximity to the proposed plant site that are capable of supplying the makeup water needs of the units.” ER at 9.4-15. The ER analysis considered marine sources; groundwater sources; reclaimed water sources; onsite surface water sources; and offsite surface water sources. *Id.* “An initial environmental screening of the alternative designs was done to eliminate those systems that are unsuitable for use at the Units 6 & 7 site.” *Id.* The discussion in Proposed Contention NEPA 2.3 fails to acknowledge, much less identify a

dispute with, the analysis in these sections and thus fails to identify a genuine dispute with the application contrary to 10 C.F.R. § 2.309(f)(1)(vi). See *Millstone*, LBP-08-9, 67 NRC at 433.

For the foregoing reasons, Proposed Contention NEPA 2.3 is inadmissible.

Summary of Staff Response to Proposed Contention NEPA 2: As explained above, none of the three subparts of Proposed Contention NEPA 2 supports the admissibility of the contention because with respect to each of its constituent bases it either fails to explain why this issue is material to the findings that the NRC must make in this proceeding; is unsupported by alleged facts or expert opinion; or fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi). Further, because these bases do not appear to raise any additional bases when viewed in combination, and because the Petition proffers no other support in connection with this contention, Proposed Contention NEPA 2 is inadmissible.

C. PROPOSED CONTENTION NEPA 3:

The ER fails to adequately address the direct, indirect, and cumulative impacts of constructing and operating the transmission lines associated with Units 6 & 7 on wetlands (including the Everglades), wildlife (including wading birds, migratory birds, and federally endangered and threatened species), and CERP.

Petition at 32. The Petition states that the “ER narrows its discussion of the potential transmission line corridors to a Preferred East, Preferred West, Secondary East, and Secondary West corridors.” *Id.* The Petition describes the Preferred West and Secondary West corridors and states that “[a]lthough the transmission line component of the project threatens to impact more than 300 acres of wetlands...the ER fails to discuss the direct, indirect, and cumulative impacts of constructing and operating the transmission lines in these corridors.” *Id.* at 33.

Staff Response: As explained below, Proposed Contention NEPA 3 is inadmissible because it fails to explain why the issue raised is material to the findings that the NRC must make in this proceeding; is insufficiently supported by alleged facts or expert opinion; and fails

to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi).¹⁹

According to the Petition, the ER contains “no discussion of the impacts from the construction, operation, and maintenance of the lines other than general statements that the corridor would traverse wetlands and that these wetlands would be impacted.” *Id.* at 33-34. The Petition also asserts that “[t]here is no discussion with respect to the specific impacts to these wetlands (including functional loss) impacts [sic] to sheet flow, impacts to vegetation, aquatic species (fisheries, amphibians, invertebrates), birds (including tree island rookeries), and other fauna.” *Id.* at 34.

The Petition does not cite to any specific portion of the ER in identifying these alleged deficiencies. See Petition at 33-34. However, potential impacts of construction, operation, and maintenance with respect to resources within the offsite transmission line corridors are described in several sections of the ER. See, e.g., ER §§ 4.1.2.1 (land use impacts and environmental protection and impact mitigation measures); 4.2.1.2.2 (surface water impacts and environmental protection and impact mitigation measures); 4.2.2.2.2 (groundwater impacts, including from dewatering); 4.2.3.1 (surface water quality); 4.2.3.2.2 (groundwater quality); 4.3.1.3 (terrestrial ecological impacts, including with respect to wetlands and plant and animal species); 4.3.2.3.3 (aquatic ecological impacts, including with respect to aquatic species);

¹⁹ Although the text of the Proposed Contention NEPA 3 refers generally to impacts of “the transmission lines associated with Units 6 & 7,” Petition at 32, and its first sentence refers to the “Preferred East, Preferred West, Secondary East, and Secondary West corridors,” *id.*, none of the statements in the contention appear to allege any omission or inadequacy in the ER regarding impacts of the “Preferred East” or “Secondary East” corridors. Accordingly, to the extent the contention could be understood to challenge the ER with respect to its analysis of either of those corridors, the contention fails to provide a brief explanation of the basis for the contention, fails to provide factual or expert opinion together with documents on which Petitioners intend to rely to support their position, and does not demonstrate a genuine dispute with the application on a material issue. See 10 C.F.R. § 2.309(f)(1)(ii), (v)-(vi).

4.4.1.3 (visual impacts); 5.1.2.1 (land use and maintenance procedures); 5.2.1.1.10, 5.2.1.2.2, and 5.2.3.1.3 (operational impacts to surface water and groundwater); 5.6.1 and 5.6.2 (operational and maintenance impacts on terrestrial and aquatic resources).

These sections of the ER appear on their face to discuss potential impacts to the very resources for which the Petition asserts the ER contains “no discussion,” including wetlands, water,²⁰ and plant and animal species, including birds. In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421, 433 (citing *Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)). By failing to address or controvert the discussion in the ER, Petitioners have not explained or supported their assertion that the ER contains “no discussion” of these general issues. In any case, the Petitioners do not specify in this assertion what impacts they consider to be likely to occur to those resources as a result of the transmission line construction or to what extent they would be significant to the environmental analysis. See *Rancho Seco*, LBP-93-23, 38 NRC at 246 (“A contention that simply alleges that some matter ought to be considered does not provide the basis for an admissible contention.”). Without having explained more specifically what information they believe is missing from (or otherwise inadequate in) these portions of the ER, they have failed to identify a genuine dispute with the applicant’s analysis or conclusions, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

²⁰ Although it is not clear what the Petitioners assert has not been discussed with respect to “specific impacts to these wetlands (including functional loss) impacts to sheet flow,” to the extent it asserts an inadequate discussion regarding impacts to surface or groundwater flow, the Petition does not reference or specifically dispute the ER’s discussion of those issues in ER §§ 4.2.1.2.2, 4.2.2.2.2, 4.2.3.1, 4.2.3.2.2, 5.2.1.1.10, 5.2.1.2.2, or 5.2.3.1.3.

The Petition also states that there is “no discussion of the visual impacts to visitors of Everglades National Park.” Petition at 34. However, as noted above, ER § 4.4.1.3 describes “visual impacts of construction” within transmission line corridors, including the expected visibility of the structures within Everglades National Park, and concludes that the aesthetic impacts from the presence of the new transmission lines would be small. See ER at 4.4-6, 4.4-7; see also ER at § 5.6.3.1 (visual impacts of maintenance activities). The Petition does not acknowledge this discussion or describe why it is inadequate, nor does it provide factual or expert support to explain the alleged deficiency, contrary to 10 C.F.R. § 2.309(f)(1)(v), (vi). See also *Millstone*, LBP-08-9, 67 NRC at 433.

The Petition also states that there is “no discussion of the potential impacts to federally listed species, including the wood stork, eastern indigo snake, and Florida panther.” Petition at 34. The Petition states that “[w]ood storks are among the species with the highest risk of mortality from electrocution and collision with transmission lines” and states that “[s]everal migratory bird species may also be subject to the same risks.” *Id.* However, as noted above, ER §§ 4.3.1.3 and 5.6.1 describe impacts to terrestrial ecosystems within proposed transmission corridors. ER Section 4.3.1.3 includes a discussion of wood storks that states the location of colonies near the potential transmission corridors, notes “habitat management guidelines” for the species with respect to power lines and transmission towers, refers to “concerns about loss of their wetland foraging habitats,” and describes possible “mitigation actions.” *Id.* at 4.3-13. The ER also states that “collisions with transmission lines and resulting mortalities of storks have been documented” but states that “they are not common occurrences.” *Id.* It concludes that “the impacts of establishing new transmission corridors on storks would be SMALL, but may still warrant discussions with regulatory agencies and result in mitigation activities.” *Id.* ER Section 5.6.1 contains additional discussion of the wood stork, including FPL’s implementation of “guidelines and avian-friendly design standards that minimize the likelihood of collisions and electrocutions of wood storks and other birds from electrical

facilities.” *Id.* at 5.6-2; *see also id.* at 5.6-4. The Petition does not acknowledge these discussions in the ER or describe why they are inadequate, contrary to 10 C.F.R. § 2.309(f)(1)(vi).²¹ *See also Millstone*, LBP-08-9, 67 NRC at 433. The Petition alludes to other bird species that it states “may also be subject to the same risks” as storks, Petition at 34, but does not state what species those would be. Without identifying factual support for this assertion or specifically controverting the aforementioned discussions in the ER, this statement also fails to comply with 10 C.F.R. § 2.309(f)(1)(v) and (vi).

Similarly, despite the Petition’s assertion that the ER contains “no discussion” of the potential impacts to the Florida panther, the description in ER § 4.3.1.3 acknowledges that “Florida panthers have been observed historically within the area containing the two Clear Sky-to-Levee transmission corridor options” and that “[c]onstruction of either corridor would result in temporary disturbance during the activity and some loss of potential panther habitat.” ER at 4.3-13. Noting that the amount of habitat loss would differ between the two routes, the ER concludes that “[p]ending finalization of the corridor route, the potential impacts of this construction are likely SMALL, although discussions with regulatory agencies after route selection may result in mitigation actions such as habitat enhancement and/or purchase of panther mitigation credits.” *Id.* Similarly, the description in ER § 5.6.1 acknowledges “approximately 60 sightings of panthers during the last 20 years in the Everglades area crossed

²¹ With respect to the wood stork’s “risk of mortality from electrocution and collision with transmission lines,” the Petition references comments to FPL from the SFWMD in the context of that agency’s separate review of FPL’s Site Certification Application. Petition at 34 (citing Exhibit 20 at 3-4). However, as already discussed above, the Petition does not explain how these comments contradict or represent an inadequacy in the ER’s discussions regarding potential impacts to wood storks, including from collisions and electrocution. *See, e.g.,* ER §§ 4.3.1.3, 5.6.1. Furthermore, the Petition also does not explain why SFWMD’s comments or requests for additional information on a separate application before it would necessarily be material to the adequacy of an ER for a COL application under NEPA. 10 C.F.R. § 2.309(f)(1)(iv); *cf. Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 164 (2006) (“we have held repeatedly that the mere issuance of a Staff RAI does not establish grounds for a litigable contention”); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 336-37 (1999).

by the two alternative corridors for the Clear Sky-to-Levee transmission corridor” and states that “[r]outing the transmission line along either corridor could temporarily disturb Florida panthers.” *Id.* at 5.6-2. The ER also refers to NRC findings in the Generic Environmental Impact Statement (GEIS) for License Renewal of Nuclear Plants (NUREG-1437) and describes the GEIS’s conclusion that “typical line maintenance and vegetation management practices do not lower habitat diversity or produce significant changes in surrounding habitat.” *Id.* at 5.6-3. The Petition does not address these statements in the ER nor explain in what way the Petitioners disagree with them, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

The Petition further asserts that “there may be impacts to Florida panthers and other protected species as the presence of transmission lines could act as barriers disrupting the travel and behavioral patterns of panthers in and around Everglades National Park.” Petition at 34. The Petition refers to the U.S. Fish and Wildlife Service’s Florida Panther Recovery Plan, which the Petitioners describe as calling for “the prevention of habitat fragmentation, the promotion of habitat connectivity, and the preservation of spatial extent within panther habitat.” *Id.* at 34-35 (citing Exhibit 22 at 31, 99). However, the Petition does not explain why the transmission corridors’ potential effects on habitat fragmentation, connectivity, or preservation would be of sufficient significance to affect implementation of the Recovery Plan or otherwise result in significant impacts to panthers. The mere possibility of an effect does not demonstrate why further analysis would be material to the outcome of the proceeding. See 10 C.F.R. § 2.309(f)(1)(iv); *Exelon Generating Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 811 (2005) (“There may, of course, be mistakes in the DEIS, but in an NRC adjudication, it is Intervenor’s burden to show their significance and materiality. ‘Our boards do not sit to ‘flyspeck’ environmental documents or to add details or nuances. If the ER (or EIS) on its face ‘comes to grips with all important considerations’ nothing more need be done.’”) (quoting *Systems Energy Resources, Inc.* (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005)); see also *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant),

LBP-05-31, 62 NRC 735, 748-49 (2005) (“Materiality’ requires that the petitioner show why the alleged error or omission is of possible significance to the result of the proceeding. This means that there must be some significant link between the claimed deficiency and either health and safety of the public, or the environment.”). In any event, the Petitioners do not address how the assertion of “potential impacts” to the Florida panther from the proposed transmission line corridors contradicts the ER’s aforementioned acknowledgement of such possible impacts and the applicant’s conclusion regarding their significance. See *Millstone*, LBP-08-9, 67 NRC at 433. Having failed to acknowledge the discussions in the ER concerning impacts to Florida panthers in the transmission line corridors, the Petition does not explain how its statements and references controvert the applicant’s conclusion, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

The Petition also states that “there are no surveys discussed in the ER estimating the population of indigo snakes within the corridors and no discussion of the potential impacts to this species as a result of constructing transmission lines within the corridors.” Petition at 34. The Petition refers to a portion of FPL’s separate Site Certification Application and states that “FPL has determined there is a high likelihood that the species occurs within the western secondary and preferred corridors.” *Id.* (citing Exhibit 21). However, assuming the Petition is correct regarding the indigo snake’s occurrence in the corridors, the Petition does not assert or identify facts or other support to explain why adverse impacts to the indigo snake as a result of constructing transmission lines would be potentially significant. NRC regulations indicate that in an ER, impacts should only be discussed “in proportion to their significance,” see 10 C.F.R. § 51.45(b)(1), and an ER (or an EIS) need only consider environmental impacts that are “reasonably foreseeable.” *Private Fuel Storage LLC* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348-9 (2002); see also *Louisiana Energy Services, LP* (National Enrichment Facility), CLI-05-20, 62 NRC 523, 536 (2005). Having merely suggested that impacts to the indigo snake could occur, but without describing the nature or significance of those impacts, the Petitioners have not shown why consideration of these impacts could make a

difference in the outcome of the proceeding. See 10 C.F.R. § 2.309(f)(1)(iv); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999) (citing 54 Fed. Reg. at 33,172) (A “dispute at issue is ‘material’ if its resolution would ‘make a difference in the outcome of the licensing proceeding.’”); see also *Monticello*, LBP-05-31, 62 NRC at 748-49. Without more, the Petition does not support the claim that there is any material inadequacy in the ER. See *Rancho Seco*, LBP-93-23, 38 NRC at 246 (“A contention that simply alleges that some matter ought to be considered does not provide the basis for an admissible contention.”).

Next, the Petition states that “[w]ith respect to both the West Preferred Corridor and West Secondary Corridors, the project would impact a mosaic of wetland resources” and that “[t]he construction, operation, and maintenance of transmission lines could alter the hydrology and flood plain characteristics within these areas.” Petition at 35. The Petition asserts that this “may result in decreased stormwater capacity and altered surface water flows.” *Id.* According to the Petition, “[n]one of these impacts are considered.” *Id.* In support of this assertion, the Petition cites to a Florida Department of Environmental Protection (DEP) request to FPL seeking information in connection with FPL’s separate Site Certification Application. *Id.* (citing Exhibit 18 at 1). The cited Florida DEP document appears to acknowledge that proposed activities in transmission line corridors “have the potential to alter the hydrology and flood plain characteristics in the region resulting in flooding and adversely impacting works of the District” and gives examples of such effects as “wetland filling decrease [sic] stormwater storage capacity; filling [sic] canal and ditches alter stormwater conveyance; and road construction impounds and obstructs surface water flows.” Exhibit 18 at 1.

However, as noted above, several sections of the ER discuss potential impacts to surface water and groundwater in the transmission line corridors. See, e.g., ER §§ 4.2.1.2.2;

4.2.2.2.2; 4.2.3.1; 4.2.3.2.2, 5.2.1.1.10, 5.2.1.2.2, 5.2.3.1.3.²² In each of these sections the Applicant concludes that impacts of the new transmission lines would be small. See *id.* As a threshold matter, the Petition does not acknowledge these discussions or describe why they are inadequate, contrary to 10 C.F.R. § 2.309(f)(1)(vi). See also *Millstone*, LBP-08-9, 67 NRC at 433. Moreover, neither the Petition nor the referenced Exhibit either explain the alleged significance of the various potential impacts noted by DEP or explain why these potential effects differ (in kind or magnitude) from the potential impacts to surface water and groundwater that are acknowledged in the ER and which the Applicant concluded would be SMALL.²³

²² For example, the ER identifies potential impacts to “drainage canals and wetlands”; it also notes that “vehicular traffic in the corridor” could “alter surface water flow direction[.]” ER at 4.2-15. It describes potential mitigation measures and concludes that “[i]mpacts to surface water from altering hydrologic flow would be SMALL and would not require mitigation in addition to those described.” *Id.* at 4.2-15, -16. It also notes that “[i]t could be necessary to dewater the excavations for the foundation of the towers along the rights-of-way” but that the “dewatering effects would be short term and the water level would return to preconstruction levels”; it concludes that impacts to groundwater “from hydrologic alterations would be SMALL and would not require additional mitigation other than those required in the site-specific permits.” *Id.* at 4.2-18. The ER discusses “[s]hallow groundwater dewatering” that “may be required during construction of new transmission towers[]”, describes the use of sheet piles as a mitigative measure, and notes that “[w]ater from potential dewatering activities along the corridors could be released to a detention pond, surface pool, or other type of sediment trap before the release to a permitted outfall under any required NPDES permit requirements and SWPPPs for the construction activity.” *Id.* at 4.2-23. The ER also states that “[c]onstruction of transmission lines would comply with applicable regulations and standard industry construction practices (including use of existing corridors to the extent practicable) would be used.” *Id.* at 4.2-25. The ER also notes possible spills of “diesel fuel, hydraulic fluid, lubricants, or other construction-related pollutants” during construction of transmission towers or modification of existing lines, and states that “[i]n the unlikely event small amounts of [such] pollutants escape into the environment” during transmission line construction, “they would have only a small, localized, and temporary impact on the water table aquifer.” *Id.* at 4.2-25; see also *id.* at 5.2-12, -13, -21.

²³ The Petition also does not explain why the Florida DEP’s comments or requests for additional information on a separate application before it would necessarily be material to the adequacy of an ER for a COL application under NEPA. 10 C.F.R. § 2.309(f)(1)(iv). Cf. *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 164 (2006) (“we have held repeatedly that the mere issuance of a Staff RAI does not establish grounds for a litigable contention”); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 336-37 (1999). That another agency has requested information to support its own review of a separate application does not, by itself, demonstrate that there is a material deficiency in a license application before the NRC.

Accordingly, this claim fails to demonstrate a genuine dispute with the application pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

Next, the Petition asserts that the ER “lacks sufficient vegetation and wildlife surveys and studies of the selected corridors to assess the baseline conditions of these [corridor] areas.” Petition at 35. However, the Petition’s only explanation or citation for this assertion is two pages from the ER itself. The Petitioners do not specify in what way any discussion at the cited pages (or elsewhere in the ER) is insufficient, nor do they identify any particular surveys or studies that they believe have been omitted. The Petitioners likewise do not identify any factual or expert support for the asserted inadequacy, contrary to 10 C.F.R. § 2.309(f)(1)(v); see *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180 (1998) (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 that set forth the necessary technical analysis to show why the proffered bases support its contention.”). The Petition’s unexplained assertion that the ER “lacks sufficient vegetation and wildlife surveys and studies to assess the baseline conditions of these areas” does not provide admissible support for the proposed contention. Petition at 35.

Finally, the Petition alleges that “[t]he siting of transmission lines within the Western Preferred Corridor may also adversely affect the CERP BBCW project.” *Id.* The Petition describes “Alternative ‘O’ of CERP” and states that “FPL may construct fill roads in [the area of the CERP project] that may impede the implementation of Alternative O.” *Id.* at 35-36. In support of this claim, the Petitioners cite comments to FPL from the SFWMD in connection with its review of FPL’s separate Site Certification Application. *Id.* (citing Exhibit 19 at 3-4). However, neither the Petition nor the Exhibit explains why the construction of fill roads in the areas postulated in the Petition is reasonably foreseeable rather than simply speculative. See *PFS*, CLI-02-25, 56 NRC at 348-9. Furthermore, even if such construction were indeed to occur and “adversely affect” implementation of the CERP alternative, the Petition fails to describe why

that would represent a significant environmental concern, contrary to 10 C.F.R. § 2.309(f)(1)(iv), or thereby controvert any particular analysis or conclusion in the ER. See *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 748-49 (2005) (“Materiality’ requires that the petitioner show why the alleged error or omission is of possible significance to the result of the proceeding. This means that there must be some significant link between the claimed deficiency and either health and safety of the public, or the environment.”).

For the foregoing reasons, Proposed Contention NEPA 3 is inadmissible.

D. PROPOSED CONTENTION NEPA 4:

The ER fails to adequately address the direct, indirect, and cumulative impacts of constructing and operating the access roads associated with Units 6 & 7 on wetlands and wildlife.

Petition at 36. The Petition asserts that the ER “fails to adequately discuss and analyze the impacts associated with the construction and operation of access roads.” *Id.* The Petition states that “there is also no information in the ER regarding the potential overlap of wildlife corridors with the proposed access roads” and that the ER “also contains no information on types of species that would be affected by overlap with wildlife corridors, including state listed and federally listed endangered species such as the Eastern Indigo Snake and Florida Panther.” *Id.* at 37.

Staff Response: As explained below, Proposed Contention NEPA 4 is inadmissible because it fails to explain why the issue raised is material to the findings that the NRC must make in this proceeding; is insufficiently supported by alleged facts or expert opinion; and fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

The Petition first asserts that construction and operation of access roads “will cause the disruption of ecological corridors, disruption of sheetflow, degradation of conservation lands (due to the disruption of management activities from access limitations), increased road-kill,

increased colonization of invasive/exotic plant species, and increased dumping and all terrain vehicle/off road vehicle use (by providing access opportunities for unauthorized persons).” Petition at 37. The only documentary support to which the Petition refers for this assertion is a set of comments to FPL from Miami-Dade County in the context of its review of FPL’s separate Site Certification Application. *Id.* (citing Exhibit 3 at 39).

However, contrary to the implication in the Petition, the cited portion of that document does not assert that construction and operation of access roads associated with Units 6 & 7 “will cause” any of these effects. Rather, it contains a more general statement that “[c]onstruction and operation of non-transmission linear facilities, *including but not limited to construction access roads, may have* an adverse impact on adjacent and nearby EEL lands, including but not limited to” several of the potential effects listed in the above-quoted statement from the Petition.²⁴ Exhibit 3 at 39 (emphasis added). “A document put forth by an intervenor as the basis for a contention is subject to scrutiny both for what it does and does not show.” *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1988); *rev’d in part on other grounds*, CLI-96-7, 43 NRC 235 (1996).

The cited portion of the Exhibit is a request from Miami-Dade County to FPL for additional information in order for the County to assess, in its review of the separate Site Certification Application, what impacts “non-transmission linear facilities” “may have” on Environmentally Endangered Lands. Neither the Petition nor the only cited reference explains why the general possibility of such impacts from “construction and operation of non-transmission linear facilities” makes adverse impacts foreseeable with respect to any access roads actually proposed or contemplated in connection with the construction and operation of

²⁴ The cited page of the Exhibit does not refer to “increased road kill,” although the statement in the Petition quotes it as support for that claim. Petition at 37 (citing Exhibit 3 at 39).

Units 6 & 7.²⁵ *Private Fuel Storage LLC* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348-9 (2002) (NEPA requires only a discussion of “reasonably foreseeable” impacts); *see also Louisiana Energy Services, LP* (National Enrichment Facility), CLI-05-20, 62 NRC 523, 536 (2005). To support a contention, “a petitioner must provide documents or other factual information or expert opinion that set forth the necessary technical analysis to show why the proffered bases support its contention.” *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180 (1998) (*citing Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff’d in part*, CLI-95-12, 42 NRC 111 (1995) (A petitioner is obligated “to provide the [technical] analyses and expert opinion” or other information “showing why its bases support its contention.”)).

Furthermore, neither the Petition nor the Exhibit explain in what way the significance of these effects from access road construction, were they to occur, would have the potential to affect the outcome of the proceeding and thus be material to the NRC’s findings. See 10 C.F.R. § 2.309(f)(1)(iv); *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 748-49 (2005) (“Materiality’ requires that the petitioner show why the alleged error or omission is of possible significance to the result of the proceeding. This means that there must be some significant link between the claimed deficiency and either health and safety

²⁵ It is also unclear from the Contention whether it is directed at access roads to the Turkey Point plant site or instead to access roads to the proposed transmission line corridors. For example, the Petition cites to the ER discussion at 4.1-6 regarding access roads to transmission line corridors, but in the next sentence refers to the ER conclusion at 4.1-11, which concerns impacts of access roads for access to the plant site for construction and operations. See Petition at 36-37. The ER also identifies potential impacts associated with “access roads” in several sections other than those cited by the Petition, but the Petition does not address those analyses or explain whether Petitioners contend that they are deficient. See, e.g., ER §§ 4.2.1.1.3; 4.2.1.2.2; 4.2.3.2.2, 4.3.1.3.1; 4.3.1.3.3. Furthermore, while the Petition criticizes a conclusion in ER § 4.1.2.5 as having relied on “the bare assurance of local government approval, the granting of easements, and the use of best management practices,” Petition at 37, it does not actually explain how it disagrees with the conclusion of SMALL impacts.

of the public, or the environment.”). Without an explanation of the likelihood or significance of such potential effects, much less how they directly controvert the conclusions in the ER, these assertions in the Petition do not support the admissibility of the contention. See 10 C.F.R. § 2.309(f)(1)(vi).

Similarly, with respect to its claim that the ER contains no information regarding “potential overlap of wildlife corridors with the proposed access roads,” Petition at 37, the Petition does not identify a genuine material dispute with the application. The Petition again cites comments to FPL from Miami-Dade County as support for the claim that “[w]ithout this information, the Commission cannot determine whether the access roads will cross through commonly used migration routes, travel corridors between feeding and breeding or resting areas, and other types of travel corridors.” *Id.* (citing Exhibit 3 at 39). However, the cited portion of that document (see Exhibit 3 at 39) does not assert that there actually would be overlap between access roads and wildlife corridors, nor does it explain why the general potential for such overlap makes adverse impacts “reasonably foreseeable” with respect to any access roads actually proposed or contemplated in connection with the construction and operation of Units 6 & 7. See *PFS*, CLI-02-25, 56 NRC at 348-9. To support a contention, “a petitioner must provide documents or other factual information or expert opinion that set forth the necessary technical analysis to show why the proffered bases support its contention.” *PFS*, LBP-98-7, 47 NRC at 180. Neither the Petition nor the Exhibit explain in what way the significance of such “overlap,” even if identified, demonstrates that the ER failed to address an important consideration material to the environmental analysis. See *Exelon Generating Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 811 (2005); see also *Monticello*, LBP-05-31, 62 NRC at 748-49. Likewise, absent an explanation of how the potential importance of such effects would contradict the ER’s conclusions with respect to impacts to any

particular resource, these assertions in the Petition do not demonstrate a genuine dispute with the application on a material issue. See 10 C.F.R. § 2.309(f)(1)(vi).

The Petition also relies on the Miami-Dade County comments in asserting the absence of information on “types of species that would be affected by overlap with wildlife corridors, including state listed and federally listed endangered species such as the Eastern Indigo Snake and Florida Panther” and the lack of discussion of “whether certain wildlife protection measures could be incorporated into the design of the roads to protect these species” and of “impacts to reptiles[.]” *Id.* at 37-38 (referencing Exhibit 3 at 39, 44).

Although the cited portions of the Exhibit do not specifically refer to any state listed or Federally listed species other than the Eastern indigo snake, the Exhibit does question the accuracy of FPL’s assessment of “the likelihood that the Eastern indigo snake occurs within or near the plant site or associated linear and non-linear features”; it also states that with respect to “proposed construction access roads,” Miami-Dade County has “presented information indicating that reptiles, and especially snakes, are disproportionately represented in a roadkill survey for a multilane road, US Highway 1, that passes through habitat similar to where the proposed construction access road will be located.” Exhibit 3 at 44.²⁶ However, neither the Petition nor the Exhibit explain why, even if some roadkill may occur, such impacts would be sufficiently environmentally significant to reptiles generally, let alone more specifically to the Eastern indigo snake, so as to warrant analysis in the ER. NRC regulations indicate that in an ER, impacts should only be discussed “in proportion to their

²⁶ The Exhibit also states as part of this discussion that “Miami-Dade County wishes to clarify that the County did not claim that there were Eastern indigo snakes represented in the roadkill survey, but instead stated that ‘reptiles, and particularly snakes, are disproportionately represented in road-kill surveys for other paved roads that have wetlands on both sides of the road, such as US Highway 1.’” Exhibit 3 at 44.

significance.” 10 C.F.R. § 51.45(b)(1). Having merely suggested that impacts from roadkill could occur, but without describing the significance of those impacts, the Petitioners have not shown why consideration of these impacts in the ER could make a difference in the outcome of the proceeding. See 10 C.F.R. § 2.309(f)(1)(iv); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999) (citing 54 Fed. Reg. at 33,172) (A “dispute at issue is ‘material’ if its resolution would ‘make a difference in the outcome of the licensing proceeding.”); see also *Monticello*, LBP-05-31, 62 NRC at 748-49. Accordingly, the Petition does not adequately explain why it would be necessary for the ER to address “protection measures” that “could be incorporated into the design of the roads to protect these species.” Petition at 37-38.²⁷ See *Monticello*, LBP-05-31, 62 NRC at 748-49. Furthermore, without having shown why the mere potential for such effects would contradict the ER’s conclusions with respect to the magnitude of ecological impacts, the Petitioners have not demonstrated that these assertions represent a genuine dispute with the application on a material issue of fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

Finally, the Petition states that “the ER fails to consider the implementation of wildlife protection measures such as fencing, signage, reduced speed limits, and wildlife underpasses to eliminate or minimize mortalities from road-kill.” Petition at 38. Again the sole documentary support cited by the Petition for this assertion is the comments to FPL from Miami-Dade County regarding the separate Site Certification Application. See *id.* (citing Exhibit 3 at 46). However, since as noted above the Petition has not explained why

²⁷ A footnote in the Petition suggests that the Florida Panther Recovery Plan calls for “insuring that panther habitat needs are incorporated in the planning of new roads and road expansion projects[.]” Petition at 38 n.8 (citing Exhibit 22 at 100). However, since as noted above this contention has not explained or provided support for either the likelihood or potential significance of any impacts to the Florida panther, the Petitioners have failed to explain why any discussion of protection measures in road design related to the Florida panther would be material to the ER.

any potential impacts associated with “mortalities from road-kill” are expected to be significant, it has not shown why a discussion of such “protection measures” would be necessary in the ER, or disputed the applicant’s conclusions.²⁸ 10 C.F.R. § 2.309(f)(1)(vi). In determining contention admissibility, 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 that set forth the necessary technical analysis to show why the proffered bases support its contention.” *PFS*, LBP-98-7, 47 NRC at 180. For the foregoing reasons, Contention 4 is inadmissible.

E. PROPOSED CONTENTION NEPA 5:

The ER fails to adequately address (1) all reasonable alternatives to the proposed transmission line corridors and associated access roads, and (2) how the applicant will avoid and/or minimize impacts to wetlands caused by construction and operation of these transmission line corridors and associated access roads.

Petition at 38. The Petition asserts that the ER “does not...specify the amount of wetland loss resulting from the construction of the transmission line corridors and associated access roads, although it notes that these corridors and roads ‘cross a variety of land use types, including various kinds of wetlands (marshes, forested wetlands, and canals).’” *Id.* at 40 (citing ER at 4.3-1). The Petition asserts that the ER’s “brief discussion regarding impact level not only fails to consider the specific impacts of constructing, operating, and maintaining transmission lines and access roads within wetlands—it also fails to address

²⁸ In addition, the portion of the Exhibit relating to the examples of “wildlife protection measures” listed in the Petition is in a paragraph seeking “information...that is sufficient to determine whether the requirements of Miami-Dade County Code and the CDMP as well as Condition 9 of Z-56-07 have been met.” Exhibit at 46. Yet without having shown why these asserted deficiencies would bear on the adequacy of an environmental conclusion in the ER, the Petition does not explain why the information deemed necessary by Miami-Dade County in order for FPL to demonstrate compliance of the Site Certification Application with these State or local requirements would necessarily be material to the adequacy of an ER for a COL application under NEPA. 10 C.F.R. § 2.309(f)(1)(iv).

whether reasonable alternatives are available to avoid and/or reduce these impacts as required by 10 C.F.R. § 51.45(b)(3).”²⁹ *Id.* at 41. The Petition further states that “FPL appears to rely on conceptual mitigation plans to avoid having to discuss how environmental impacts from transmission lines and access road construction could otherwise be avoided or minimized.” *Id.* at 43. According to the Petition, “FPL’s decision to consider only two corridors,[] and its refusal to analyze the impacts of siting transmission lines in either one of these corridors, much less identify what steps can be taken to avoid and/or minimize these impacts, undermines NEPA and NRC regulations.” *Id.* at 45.

Staff Response: As explained below, Proposed Contention NEPA 5 is inadmissible because it fails to explain why the issue raised is material to the findings that the NRC must make in this proceeding; is insufficiently supported by alleged facts or expert opinion; and fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

1. ER’s Analysis of Impacts on Wetlands

First, although the Petition appears to contend that the ER “summarily dismisses the issue” of “impacts of transmission line corridor and access road construction on wetlands,” it

²⁹ Within Proposed Contention NEPA 5 the Petitioners also claim that “the ER suggests that the applicant need not provide a discussion and analysis of the specific wetland impacts resulting from the project because FPL has undertaken a route selection process to choose the transmission line corridors in accordance with the PPSA.” Petition at 41. The Petition asserts that “FPL cannot cite to the requirements or procedural differences and considerations under state law to excuse its noncompliance with federal law” and states that “[h]ere, it appears FPL is attempting to delay, if not avoid, having to address the specific impacts posed by the potential siting of transmission lines within hundreds of acres of wetlands inside or in close proximity to Everglades National Park boundaries by relying on a state process that defers a final determination on the siting of transmission lines until after FPL receives state certification.” *Id.* at 42. It asserts that “any such attempt to postpone or evade these requirements violates 10 C.F.R. § 51.45.” *Id.* The only reference Petitioners make to the ER in connection with this claim is to ER § 4.1.2.1 at 4.1-4. *Id.* at 41. However, the cited page of the ER does not contain an assertion that FPL is deferring its analysis of impacts to proposed transmission corridors to a state process or otherwise declining to analyze impacts relevant to the COL NEPA review. Accordingly, it is not clear in what way this discussion in the Petition represents a material dispute with the application, or an independent basis for an admissible contention.

cites to a portion of the ER that does acknowledge such impacts and reaches conclusions regarding their environmental significance. Petition at 41. Indeed, the cited conclusion asserts that impacts resulting from wetland loss would be MODERATE. *Id.* (citing ER at 4.3-14, -15). More importantly, however, while the Petition cites the applicant's "Summary" in ER § 4.3.1.4, it fails to address or dispute the preceding sections of the ER on which that summary and conclusion rely. While this Portion of the contention cites only to ER Section 4.3.1.4, the ER discusses impacts from construction activities in the proposed transmission corridors, including to wetlands, in Section 4.3.1.3.1, "Transmission Corridors," within Section 4.3.1.3, "Potential Impacts to Offsite Areas." Section 4.3.1.3.1 identifies the potential new corridors, notes potential impacts to wetland habitats, describes "[s]tandard industry construction practices [that] would be used to reduce these impacts," notes that "some mitigation for wetland loss may be required" and states that "[m]itigation could include habitat enhancement, land swapping, or purchasing EMB credits." ER at 4.3-12. That same section describes potential impacts to species within the transmission corridors and potential associated "mitigation actions" with respect to these species and associated wetland habitat. *Id.* at 4.3-13. In sum, while Petitioners criticize the section titled "Summary" in § 4.3.1.4 as "summarily dismiss[ing] the issue" of impacts to wetlands from transmission corridor construction, they neither acknowledge nor identify any specific disagreement with the related preceding section that purports to discuss "Transmission Corridors." If the Petitioners consider this analysis to be deficient, they have not explained the basis for that dispute, nor why it establishes a genuine dispute with the application. In determining contention admissibility, "[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed." See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421, 433 (citing *Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear

Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)).

Furthermore, other than a general allusion to “the significant acreage of wetland habitat affected,” the contention does not identify any “specific impact” of “constructing, operating, and maintaining transmission lines and access roads” that it believes should be analyzed. Petition at 41. The Petitioners likewise fail to allege how the significance of such an unspecified impact would affect, let alone contradict, any conclusion in the ER, including the one that the Petition references. “A contention must . . . identify the disputed portion of the application, and provide ‘supporting reasons’ for the challenge to the application. Similarly, if a petitioner believes that an application fails to contain information on a ‘relevant matter as required by law,’ the contention must identify each failure and the supporting reasons for the petitioner’s belief.” *USEC Inc. (American Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 456 (2006). Consequently, such vague assertions concerning the absence of “specific impacts” fail to demonstrate the admissibility of the contention, as Petitioners fail to explain how these claims represent a material dispute with the application, contrary to 10 C.F.R. § 2.309(f)(1)(vi). Moreover, the Petitioners fail to identify any factual or expert support for these assertions, contrary to 10 C.F.R. § 2.309(f)(1)(v).

2. ER’s Analysis of Mitigation

Next, the Petition challenges the ER’s discussion of mitigation measures. It asserts that “FPL appears to rely on conceptual mitigation plans to avoid having to discuss how environmental impacts from transmission lines and access road construction could otherwise be avoided or minimized.” Petition at 43. According to the Petition, the “ER states only that a three-pronged approach to mitigation would be used[,]” and “the ER does not elaborate on any one of these.” *Id.*

As a threshold matter, the wording of Proposed Contention NEPA 5 indicates that the contention is directed at construction of “the proposed transmission line corridors and associated access roads,” and thus relates to impacts of the proposed new offsite transmission line corridors, rather than to impacts within existing transmission line corridors. Petition at 38.³⁰ Yet the section of the ER to which the Petitioners cite regarding mitigation (ER at 4.3-9, in ER § 4.3.1.1.4) does not contain the Applicant’s discussion of impacts to wetlands in new offsite transmission line corridors. See Petition at 43. Rather, Petitioners’ reference is to a discussion in the “Wetlands” subsection of ER § 4.3.1.1, “Potential Impacts to the Units 6 & 7 Plant Area and Other Plant Property Areas,” which relates to onsite rather than offsite impacts. As discussed *supra*, the ER’s discussion of impacts from construction activities in the proposed transmission corridors, including to wetlands, is instead in ER Section 4.3.1.3.1, “Transmission Corridors,” within Section 4.3.1.3, “Potential Impacts to Offsite Areas.” As previously noted, that section of the ER identifies the potential new corridors, notes potential impacts to wetland habitats, describes “[s]tandard industry construction practices [that] would be used to reduce these impacts,” notes that “some mitigation for wetland loss may be required” and states that [m]itigation could include habitat enhancement, land swapping, or purchasing EMB credits.” ER at 4.3-12. That same section describes potential impacts to species within the transmission corridors and potential associated “mitigation actions” with respect to these species and associated wetland habitat. *Id.* at 4.3-13.

³⁰ See also Petition at 40 (referring to “wetland loss resulting from the *construction of the transmission line corridors and associated access roads*”)(emphasis added); 41-42 (criticizing reliance on state “route selection process to choose the transmission line corridors,” asserting FPL’s “obligations to analyze the environmental impacts of *siting transmission lines in these corridors*,” and FPL’s obligations “to address the specific impacts posed by the potential *siting of transmission lines*[.]”)(emphasis added).

In their discussion regarding the ER's mitigation measures, the Petitioners do not acknowledge this discussion, nor explain why it is inadequate. Because the contention fails to address any alleged inadequacy of the portion of the ER analysis directed at the category of impacts that the contention purports to challenge, it fails to demonstrate a genuine dispute with the application on a material issue, contrary to 10 C.F.R. § 2.309(f)(1)(vi). A petitioner's imprecise reading of a reference document, including the application, cannot serve to generate an issue suitable for litigation. *See Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Ga.), LBP-95-6, 41 NRC 281, 300 (1995); *see also Millstone*, LBP-08-9, 67 NRC at 433.³¹

3. ER's Analysis of Alternatives

Lastly, Proposed Contention NEPA 5 challenges the ER's discussion of alternatives. It asserts that "the ER also fails to adequately analyze potential alternative locations for the transmission line corridors and access roads." Petition at 43. As explained below, with respect to this assertion, the Petition fails to demonstrate that the issue raised is material to

³¹ As noted above, the Petitioners cite to a section of the ER that is unrelated to the particular concern raised in their contention, while failing to cite a section that does relate to that issue. They thus do not explain the materiality of their asserted disagreement with the application. Further, the Petitioners' description of the ER section they do reference omits some portions of the ER's discussion. According to the Petition, the "ER states only that a three-pronged approach to mitigation would be used: active mitigation, "land swapping," and the purchase of wetland credits from the Everglades Mitigation Bank." Petition at 43 (referencing ER at 4.3-9). The Petition states that "[r]emarkably, the ER does not elaborate on any one of these." *Id.* The referenced statements in the ER state: "A three-pronged approach to wetland mitigation would be used. The first option would be active mitigation (e.g., creation of crocodile habitat, establishment of culverts under existing roadbeds to allow sheet flow of water, etc.). The second option would be "land swapping" (e.g., providing relatively natural land as a preserve, etc.). The third option would be purchase of wetland credits from the Everglades Mitigation Bank." ER at 4.3-9. The ER text omitted from the Petition does "elaborate" on the meaning of these options, albeit briefly.

Furthermore, other than to characterize these statements in the ER as "cursory references," the contention does not specifically challenge the appropriateness of any of the stated mitigation approaches, nor does it identify any additional mitigation measures that it believes should be analyzed. Petition at 43. "[I]f a petitioner believes that an application fails to contain information on a 'relevant matter as required by law,' the contention must identify each failure and the supporting reasons for the petitioner's belief." *USEC Inc. (American Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 476 (2006). Even had it addressed the applicable section of the ER, Petitioners' challenge to the discussion of mitigation fails to explain what information they assert is required.

the findings that the NRC must make in this proceeding. See 10 C.F.R. § 2.309(f)(1)(iv).

Likewise, this basis is insufficiently supported by alleged facts or expert opinion; and fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(v)-(vi).

In Proposed Contention NEPA 5, the Petitioners provide a background discussion describing how NEPA (and the NRC's implementing regulations) require the ER to discuss alternatives, before asserting that the ER's discussion of alternatives to the proposed transmission line corridors is inadequate. See Petition at 38-40, 43-47. As the Petition correctly states, NRC regulations (consistent with NEPA) require consideration of "alternatives to the proposed action." See, e.g., 10 C.F.R. §§ 51.45(b)(3); 51.71(d). However, as discussed below, under NRC regulations, the construction of transmission lines is not part of the "proposed action" of issuing combined licenses. See 10 C.F.R. §§ 50.10(a)(2)(vii), 50.10(c). Thus, pursuant to NRC regulations, there is no requirement to consider alternatives to transmission line corridors. Consequently, as explained below, the Petition's assertion of the need for the ER to discuss alternatives "to the proposed action" fails to demonstrate why discussion in the ER of alternative transmission line corridors is material to satisfaction of that requirement (i.e., 10 C.F.R. § 51.45). This basis for the contention accordingly does not comply with 10 C.F.R. § 2.309(f)(1)(iv).

In a 2007 rulemaking, the NRC clarified the definition of "construction" under the Atomic Energy Act (AEA) to more clearly distinguish between those activities associated with building a nuclear power plant which require an NRC license and are therefore considered "construction," and those that can be undertaken without Commission approval. See Limited Work Authorizations for Nuclear Power Plants, 72 Fed. Reg. 57,416 (2007) ("LWA Rule"). As explained in the LWA Rule's Statements of Consideration, some preliminary site preparation activities that NRC regulations had previously stated could not be undertaken without an NRC license, including the construction of transmission lines, are no longer considered "construction"

within the purview of the agency's AEA jurisdiction. See *id.* at 57,427. The Commission explained that "the NRC's redefinition reflects its consideration of the proper regulatory jurisdiction of the agency, and properly divides what was considered a single Federal action into private action for which the NRC has no statutory basis for regulation, and the Federal action (licensing of construction activities with a reasonable nexus to radiological health and safety or common defense and security, for which no other regulatory approach is acceptable)[.]" *Id.* at 57,418-19.

In the rulemaking, the Commission also explained the implications of this redefinition for its environmental reviews under NEPA. In responding to public comments, the Commission explicitly disagreed with the assertion that "the NRC's EIS for a combined license must attribute *to the NRC's Federal action* all of the environmental impacts of constructing a nuclear power facility, including the private, pre-construction activities that may be accomplished by the applicant without any NRC approval." *Id.* at 57,421 (emphasis added). Rather, the Commission emphasized that the NRC's EIS "need only describe the environmental impacts *of the Federal action* as those construction activities, as defined under § 50.10, which can only be accomplished under an LWA and combined license or construction permit. The environmental impacts of pre-construction activities will also be described in the NRC's EIS *because such description is necessary to evaluate the cumulative impacts of the Federal action*[" 72 Fed. Reg. at 57,421 (emphasis added). In explaining why this concept of the "major Federal action" is consistent with NEPA, the Commission noted that "[t]he grant of a construction permit or combined license by the NRC is not a legal condition precedent to these non-Federal, site preparation activities" and also reiterated that "while the effects caused by the non-Federal site preparation activities would not be considered effects of the NRC's licensing action, the effects of the non-Federal activities would be considered during any subsequent 'cumulative impacts' analysis." *Id.* at 57,427.

As a result, although the NRC's environmental review of the impacts from issuance of a combined license is required to consider impacts of construction of transmission line corridors to the extent it bears on its analysis of "cumulative impacts," the construction of transmission line corridors is not "construction" as defined in 10 C.F.R. § 50.10. That activity accordingly is not considered to be part of the "major Federal action" that is approved by the Commission if a combined license is issued. Because alternatives to the proposed construction of transmission lines are thus not alternatives to the "proposed action" before the agency, the requirement to discuss alternatives "to the proposed action" does not extend to them.³² See, e.g., *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 55 (2001)("[a]gencies need only discuss those alternatives that are reasonable and 'will bring about the ends' of the proposed action.") (citing *Citizens Against Burlington v. Busey*, 938 F.2d 190, 195 (D.C. Cir. 1991), *cert. denied*, 52 U.S. 994 (1991)(internal citations omitted)). Consequently, the Petitioners' general assertion that the ER must discuss alternatives to the transmission line corridors fails to demonstrate why such discussion is material to satisfaction of that requirement (i.e., 10 C.F.R. § 51.45), contrary to 10 C.F.R. § 2.309(f)(1)(iv).³³

³² This understanding is fully consistent with the principle that alternatives outside the jurisdiction or capability of the lead agency are to be analyzed in the EIS if they are reasonable. See, e.g., 40 C.F.R. § 1502.14 (CEQ regulation indicating that EIS should include "reasonable alternatives not within the jurisdiction of the lead agency"); see also Petition at 46. An analysis of alternatives to transmission line corridors is not material to the COL NEPA review of "alternatives to the proposed action" not because the authority to direct/authorize the use of an alternative corridor is outside the NRC's jurisdiction, but because it is not an alternative to the proposed action authorized by issuing a combined license.

³³ The ER states that it has included a discussion of alternative transmission systems in accordance with NUREG-1555. ER at 9.4-23. NUREG-1555, "Environmental Standard Review Plan – Standard Review Plans for Environmental Reviews for Nuclear Power Plants" (ESRP), which contains staff guidance for the environmental review of reactor license applications, including combined license applications, has not yet been revised to account for the changes associated with the LWA Rule. To the extent that guidance therein is inconsistent with the LWA Rule with respect to requesting analysis of alternatives to activities that are no longer defined as construction, the Staff recognizes that such guidance may be considered superseded by the rule.

Even if the Petition had demonstrated that the alleged deficiency was material to the findings the Staff must make, it fails to specify what information or analysis it believes is actually missing from the ER. It asserts that “the ER fails to identify and discuss any number of reasonable alternative corridors that might exist and offers not so much as a sentence explaining why these areas were eliminated from further consideration.” Petition at 46. Despite this general concern, the contention does not provide any factual or expert support to identify any “alternative corridors” that it believes have been unexamined, explain why such an alternative would be reasonable, or explain why such an alternative would be environmentally preferable to the corridors discussed in the ER. 10 C.F.R. § 2.309(f)(1)(v). It cites but does not specifically address the discussion in ER § 9.4.3 regarding the corridor selection process and associated selection criteria (including “Resource Mapping and Alternative Route Delineation”, see ER § 9.4.3.2 and the “Community Outreach Program,” see ER § 9.4.3.4), and fails to assert any particular dispute with or flaw in the selection process. Petition at 44. The Petition alleges that “[w]etlands account for more than half of all lands within both the preferred and secondary western corridors” and concludes that “FPL’s failure may have serious environmental consequences.” *Id.* at 47. Without more, the Petition has not identified what “viable but unexamined alternative” it believes should have been analyzed. *Id.* at 46. “[I]f a petitioner believes that an application fails to contain information on a ‘relevant matter as required by law,’ the contention must identify each failure and the supporting reasons for the petitioner’s belief.” *USEC*, CLI-06-10, 63 NRC at 456. Petitioners’ non-specific invocation of possible alternatives to the proposed transmission line corridors thus fails to demonstrate why its asserted dispute with the application would affect the outcome of the proceeding. See 10 C.F.R. § 2.309(f)(1)(iv); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999) (citing 54 Fed. Reg. at 33,172) (A “dispute at issue is ‘material’ if its resolution would ‘make a difference in the outcome of the licensing proceeding.’”); see also *Nuclear Management*

Co., LLC (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 748-49 (2005). The Petition accordingly fails to explain in what way discussion of a particular alternative would controvert any analysis or conclusion in the ER and thus does not identify a genuine dispute with the application on a material issue, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

For the foregoing reasons, Proposed Contention NEPA 5 is inadmissible.

F. PROPOSED CONTENTION NEPA 6:

The ER fails to adequately address the cumulative impacts of constructing and operating Units 6 and 7 on salinity levels in groundwater, surface water, Biscayne Aquifer, and Biscayne Bay; wetlands; and wildlife.

Petition at 47. Proposed Contention NEPA 6 states that “perhaps the most significant issue facing Turkey Point, both currently and into the future with the proposed construction and operation of Units 6 & 7, is increased levels of salinity in a National Park ecosystem that is already plagued by too much salinity.” *Id.* The Petition states that “[a]s discussed earlier, the ER fails to address the existing plume of saltwater that is found underneath the plant as well as adequately address the potential for saltwater intrusion as sea levels rise.” *Id.* at 47. It further states that “[t]here is the potential that with the construction and operation of Units 6 & 7, this plume of saltwater will not only expand in scope and continue its migration, but that the effects of construction and operation of Units 6 & 7, when coupled with the effects of the existing saltwater plume, will have the cumulative effect of increasing salinities in the project area.” *Id.* at 47-48.

The Petitioners assert several bases in support of Proposed Contention NEPA 6, alleging that increasing salinities “could occur as a result of the cumulative effects of drift from the cooling tower operations, the use of radial wells that could extract freshwater from the Biscayne Aquifer and Biscayne Bay (thereby increasing salinity values in the Bay), the reservation of municipal wastewater that may otherwise be used to supply freshwater into the littoral zone of Biscayne Bay through the CERP BBCW project, the failure of FPL to elevate the entire project area and facilities to guard against the intrusion of saltwater from sea level rise

and storm surge (to prevent the cooling canals from becoming essentially part of the Bay), and the use of injection wells that may result in increased salinities in the Floridan Aquifer.” Petition at 48.

As additional bases, the Petitioners assert that other actions, “when added to these effects, may intensify the existing problems posed by the groundwater plume.” *Id.* These include the “water management operations of the U.S. Army Corps of Engineers and/or the South Florida Water Management District (the “SFWMD”).” *Id.* at 48-49. The Petition also claims that “increased mining operations in the area could also accelerate the mixing of surface water and salt-intruded aquifers.” *Id.* at 50. The Petitioners further claim that “[t]he potentially dramatic increase in salinity levels in and around the plant following the construction and operation of Units 6 & 7 could have profound impacts to the native ecosystem and the wildlife found therein,” and allege potential impacts to crocodile hatchlings, which the Petitioners assert are adversely impacted by “hypersaline conditions and high water temperatures” in the cooling canals. Petition at 51. The Petition also asserts that the ER should discuss and analyze cumulative impacts to “the Bay’s flora and fauna, sea grasses (which are sensitive to high salinities), and other marine life” as part of its assessment of impacts to wildlife. Petition at 52.

Staff Response: Proposed Contention NEPA 6 is inadmissible because it is not adequately supported by alleged facts or expert opinions, and fails to raise a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(v) and (vi).

It appears that the Petitioners allege seven general bases in support of Proposed Contention NEPA 6. The Staff response will address the admissibility of each subpart separately, before assessing the extent to which the subparts support the admissibility of the contention as a whole. *Cf. Crow Butte Resources, Inc.* (North Trend Expansion Area), CLI-09-12, 69 NRC 535, 553 (2009) (the scope of an admitted contention is defined by its bases); see also *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station,

Units 1 and 2), CLI-02-28, 56 NRC 373, 379 (2002) (Where an issue arises over the scope of an admitted contention, NRC opinions have long referred back to the bases set forth in support of the contention).

At the outset of Proposed Contention NEPA 6, the Petitioners list five general alleged “effects of construction and operation of Units 6 & 7” that, they assert, “when coupled with the effects of the existing saltwater plume, will have the cumulative effect of increasing salinities in the project area.” Petition at 48. However, as a threshold matter, Proposed Contention NEPA 6 fails to provide any factual bases for its assertion that these effects would increase salinities in the project area and fails to demonstrate that they would contribute to a significant cumulative effect, contrary to 10 C.F.R. § 2.309(f)(1)(v). Moreover, as explained further below, the Petition fails to explain how these issues raise a dispute with any of the analyses and conclusions in the ER relating to these issues, contrary to 10 C.F.R. § 2.309(f)(1)(vi). Subsequent to these initial five assertions, Proposed Contention NEPA 6 also asserts two other general bases. See Petition at 48-51. The Staff addresses these other bases below following its response to the five introductory bases.

1. Drift From Cooling Tower Operations

First, the Petition claims that salinity levels could increase as a result of “drift from the cooling tower operations.” Petition at 48. However, the Petition provides no factual or expert opinion support for the proposition that “drift from cooling tower operations” would have the potential to affect salinities “in groundwater, surface water, Biscayne Aquifer, and Biscayne Bay; wetlands; and wildlife.” *Id.* at 47. Although the Petitioners have attached several exhibits in support of Proposed Contention NEPA 6, they cite none of them specifically as support for this basis. Nor do the Petitioners point to any portion of the ER in which this discussion should occur, or dispute the portions in which the impacts of salt drift are discussed. Thus this basis fails to meet 10 C.F.R. § 2.309(f)(1)(v) and (vi).

With respect to salt drift from the cooling system for Units 6 & 7 and the salinity impacts on local vegetation and terrestrial species, the ER states that “[t]he AERMOD model was used to predict the amount of salt deposits from operation of the Units 6 & 7 cooling towers” and that, based on conservative deposition rates, “[s]ignificant salt deposition is predicted at the makeup water reservoir (up to 900 kg/ha/mo).” ER at 5.3-8. However, the ER also states that “[b]eyond the makeup water reservoir, the deposition rates are predicted to decrease rapidly.” ER at 5.3-9. “The monthly salt deposition in the cooling canals of the industrial wastewater facility ranges from 10 to 80 kg/ha/month. Salt deposition of 10 kg/ha/mo would generally be confined to the plant property, with the exception of the adjacent southeastern perimeter.” *Id.*

The ER also provides an evaluation of the impacts of cooling tower salt drift on terrestrial species. The ER evaluates impacts to crocodiles and waterbirds at the wastewater facility, stating that “[g]iven FPL’s ongoing management activities that include providing freshwater habitats for young crocodiles, salt deposits from operation of the Units 6 & 7 cooling towers into the industrial wastewater facility would not impact the salinity sufficiently to impact existing crocodile growth and/or survival rates” and that “[s]alt deposits would not impact canal salinities sufficiently to eliminate or reduce fish populations and, therefore, would not impact waterbird use of the industrial wastewater facility.” *Id.* The ER subsequently concludes that “[a]ny impacts from salt drift on local terrestrial ecosystems would be SMALL and would not warrant mitigation beyond the crocodile management program identified above.” *Id.* With respect to impacts to vegetation, the ER concludes that “[c]onsidering the existing salt-tolerant vegetative community surrounding the plant area, the potential impacts of salt drift to vegetation would be SMALL and not warrant mitigation.” *Id.*

In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421, 433 (citing *Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear

Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)). Here, the Petitioners offer no facts or expert opinion to explain what additional “cumulative effects of drift” were not considered in the Applicant’s reasoning and conclusions in the ER. Specifically, Petitioners fail to provide any support for the claim that salt drift from the cooling towers may affect salinities “in groundwater, surface water, Biscayne Aquifer, and Biscayne Bay; [and] wetlands.” Petition at 47. Thus, this basis is contrary to 10 C.F.R. § 2.309(f)(1)(v). And, to the extent that Petitioners claim that the Applicant’s ER fails to provide any necessary information for the staff’s evaluation of the impact of salt drift on vegetation or terrestrial species, the Petition does not cite to the portions of the ER in which these impacts are discussed nor does it attempt to contradict the information provided there. Thus, the Petition fails to identify a genuine dispute with the Applicant on a material issue of law or fact. 10 C.F.R. 2.309(f)(1)(vi); *see USEC, Inc. (American Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 478 (2006).

2. Radial Collector Wells

Second, the Petition claims that salinities could increase from the “use of radial wells that could extract freshwater from the Biscayne Aquifer and Biscayne Bay (thereby increasing salinity values in the Bay).” Petition at 48. Again, the Petition does not provide factual or expert support for the proposition that salinities would increase from use of the radial wells or that any resulting influence on salinity would be significant or likely to result in significant impacts to “groundwater, surface water, Biscayne Aquifer, and Biscayne Bay; wetlands; and wildlife,” contrary to 10 C.F.R. § 2.309(f)(1)(v). Petition at 47. Consequently, the Petition does not provide support for its assertions that changes attributable to radial well operation would have “the cumulative effect of increasing salinities in the project area” or “may intensify the existing problems posed by the groundwater plume.” *See id.* at 48. Additionally, Petitioners fail to acknowledge or dispute the ER’s analysis of the impact of radial collector wells. The ER states that “the impacts to aquatic life as a result of radial collector well operation would be SMALL and

not warrant mitigation.” ER 5.3.1.2 at 5.3-3. The ER further states that “[t]he operation of the radial collector wells and the potential impacts on water bodies including Biscayne Bay and the cooling canals in the industrial wastewater facility have been evaluated through groundwater modeling” and “[b]ased on the evaluation, impacts with respect to aquatic vegetation (e.g. shoreline mangroves) would be SMALL and not warrant mitigation. Additionally, impacts to important aquatic species from operation of the radial collector wells would be SMALL and would not require mitigation.” *Id.* Because the Petitioners do not address this discussion of impacts in the ER, to the extent that Petitioners claim that the Applicant’s ER fails to provide any necessary information for the Staff’s evaluation of the impact of salt drift on vegetation or terrestrial species, they have failed to identify a genuine dispute with the ER’s conclusions that the cumulative impacts to water quality or aquatic resources would be small, ER Section 5.11, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

3. Use of Municipal Wastewater

Third, the Petition contends that salinities could be affected by “the reservation of municipal wastewater that may otherwise be used to supply freshwater into the littoral zone of Biscayne Bay through the CERP BBCW project.” Petition at 48. However, in connection with this contention³⁴ the Petitioners have provided no factual or expert support for the possibility that any municipal wastewater could be used to supply fresh water through the CERP BBCW

³⁴ The NRC Staff recognizes that, in support of Proposed Contention NEPA 2.3, petitioners referenced Exhibit 40, the Biscayne Bay Coastal Wetlands Rehydration Pilot Project Preliminary Engineering Report. This report specifically discusses the possible use of treated wastewater from the Miami-Dade Water and Sewer Department for wetlands rehydration. However, the Petitioners did not reference that document in support of Contention 6 and have failed to provide any other factual or expert support for the possibility that treated wastewater could be used to supply fresh water to the Biscayne Bay Coastal Wetlands. Further, as noted in the response to Proposed Contention NEPA 2.3, the Petitioners have provided no factual or expert support to indicate that Turkey Point’s use of treated wastewater from the Miami-Dade Water and Sewer Department impacts the ability of the County to also supply fresh water to the BBCW project. Therefore, even had Petitioners referenced Exhibit 40 in support of the admissibility of Contention 6, they would still fail to meet the requirements of 10 C.F.R. 2.309(f)(1)(v).

project, or how the wastewater which FPL proposes to use “may otherwise be used” for CERP, contrary to 10 C.F.R. § 2.309(f)(1)(v). Nor has the Petition provided any factual or expert support to indicate that Turkey Point’s use of treated wastewater in the cooling system impacts the ability of the Miami-Dade Water and Sewer Authority to also supply fresh water to the CERP BBCW project, contrary to 10 C.F.R. § 2.309(f)(1)(v).

The Petition also fails to provide support for its assertions that changes attributable to the “reservation of municipal wastewater” would have “the cumulative effect of increasing salinities in the project area” or “would intensify the existing problems posed by the groundwater plume.” Petition at 48. Although the Petition refers to the BBCW project, it does not state in what way that project could be affected by the Applicant’s “reservation of municipal wastewater” other than to say that the wastewater “may otherwise be used to supply freshwater into the littoral zone of Biscayne Bay through the CERP BBCW project.” *See id.* Accordingly, even if the Petition were correct that “reservation of municipal wastewater” could potentially affect the BBCW Project, it does not explain the basis for an assertion that the effect would be environmentally significant. Having failed to explain the rationale for asserting the environmental significance of Turkey Point’s “reservation” of municipal wastewater, Petitioners have failed to explain why the application is inadequate for not addressing it. *See, e.g.*, 10 C.F.R. 51.45(b)(1) (In an ER, “[i]mpacts shall be discussed in proportion to their significance.”); *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999) (A “dispute at issue is ‘material’ if its resolution would ‘make a difference in the outcome of the licensing proceeding.’”) (citing 54 Fed. Reg. at 33,172). Therefore, the Petitioners have failed to demonstrate that this issue is material to the findings the NRC must make to support that action that is involved in the proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iv).

Furthermore, several sections of the ER discuss CERP, including with respect to the analysis of cumulative impacts. *See, e.g.*, ER §§ 2.3.1.1.1; 2.3.1.1.5; 4.7; 5.11. For example,

with respect to its Chapter 5 analysis of cumulative impacts of operation, the ER states that it considered the Biscayne Bay Coastal Wetlands and C-111 Spreader Canal projects “as a result of their closeness to Turkey Point[.]” *Id.* at 5.11-2. In its analysis of cumulative surface water effects, the ER states that the “CERPs would rehydrate wetlands that provide water flow into Biscayne Bay, positively impacting Biscayne Bay.” *Id.* at 5.11-5. After discussing potential cumulative impacts from Everglades Mitigation Bank (EMB) and reiterating its earlier conclusion that impacts “on Biscayne Bay from operation of the radial collector wells would be SMALL” the ER concludes that “the cumulative impact on Biscayne Bay would be SMALL.” *Id.* at 5.11-5. In its analysis of cumulative groundwater effects, the ER states that “other projects considered for cumulative impacts, EMB and CERPs, would not withdraw groundwater and would not have groundwater injection wells. The wetlands involved in these projects would likely positively impact groundwater resources since they would promote recharge to groundwater rather than runoff.” *Id.* at 5.11-6. Subsequently, the ER states that “[c]onsidering the ... impacts to groundwater resources from the other projects considered for cumulative impacts, the cumulative impact to groundwater resources would be SMALL. *Id.*

With respect to water quality, the ER states that the “non-Turkey Point projects considered for cumulative impacts, CERPs and EMB, would not withdraw water from surface water or groundwater sources. The CERPs would provide stormwater treatment to minimize negative impacts to waters ultimately receiving the treated stormwater, such as the Biscayne Bay and underlying groundwater. Therefore, adverse impacts to surface water or groundwater resources from these projects are not expected.” *Id.* at 5.11-6. The ER subsequently concludes that “[c]onsidering that the existing units use of groundwater does not overlap with the uses for operation of Units 6 & 7 [citation omitted] and that the non-Turkey Point projects would have positive impacts to water quality, cumulative impacts to groundwater quality would not result.” *Id.* at 5.11-7.

The Petition does not cite to any of these portions of the ER, nor do Petitioners dispute the application's reasoning and conclusions with respect to the anticipated positive impacts of CERP with regard to cumulative impacts. Having failed to challenge the conclusions and analyses in the applicant's ER (see ER Section 5.11), Proposed Contention NEPA 6 fails to identify a genuine dispute with the Applicant on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

4. Sea Level Rise and Storm Surge

Fourth, the Petition appears to contend that the cooling canals, which are used to cool Units 1 through 4, could become "essentially part of the Bay" due to "the failure of FPL to elevate the entire project area and facilities to guard against the intrusion of saltwater from sea level rise and storm surge." Petition at 48. However, as explained below, the Petitioners have provided no factual or expert support for their apparent assertion that sea level rise and storm surge would cause the cooling canals to become "essentially part of the Bay" or why the Applicant, in the COL application for Units 6 & 7, should have proposed to elevate the entire project area and facilities to "guard against the intrusion of saltwater," contrary to 10 C.F.R. § 2.309(f)(1)(v) and (vi).

The ER discusses the cooling canals in §§ 2.3.1 and 5.11, "Hydrology" and "Cumulative Impacts Related to Station Operation." The ER describes the feeder and return canals as "shallow, generally 1 to 3 feet deep, with the exception of the westernmost return canal (formerly Card Sound Canal), which extends to a depth of -18 feet NGVD 29 (-19.6 feet NAVD88)." ER at 2.3-10. These canals are further described in the ER as having water levels which "rise and fall with the tide in Biscayne Bay," with groundwater flow interacting with water in these unlined cooling canals. ER at 2.3-11. "The cooling canals also experience losses as a result of evaporation and seepage. Makeup water for the industrial wastewater facility comes from treated process wastewater, rainfall, stormwater runoff, and groundwater infiltration." *Id.*

In ER Section 5.11 “Cumulative Impacts Related to Station Operation,” the ER states, in Section 5.11.2.1 (Surface Water): “[t]he cooling canals of the industrial wastewater facility would be impacted by salt deposition from operation of the Units 6 & 7 cooling towers as described in Subsection 5.3.3. However, ... [w]ith continued implementation of the management/conservation plan, the cumulative impact on the cooling canals of the industrial wastewater facility would be SMALL.” ER at 5.11-5. In Section 5.11.2.2 (Groundwater), the ER concludes: “[c]onsidering the impact from the radial collector wells and the impacts to groundwater resources from the other projects considered for cumulative impacts, the cumulative impact to groundwater resources would be SMALL.” ER at 5.11-5. Finally, in Section 5.11.2.3 (Water Quality), the ER concludes: “[c]onsidering that the existing units use of groundwater does not overlap with the uses for operation of Units 6 & 7 (Subsection 5.11.2.2) and that the non-Turkey Point projects would have positive impacts to water quality, cumulative impacts to groundwater quality would not result.” ER at 5.11-7.

The Petition does not cite to any of these portions of the ER, nor do Petitioners dispute the application’s reasoning and conclusions with respect to impacts related to the cooling canals. Furthermore, the Petitioners do not explain how construction and operation of Units 6 & 7 would increase (or even affect) salinity levels in the cooling canals and, as a result, the Petitioners’ assertion that elevation of the “entire project area” is something that should have been included in the COL application is unsupported. The Petition does not provide support, for its assertions that “the failure of FPL to elevate the entire project area and facilities,” ... “to prevent the cooling canals from becoming essentially part of the Bay” would have a cumulative impact “on salinity levels in groundwater, surface water, Biscayne Aquifer, and Biscayne Bay; wetlands; and wildlife,” and thus fails to meet 10 C.F.R. 2.309(f)(1)(v). See Petition at 47. Further, without having explained the rationale for asserting the environmental significance of these potential effects, this basis asserted in support of Proposed Contention NEPA 6 likewise fails to identify a genuine dispute with the ER’s conclusions that impacts to groundwater and

surface water would be small, and that cumulative impacts to water quality would not occur, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

5. Injection Wells

As a fifth basis for Proposed Contention NEPA 6, the Petition asserts that the Applicant failed to consider “the use of injection wells that may result in increased salinities in the Floridan Aquifer.” Petition at 48. However, the Petitioners provided no factual or expert support for the assertion that there is any relationship between the injection wells and increased salinities in the Floridan Aquifer, contrary to 10 C.F.R. § 2.309(f)(1)(v). The Petitioners also fail to acknowledge the portions of the ER in which impacts of the injection wells were discussed. ER 5.2.1.1.9; 5.11.2.3. As stated in the ER: “potential impacts from the operation of the deep well injection wells to groundwater would be SMALL and not warrant mitigation beyond that described previously,” ER Section 5.2.1.1.9, at 5.2-11; and “[w]astewater from the operation of Units 6 & 7, including blowdown, would be injected into the Boulder Zone of the Floridan aquifer via deep injection wells. The FDEP permitting process for injection well permits would be followed, including monitoring requirements for groundwater quality and groundwater elevation data in overlying aquifers. The impact to groundwater resources from this wastewater injection was characterized as SMALL.” ER 5.11.2.3, at 5.11-7. The Petitioners fail to address or dispute these statements in the ER. Consequently, without having explained the rationale for asserting the connection between the use of injection wells and increased salinities in the Floridan Aquifer, and failing to address the ER’s conclusions that impacts to groundwater resources would be small, the petition fails to identify a genuine dispute with the applicant on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

6. Other Actions

The sixth basis which Petitioners offer in support of the admissibility of Proposed Contention NEPA 6, is that “[t]here are also other actions that, when added to these effects, may intensify the existing problems posed by the groundwater plume. See Browder at 862

[Exhibit 7] (discussing how the flow rate and distribution of freshwater inputs to Biscayne Bay have been altered by water management actions over time and how these practices have had negative effects on patterns of salinity distribution and salinity variability, which have resulted in a loss of estuarine habitat).” Petition at 48. As examples of these “water management actions,” Petitioners note that “[o]ther, past, present, and reasonably foreseeable future actions of persons include the water management operations of the U.S. Army Corps of Engineers and/or the South Florida Water Management District (the “SFWMD”).” *Id.* at 48-49.

The Petitioners claim that “these water management activities create an “unnaturally dry” dry season, “leading to long periods of dry marshes and high salinities along the shoreline.” *Id.* at 50. According to the Petition, the result is: (a) a loss of productive estuarine fish and shellfish habitat; (b) increased predation of near-shore species by marine fish; (c) establishment of exotic plant species within the coastal wetland zone; and (d) loss of wading bird foraging habitat during nesting season. *Id.* In support of these claims, Petitioners reference Exhibit 7, at 865, which states that “much of the existing habitat loss for estuarine fish communities stems from changes in freshwater inflow that have disturbed the natural correspondence of favorable salinity with favorable bottom and shoreline habitat for estuarine species.” Petition at 50 (citing Exhibit 7 at 865).

Petitioners assert that “[t]he ER fails to discuss how these yearly draw-downs, when added to the existing saltwater plume (stemming from the operations of Units 6 & 7) [sic] and proposed operations of Units 6 & 7, will cumulatively impact local salinities [sic] levels within the Biscayne Aquifer and Biscayne Bay.” Petition at 50. The Petitioners reference the poster presentation of Kearns, E.J., et al., titled “Environmental Impacts of the Annual Agricultural Drawdown in Southern Miami-Dade County, Everglades National Park and Biscayne National Park” (Exhibit 24) which states that “[t]he practice [of the agricultural drawdowns] also increases the risk of saltwater intrusion into the Biscayne Aquifer.” Petition at 50; Exhibit 24. Yet even if the Petitioners are correct regarding the effects that they allege result from these water

management drawdowns, neither the Petition nor the referenced Exhibit explain how these assertions demonstrate that any direct, indirect, or cumulative environmental impact *attributable to the proposed action* has been inadequately discussed in the ER. “A contention must . . . identify the disputed portion of the application, and provide ‘supporting reasons’ for the challenge to the application. Similarly, if a petitioner believes that an application fails to contain information on a ‘relevant matter as required by law,’ the contention must identify each failure and the supporting reasons for the petitioner's belief.” *USEC*, CLI-06-10, 63 NRC at 456. The Petition does not explain how these seasonal water management drawdowns would exacerbate (or even interact with) impacts from construction and operation of the proposed new units. *See, e.g.*, 10 C.F.R. 51.45(b)(1) (In an ER, “[i]mpacts shall be discussed in proportion to their significance.”). In short, the Petition does not explain in what way the seasonal drawdowns affect the ER’s conclusions regarding the significance of the proposed action’s impacts, or how that may be different from any potential significance attributable to these drawdowns occurring entirely independent of the proposed action. Therefore, this basis fails to meet 10 C.F.R. 2.309(f)(1)(iv). *See Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 748-49 (2005). If a petitioner fails to identify information he/she believes is missing as a matter of law and provide supporting reasons for this belief, then he/she must reference “specific portions of the application . . . that the petitioner disputes and the supporting reasons for each dispute[.]” 10 C.F.R. § 2.309(f)(1)(vi). Here, Petitioners have not articulated what significant potential direct, indirect, or cumulative impact of the proposed action has been overlooked, and they have failed to dispute the relevant discussions in the ER. Thus they do not demonstrate a genuine dispute with the application on a material issue of law or fact. *See* 10 C.F.R. § 2.309(f)(1)(vi).

As additional support for the sixth proposed basis for Contention NEPA 6, Petitioners also reference the South Florida Water Management District, Miami-Dade Canal Agricultural Drawdown Study, Power Point Presentation to Governing Board, (February 12, 2008) (Exhibit

25) and indicate that this presentation notes “the potential effects of FPL’s expanding operations, mining activities and canal draw downs in the area.” Petition at 49. The attached presentation is in the form of PowerPoint slides with discussion topics listed as bulleted items. Only one of the discussion topics clearly mentions the Applicant (“Florida Power and Light expanded power facility at Turkey Point and affect on regional water resources”). Exhibit 25, at slide 9. This slide includes no text which explains any of the “potential effects,” or how “mining activities” and “canal draw downs” might be related to the proposed new reactors. The other slides in the presentation make no reference to the Turkey Point site or indicate that they relate in any way to Turkey Point construction or operation or the COL application. The Petitioners provide no further discussion regarding the extent to which any oral statements made in connection to any portion of the PowerPoint presentation were related to the construction and operation of the Turkey Point site. This exhibit, without more, cannot serve as support for the bases the Petitioners have stated in support of Proposed Contention NEPA 6.

10 C.F.R. § 2.309(f)(1)(v). Furthermore, even if the exhibit indicated potential effects of increased mining operations, the Petition does not explain in what way those effects would bear on the ER’s conclusions regarding the significance of the proposed action’s impacts. The Petitioners therefore have not articulated what significant potential direct, indirect, or cumulative impact of the proposed action has been overlooked. 10 C.F.R. § 2.309(f)(1)(vi).

7. Native Ecosystem and Wildlife Impacts

As a final basis for Proposed Contention NEPA 6, Petitioners claim that “[t]he potentially dramatic increase in salinity levels in and around the plant following the construction and operation of Units 6 & 7 could have profound impacts to the native ecosystem and the wildlife found herein.” Petition at 51. Petitioners assert that cumulative impacts to “the Bay’s flora and fauna, sea grasses (which are sensitive to high salinities), and other marine life” must be “discussed and analyzed.” *Id.* at 52.

As an initial matter, Proposed Contention NEPA 6 does not provide factual or expert opinion support for the Petitioners' assertion that increases in salinity levels in and around the plant could be "potentially dramatic." It is unclear from the contention and supporting documentation what Petitioners mean by that term. More importantly, for the same reasons discussed earlier in the Staff response to this contention, the Petitioners have failed to state their basis for asserting that the alleged potential increase in salinity levels would be attributable to or affected by the construction and operation of Turkey Point Units 6 & 7.

Petitioners offer no support for claims that "cumulative impacts to the Bay's flora and fauna, sea grasses (which are sensitive to high salinities), and other marine life" have therefore been inadequately analyzed. First, the Petition does not directly reference any factual or expert support for this assertion. The only document cited in support of this contention which discusses seagrasses states generically that Biscayne Bay seagrasses require "a consistent . . . salinity regime and appropriate water quality" See Exhibit 7 at 863. Furthermore, Proposed Contention NEPA 6 does not explain how this document disputes any discussion in the ER, or reveals an inadequacy. Likewise, although this Exhibit also discusses "mangrove functionality and herbaceous wetlands," benthic communities, pink shrimp, the estuarine fish community, manatees and wading birds, the contention does not explain how or why it shows that these resources would be adversely affected by an impact of the proposed action. "A document put forth by an intervenor as the basis for a contention is subject to scrutiny both for what it does and does not show." *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1988); *rev'd in part on other grounds*, CLI-96-7, 43 NRC 235 (1996). The Petitioners do not explain how this reference supports their assertion that the ER fails to adequately address the cumulative impacts of constructing and operating Units 6 and 7. 10 C.F.R. § 2.309(f)(1)(v), (vi).

As the sole example of the impacts to wildlife which Petitioners allege will occur, the Petition includes a discussion about the federally listed American Crocodile which is present at

the FPL site. Petition at 51-52. The Petition asserts that the ER must address “the potential that hypersaline conditions could reduce the survival of hatchlings and negate the otherwise successful nesting of female crocodiles.” *Id.* Petitioners also reference portions of the ER which relate to the crocodile population at the Turkey Point site. Petition at 51. However, the Petitioners fail to address the analysis of cumulative impacts to the crocodile population found in ER Section 5.11.3.1, which states:

... the cooling canals of the industrial wastewater facility would experience a cumulative impact from salt deposition from operation of the Units 6 & 7 cooling towers and discharges from the uprated Units 3 & 4 that would increase temperature and saline levels. However, the increased temperature and salinity attributable to the uprated Units 3 & 4 are not anticipated to adversely impact the thriving American crocodile population and salt deposits from the Units 6 & 7 cooling towers into the cooling canals also would not impact salinity levels sufficiently to impact existing crocodile growth and/or survival rates (Subsection 5.3.3). The impacts to terrestrial resources from the projects considered for cumulative impacts would have a SMALL adverse contribution to cumulative impacts or have a beneficial impact. The overall cumulative impact would be SMALL to MODERATE.

ER at 5.11-7, -8. The Petition does not dispute this analysis.

Indeed, neither the Petition nor the attached references explains why any effect attributable to the proposed new units would contribute to “hypersaline conditions and high water temperatures in [the cooling canals and industrial wastewater facility]”, in a way that would adversely affect the salinity of the crocodile habitat, or, if impacts were to occur, how they would be significant to the ER’s conclusion regarding the cumulative impacts to crocodiles or terrestrial resources. See Petition at 51. Accordingly, the Petition does not explain why this issue would make a difference to the outcome of the proceeding and thus be material to the Staff’s findings on the application. See 10 C.F.R. § 2.309(f)(1)(iv); *Oconee*, CLI-99-11, 49 NRC at 333-34; Furthermore, the Petitioners have not addressed the ER’s analysis of cumulative impacts to the crocodile population, and the Petition’s cited documentary support on this topic does not explain the claim that significant cumulative impacts have been omitted. Accordingly the Petition has failed to identify a genuine dispute with the ER’s analysis on a material issue of law or fact,

contrary to 10 C.F.R. § 2.309(f)(1)(vi). See *Millstone*, LBP-08-9, 67 NRC at 433. For the foregoing reasons, this basis does not support the admissibility of Contention NEPA 6.

Summary of Staff Response to Proposed Contention NEPA 6: As explained above, Proposed Contention NEPA 6 is inadmissible because with respect to each of its constituent bases it either is unsupported by alleged facts or expert opinion; or fails to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(v) and (vi). Although Proposed Contention NEPA 6 asserts inadequacies with respect to the ER's analysis of the "cumulative impacts of constructing and operating Units 6 and 7 on salinity levels in groundwater, surface water, Biscayne Aquifer, and Biscayne Bay; wetlands; and wildlife," each Proposed Contention NEPA 6 basis appears to focus on separate failings rather than specifically on one or more of the three categories suggested by the summarized statement of the contention. The Staff has identified no assertions with cumulative force that would support the admissibility of the "overarching" contention despite the inadmissibility of the individual Proposed Contention NEPA 6 bases.

G. PROPOSED CONTENTION NEPA 7:

The ER fails to address the direct, indirect, and cumulative impacts of sea level rise on the construction and operation of Units 6 & 7 and the ancillary facilities.

Petition at 52. The Petitioners assert that sea level in the Turkey Point area is rising, and that this rise "could be between 1.5 to 5 feet." *Id.* The Petition further states that "the ER entirely fails to discuss and analyze the potential impacts of this 1.5 to 5 foot rise in sea level on Units 6 & 7." *Id.* The Petitioners indicate that certain of the facilities associated with Turkey Point Units 6 & 7 will be located below plant grade and that the "ER fails to contain discussion regarding the impacts of sea level rise on these facilities, which in turn could impact the operation of Units 6 & 7." Petition at 53. The Petitioners also assert that "an increase in sea level is likely to raise the general groundwater levels in the region" and that there is "no discussion in the ER of the impacts of this change in groundwater level and the resulting saltwater intrusion." *Id.* The

Petitioners also state that “with an increase in sea level rise, Units 6 & 7 are likely to be more susceptible to storm surge” and the ER “wholly fails to discuss the impacts of such a surge.” *Id.*

Staff Response: Proposed Contention NEPA 7 is inadmissible because it fails to explain why this issue is material to the findings that the NRC must make in this proceeding; is not adequately supported by alleged facts or expert opinions; and fails to demonstrate the existence of a genuine dispute with the applicant on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi).

The Petitioners assert that the ER has failed to address the impact of sea level rise on the construction and operation of Units 6 & 7 and the associated facilities. In particular, the Petitioners claim that the ER should address “the impacts of sea level rise” on the containment building, auxiliary building, and turbine building, “which in turn could impact the operation of Units 6 & 7,” and assert that “with an increase in sea level rise, Units 6 & 7 are likely to be more susceptible to storm surge.” Petition at 53. Such statements appear to allege that sea level rise and storm surge may have effects on the operational safety of Units 6 & 7. However, Proposed Contention NEPA 7 is characterized by the Petitioners as an environmental contention; the only regulatory authority to which the Petitioners cite is 10 C.F.R. 51.45(b), a portion of the NRC regulations implementing NEPA. The ER is not the basis for the Staff’s safety review, and the Petition does not explain why § 51.45 or any other regulation requires the ER to contain a discussion of the impacts of sea level rise or storm surge on the safe operation of the plant. Accordingly, to the extent Contention 7 is asserting that an operational safety matter has not been adequately analyzed in the ER, it fails to demonstrate that the issue is material to the findings that the NRC must make to support its environmental review, contrary to 10 C.F.R. § 2.309(f)(1)(iv).

Furthermore, with respect to safety, the Petitioners offer no facts or expert opinion to explain what “impacts” to the new units or associated facilities they allege could occur as a result of sea level rise or increased storm surge, contrary to 10 C.F.R. § 2.309(f)(1)(v). Nor do

the Petitioners explain why these impacts would be expected to have safety significance, contrary to 10 C.F.R. § 2.309(f)(1)(iv). *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999) (citing 54 Fed. Reg. at 33,172) (A “dispute at issue is ‘material’ if its resolution would ‘make a difference in the outcome of the licensing proceeding.’”); see also *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 748-49 (2005) (“‘Materiality’ requires that the petitioner show why the alleged error or omission is of possible significance to the result of the proceeding. This means that there must be some significant link between the claimed deficiency and either health and safety of the public, or the environment.”). The only document referenced in the contention (other than the ER) is a set of “completeness questions/comments” apparently provided to FPL by the South Florida Water Management District (SFWMD) in the context of SFWMD’s review of FPL’s separate Site Certification Application. Petition at 52-53 (citing Exhibit 11). The Exhibit provides a list of items which SFWMD indicates “need to be addressed in order for the SFWMD to complete its evaluation of the proposed project and prepare its Agency Report.” Exhibit 11 at 1. In the portion of the Exhibit that Petitioners cite, SFWMD appears to pose questions to FPL, some of which relate to sea level rise or storm surge (e.g., “If sea levels rise beyond MSE design specs, are there concerns related to the structural integrity of the reactor buildings?”; “How will the facility be protected from storm surge when the entire plant may be surrounded by ocean waters under a sea level rise scenario?”). Petition at 53 (citing Exhibit 11 at 35).

However, none of the cited questions or requests regarding potential effects appears to assert what the safety significance of such effects would actually be. *Id.* at 34-35. As Licensing Boards have held, merely posing a question in a petition is not sufficient support to admit a contention. See *PPL Susquehanna, LLC* (Susquehanna Steam Electric Station, Units 1 and 2), LBP-07-4, 65 NRC 281, 324 (2007). That rationale applies equally to a petition’s reliance on a question from a third party, where that reference is unaccompanied by some explanation or determination as to why the issue would be significant. See *Sacramento Municipal Utility*

District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 246 (1993) (“A contention that simply alleges that some matter ought to be considered does not provide the basis for an admissible contention.”). Moreover, the Petition does not explain why SFWMD’s comments or requests for additional information with respect to its own regulatory review of the separate Site Certification Application would necessarily be material to the adequacy of a COL application. 10 C.F.R. § 2.309(f)(1)(iv). The Commission has emphasized that the Staff’s issuance of RAIs to an applicant on a particular matter during its licensing review does not in and of itself constitute the basis for an admissible contention. *See Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), CLI-06-6, 63 NRC 161, 164 (2006); *Oconee*, CLI-99-11, 49 NRC at 336-37. For similar reasons, the fact that another agency has requested information to support its own review of a separate application does not, by itself, demonstrate that there is a material deficiency in a license application before the NRC.

The Petition likewise fails to cite to any portions of the Applicant’s FSAR that address the safety aspects of operation of the listed plant facilities, nor explain in what way the asserted changes in sea level rise or storm surge would contradict any particular analysis or conclusion in the FSAR.³⁵ In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” *See Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421, 433 (citing *Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)). Additionally, as noted above, the Petitioners have not cited any legal

³⁵ For example, the applicant’s safety analysis regarding floods and flood design considerations is addressed in Section 2.4.2 of the FSAR; probable maximum surge and seiche flooding is discussed in FSAR Section 2.4.5; and the design basis flood protection for the safety-related structures is addressed in FSAR Section 2.4.10. [Turkey Point Units 6 & 7, COL Application, Part 2 - FSAR] The Petitioners do not cite to these sections, nor describe why any analysis or conclusion therein is inadequate.

requirement that an analysis of safety impacts of sea level rise on the operation of the facility should be discussed in the Applicant's ER or be evaluated in the Staff's environmental review. Therefore, to the extent that Petitioners claim that the Applicant's ER fails to provide any necessary information for the Staff's evaluation of the safe operation of Units 6 & 7, they have failed to demonstrate that such information is material to the findings the NRC must make in its environmental review; have failed to offer supporting facts or expert opinion to support their assertion of a safety issue; and have failed to identify a genuine dispute with the Applicant on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv), (v) and (vi).

Alternatively, to the extent Contention 7 alleges that there is an environmental impact related to the "direct, indirect, and cumulative impacts of sea level rise" that has been inadequately addressed in the ER, the Petitioners have failed to demonstrate that the issue raised is material to the findings the NRC must make, have failed to offer supporting facts or expert opinion, and have failed to identify a genuine dispute with the Applicant on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(iv), (v) and (vi).

The Petition asserts that sea level rise may result in increased groundwater levels in the region and that as a result there may be "saltwater intrusion." Petition at 53. As noted above, the only document referenced in the contention (other than the ER) is Exhibit 11, the SFWMD comments to FPL in the context of SFWMD's review of FPL's separate Site Certification Application. Petition at 53 (citing Exhibit 11). Petitioners cite this Exhibit in connection with their claim that the ER fails to discuss the impacts of increased groundwater levels in the Biscayne Aquifer "and the resulting saltwater intrusion." Petition at 53. The Exhibit states that "[t]he aquifer is extremely porous and the increased sea levels are likely to raise the general groundwater levels in the regions." Exhibit 11 at 35. The Exhibit subsequently poses the question: "[w]hat are the implications of accelerated saltwater intrusion on the stormwater management system and the associated facilities?" *Id.* The Petitioners also quote this document as stating "[t]he plant site and general vicinity would become more vulnerable to

storm surge with sea level rise.” Petition at 53; Exhibit 11 at 35. As stated previously, however, Petitioners do not explain how the questions and comments posed by SFWMD with respect to its review of a Site Certification Application relate to information which would be required in the Applicant’s ER submitted as part of the NRC COL application. See 10 C.F.R. § 2.309(f)(1)(iv); *cf. Monticello*, CLI-06-6, 63 NRC at 164; *Oconee*, CLI-99-11, 49 NRC at 336-37.

Petitioners assert that the Applicant’s ER “entirely fails to discuss and analyze the potential impacts of a 1.5 to 5 foot rise in sea level on Units 6 & 7.” Petition at 52. Petitioners allege that this sea level rise “could impact the operation of Units 6 & 7,” and that “Units 6 & 7 are likely to be more susceptible to storm surge.” Petition at 53. Yet even if these assertions were correct, neither the Petition nor the referenced SFWMD’s comments explain how these assertions demonstrate that any environmental impact attributable to the proposed action has been inadequately discussed. “A contention must ... identify the disputed portion of the application, and provide ‘supporting reasons’ for the challenge to the application. Similarly, if a petitioner believes that an application fails to contain information on a ‘relevant matter as required by law,’ the contention must identify each failure and the supporting reasons for the petitioner's belief.” *USEC Inc. (American Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 456 (2006). The contention does not explain the environmental significance of the postulated storm surge or saltwater intrusion from sea level rise, much less how those developments would exacerbate (or mitigate) impacts from construction and operation of the facility. See, e.g., 10 C.F.R. 51.45(b)(1) (In an ER, “[i]mpacts shall be discussed in proportion to their significance.”). In short, the Petition does not explain in what way the postulated sea level rise affects the ER’s conclusions regarding the significance of the proposed action’s impacts, or how that may be different from any potential significance attributable to sea level rise occurring entirely independent of the proposed action. Therefore, the Petitioners do not demonstrate that the issues raised in Contention 7 are material to the findings that the Staff must make on the application, contrary to 10 C.F.R. § 2.309(f)(1)(iv). See *Monticello*, LBP-05-31, 62 NRC at 748-

49. Here, Petitioners have not articulated what significant potential impact of the proposed action has been overlooked. Thus they do not demonstrate a genuine dispute with the application on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(vi).

For the foregoing reasons, Proposed Contention NEPA 7 is inadmissible.

H. PROPOSED CONTENTION NEPA 8:

FPL fails to adequately address the need for power in its ER. In particular, the ER fails to consider the drop in electricity demand in FPL's service area since 2008, and it relies on erroneous claims that state and regional evaluations satisfy NUREG-1555.

Petition at 53. In challenging the ER's need for power analysis, the Petition asserts two bases for the contention, which are broken into two sub-bases: (1) "[t]he ER provides insufficient data and an outdated energy demand forecast that do not aid the Commission in determining the need for power in FPL's service area; and (2) "[t]he state and regional evaluations of the need for power fail to satisfy the requirements for NUREG-1555's exclusion of NRC independent review because they are not: (1) systematic, (2) comprehensive, (3) subject to confirmation; or (4) responsive to forecasting uncertainty." *Id.* at 54, 58. Thus, the Petitioners allege that "[t]he ER ... does not contain the requisite analysis of the power need. Without this analysis, the Commission cannot make the benefits determination required by its regulations and NEPA." *Id.* 53-54.

As explained below, Proposed Contention NEPA 8 is inadmissible. Because the contention is organized around bases described in the above two sub-bases, the Staff response will address the admissibility of each sub-basis separately, before assessing the extent to which the subparts support the admissibility of the contention as a whole. *Cf. Crow Butte Resources, Inc* (North Trend Expansion Area), CLI-09-12, 69 NRC 535, 553 (2009) (the scope of an admitted contention is defined by its bases); *see also Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 379 (2002).

Summary of Proposed Contention NEPA 8.1

1. Proposed Contention NEPA 8.1

The ER provides insufficient data and an outdated energy demand forecast that do not aid the Commission in determining the need for power in FPL's service area.

Petition at 54. In Proposed Contention NEPA 8.1, the Petition asserts that "the electricity demand forecast provided by FPL will not aid the Commission in its decision to issue the COL because the forecast is critically outdated[.]" and that "FPL has based its need for power on demand growth rate assumptions that are no longer valid." *Id.*

The Petition alleges that "[t]here has been a dramatic change in demand since FPL prepared its COL application[.]" because "[t]he nation has plunged into the worst recession since the Great Depression." *Id.* The Petition asserts that this change has resulted in "a major shift in the economy." *Id.* The Petition then asserts that the "ER does not reflect these economic impacts and consequential drop in electricity demand." *Id.* at 55.

The Petition compares FPL's demand forecasts against actual electricity demand for two years, 2008 and 2009 (by reference to FPL's Ten Year Power Site Plans submitted to the Florida Public Service Commission in 2009 and 2010), and asserts that "actual electricity use has been *well below* projected demand for *several* years." *Id.* (Emphasis added). The Petition asserts that "[a]ctual energy use in FPL's territory represents over a 10,000 GWh underestimation of demand in just two years." *Id.* The Petition then alleges that "the information provided to the Commission [the NRC] in the ER runs in stark contrast to events on the ground." *Id.* The Petition asserts, citing the declaration of Dr. Mark Cooper, that "excess capacity, caused by slowing demand, is already pushing the need for Units 6 & 7 further into the future." *Id.* The Petition takes issue with the ER by stating that it "fails to mention, let alone provide an adequate discussion of, this dramatic shift in need for the proposed reactors." *Id.* at 56. Further, the Petition asserts that "the ER fails to identify any elements that have contributed

to diminished growth...[and fails] not only to discuss and analyze economic and demographic trends, but even raise them as issues, [thus] violat[ing] 10 C.F.R. § 51.45 as it fails to provide the Commission with adequate information to make an informed decision.” *Id.*

Next, the Petition asserts that “the ER fails to consider the effect that greater efficiency can have on demand.” *Id.* The Petition asserts that “FPL’s energy efficiency programs are relatively weak compared to leading utilities around the nation,” *id.*, and that “FPL captures less than 0.25 percent of annual electricity demand through energy efficiency ... [when] [l]eading utilities are capturing more than 4 times that level of energy savings though [sic] efficiency.” *Id.* at 56-57. The Petition also states that, given higher DSM goals for FPL set by the PSC, “[t]he ER provides no discussion, let alone an adequate analysis, on the new efficiency goals set by the FL PSC and how these goals will affect demand and subsequent need for power.” *Id.* at 57.

Additionally, the Petition asserts that “the ER fails to address how pending federal renewable and efficiency policy will impact the demand for power.” *Id.* The Petition alludes to proposed energy targets in HR 2454 and asserts that “[t]he ER is devoid of any discussion on how federal mandates might affect demand for non-renewable power.” *Id.*

The Petition further faults the Applicant for “provid[ing] *no* discussion for the need for power from the proposed reactors; [but] rather ... ask[ing] the Commission to rely on its interpretation of a state process that supports a claimed need, without ever making a case for the project on its merits.” *Id.* (emphasis in original). The Petition asserts that FPL’s “proposal before the NRC is speculative,” because “FPL has yet to make a decision on whether to finish construction [sic] Units 6 & 7, ... that construction of the plant is contingent on economics and state and federal energy policy.” *Id.* at 58.

Staff Response to Proposed Contention NEPA 8.1: As explained below, Proposed Contention NEPA 8.1 is inadmissible because it fails to explain why the issues raised are material to the findings that the NRC must make in this proceeding and fails to identify a

genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv), (vi).

The Petitioners raise several different claims in Proposed Contention NEPA 8.1. The Staff understands these claims to fall into four general bases: changes in the forecasted demand for power, the effects of efficiency measures on demand, the potential effects of pending energy legislation, and the uncertainty as to whether the applicant will ultimately construct the new units.³⁶ The Staff response addresses these bases in order.

a. Changes in the Demand Forecast

At the outset of Proposed Contention NEPA 8.1, the Petitioners make several general statements regarding the national economy, after which they note that “Florida has been one of the hardest hit states in real estate foreclosures” and that “the state lost population for the first time in 2009.” Petition at 54-55. According to the Petition, the ER “does not reflect these economic impacts and consequential drop in electricity demand.” *Id.* at 55. However, the Petition does not explain (or otherwise provide referenced support for) how general U.S. economic conditions bear on electricity demand in Florida. Likewise, neither the Petition nor the only two sources cited regarding foreclosures and Florida population loss (Exhibits 27 and 39) explain to what extent either of these “economic impacts” relate to changes in electricity demand (either in the short term or in the period encompassed by the Applicant’s need for power analysis), or how they contradict any assumptions or analyses in the application.

³⁶ Proposed Contention NEPA 8.1 raises some of the same issues raised in Proposed Contentions NEPA 8.2 and NEPA 9; particularly with regard to the ER’s consideration of energy efficiency programs (demand-side management). These issues will be addressed *infra* as appropriate. Because these bases present distinct arguments, the Staff responds to each of them separately. For the reasons explained below, each basis fails to provide support for the admissibility of the contention; moreover, these bases do not have any cumulative force that would constitute an admissible contention.

Accordingly, the Petition does not demonstrate that these general statements constitute or support a material dispute with the application. 10 C.F.R. § 2.309(f)(1)(vi).

However, the Petition does compare FPL's demand forecasts against actual electricity demand for two years, 2008 and 2009 (by reference to FPL's Ten Year Power Site Plans submitted to the Florida Public Service Commission in 2009 and 2010), and asserts that "actual electricity use has been well below projected demand for several years." Petition at 55. The Petition contends that "the information provided to the Commission [the NRC] in the ER runs in stark contrast to events on the ground" because "excess capacity, caused by slowing demand, is already pushing the need for Units 6 & 7 further into the future." *Id.* According to the Petition, changes in FPL's 2009 peak demand forecast "push[] the date for the reactors back to 2022" and that the ER "fails to mention, let alone provide an adequate discussion of, this dramatic shift in need for the proposed reactors." *Id.* at 56.

Although the Petition alleges that the ER's estimated date by which the reactors would be needed differs from the dates in the 2009 projection cited by the Petition, the Petition fails to explain why that difference in timing ultimately contradicts the asserted need for the proposed reactors and thus it does not present a genuine dispute with the application on a material issue of fact. 10 C.F.R. § 2.309(f)(1)(vi). According to the ER, the proposed Units 6 and 7 would not begin operation until 2018 and 2020, respectively. See ER at 1.1-4.³⁷ Thus, while the ER describes, among other things, the load forecast for a ten-year reporting period, the Applicant does not project that the new units would begin addressing such a need until 2018 and 2020. *Id.* Perhaps more significantly, the application does not assume that Units 6 & 7 would satisfy

³⁷ The Petition asserts that FPL "has announced that the in-service date of Units 6 & 7 will be pushed back to 2023 and 2024." Petition at 56. The Petition does not explain why a potential change of four or five years in the target start of operations constitutes a material shift in the applicant's determination of the need for power.

the entire need for power projected by the Florida PSC. As quoted in ER Chapter 8, in the PSC order granting FPL's "Petition to Determine Need for Units 6 & 7," the PSC determined that: "FPL has a need for 8,350 MW of additional capacity beginning in the 2011 through 2020 period. Turkey Point 6 and 7 will provide only a portion of FPL's need for capacity. ... If FPL's load forecast dramatically declines or the amount of DSM or renewable generation available substantially increases, the most likely result will be the cancellation of some gas-fired combined cycle plants that have not yet been certified. Based on this record, FPL has shown that it has a reliability need for either the 1,100 MW or 1,520 MW units (referring to the AP1000 or ESBWR designs respectively considered) in 2018 and 2020." ER at 8.1-4, -5.³⁸ The ER also quotes the Florida PSC order as stating that "...[B]y 2010 FPL will have approximately 15,235 MW of existing or certified base-load generation capacity which consists of coal (902 MW), gas-fired combined cycle (10,979 MW), and nuclear generation facilities (3,354 MW). As mentioned previously, FPL's peak load is expected to increase by over 6,000 MW by the year 2020. FPL's base-load needs are also projected to increase by approximately the same amount. Even with the addition of Turkey Point 6 and 7, FPL's base-load needs will continue to be met primarily with natural gas-fired combined cycle generators." *Id.* at 8.1-5. In sum, the stated purpose and need for the COL application is "to provide additional baseload [power] generation to maintain system reliability ...[,]" ER at 1.1-2, and the determinations by the Florida PSC that are cited in the ER assert the existence of that need for baseload power. Accordingly, even if Petitioners are correct that there will be a shift in the date of the forecasted "peak demand," the Petition fails to explain why this represents a "dramatic shift in need for the proposed reactors." Petition at 55-56. Because the Petition fails to explain how an alleged decrease in forecasted peak

³⁸ According to the ER, economic growth is just one of many factors taken into account in the applicant's need for power analysis, see ER at 8.1-3 to -6, and the projections rely, in part, on long-term trends, not just snapshots of the current economy, see ER at 8.2-3.

demand controverts the asserted need for baseload power generation, this basis for the contention fails to demonstrate a genuine dispute with the ER on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi).

The Commission has long acknowledged the uncertainty inherent in long range demand forecasts. In the *Shearon Harris* proceeding, the Commission stated that the general rule for differences in demand forecasts is not whether the facility is needed, but when it is needed. See *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), CLI-79-5, 9 NRC 607, 609 (1979). This rule is based on the following realization:

[E]very prediction has associated uncertainty and [] long-range forecasts of this type are especially uncertain in that they are affected by trends in usage, increasing rates, demographic changes, industrial growth or decline, the general state of the economy, etc. These factors exist even beyond the uncertainty that inheres to demand forecasts: assumptions on continued use from historical data, range of years considered, the area considered extrapolations from usage in residential, commercial, and industrial sectors, etc.

Id. at 609-10. Applying this rule, the Commission considered a potential one year slip in construction schedules, based upon a difference between 5.2% and 6.7% projected growth rates, to be “clearly within the margin of uncertainty.” *Id.* at 610. The Commission quoted with approval the conclusion, in *Niagara Mohawk Power Corp.* (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347 (1975), that a two year difference in projected power need was not a “statistically meaningful distinction.” *Shearon Harris*, CLI-79-5, 9 NRC at 609 (quoting *Nine Mile Point*, ALAB-264, 1 NRC at 365). Here, the Petition has not articulated why the shift in “peak demand” to which the Petitioners point is inconsistent with the uncertainty encompassed by the applicant’s (or any) long-term forecast. Without such an explanation, they have failed to explain why such a shift would make a difference in the outcome of the proceeding and thus why it would be material to the NRC’s findings. 10 C.F.R. § 2.309(f)(1)(iv); *Duke Energy Corp.* (Oconee Nuclear Power Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 333-34 (1999); see also *Nuclear Management Co., LLC* (Monticello Nuclear Generating Plant), LBP-05-31, 62 NRC 735, 748-49 (2005). For the same reasons, the Petitioners have not asserted why the shift in

“peak demand” contradicts the applicant’s conclusion that there will be a need for power from Units 6 & 7 within the estimated time frame,³⁹ and thus they have failed to demonstrate a genuine dispute on with the ER on a material issue of fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

b. Energy Efficiency

As a second general basis for Proposed Contention NEPA 8.1, the Petition asserts that “the ER fails to consider the effect that greater efficiency can have on demand.” Petition at 56. The Petitioners further assert that “FPL’s energy efficiency programs are relatively weak compared to leading utilities around the nation [because] FPL captures less than 0.25 percent of annual electricity demand through energy efficient [where] [l]eading utilities are capturing more than 4 times that level of energy savings though [sic] efficiency.” *Id.* at 56-57. Additionally, the Petition states that FPL assumes that it will continue its DSM plans, “which incorporate efficiency measures,” at its current projections in spite of new, higher, DSM goals mandated by the state, and that the ER fails to discuss or analyze these new goals. *Id.* at 57.

However, the Petition does not explain why its claim that “FPL captures less than 0.25 percent of annual electricity demand through energy efficiency” or that the applicant’s program

³⁹ Petitioners assert that “[e]ven FPL has realized the drop in demand can no longer support the need for power on its original timeframe, and has announced that the in-service date of Units 6 & 7 will be pushed back to 2023 and 2024.” Petition at 56. Although Petitioners reference Exhibit 31 in support of this claim, Exhibit 31 does not appear to suggest that the revised in-service dates for Units 6 & 7 are attributed to a drop in demand. Exhibit 31 is FPL’s cost recovery petition to the Florida PSC, filed on May, 3, 2010. That petition references the testimony of Mr. Steven Scroggs, an FPL witness, as stating that “the revised in-service date for planning purposes is derived by sequencing the Preparation and Construction phase activities, based upon currently available information, to begin after the expected receipt of a Combined License from the NRC and completion of other necessary licensing and permitting work.” Exhibit 31 at 9 (Paragraph 13). Contrary to the Petitioners’ implication, Mr. Scroggs’ testimony does not appear to reflect an FPL conclusion that “the drop in demand can no longer support the need for power on its original timeframe[.]” Petition at 56. In determining contention admissibility, “[a] document put forth by an intervenor as the basis for a contention is subject to scrutiny both for what it does and does not show.” *Yankee Atomic Electric Co.*, (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1996); *rev’d in part on other grounds*, CLI-96-7, 43 NRC 235 (1996).

is “relatively weak compared to leading utilities” is material to the ER’s need for power analysis.⁴⁰ *Id.* at 56. Even if the Petition is correct, it fails to describe to what extent such a hypothetical increase in FPL’s DSM program (from 0.25 to 1%) would be likely to affect the overall electricity demand considered in the ER, or why that would be sufficiently significant to alter the analysis of the need for power for Units 6 & 7.⁴¹ Likewise, the Petition alludes to new efficiency goals imposed by the Florida PSC on utilities, including FPL, but does not explain why these “higher DSM goals” change any FPL assumption in the application in such a way as to have any significance for the need for power analysis. The Petition concedes that FPL’s alleged “weak DSM plans [do] incorporate efficiency measures,” but that these measures do not meet “higher DSM goals for FPL” set by the PSC. *Id.* at 57. Again, however, the Petition does not explain how, even if FPL were to meet those “higher DSM goals,” that would be likely to affect the overall electricity demand considered in the ER, or why that would be sufficiently significant to alter the analysis of the need for power for Units 6 & 7. Without such an explanation, Petitioners have failed to show that this basis represents a material dispute with the application as required by 10 C.F.R. § 2.309(f)(1)(vi).

c. Pending Legislation

As a third general basis for Proposed Contention NEPA 8.1, the Petition asserts that “the ER fails to address how pending federal renewable and efficiency policy will impact the demand for power.” *Id.* at 57. The Petition asserts that “currently pending bill HR 2454 has passed the

⁴⁰ Even if a comparison between utilities were relevant, the Petition does not explain why it would be reasonable for FPL to attain such a percentage and whether any of these programs’ gains could be transferred to FPL’s situation.

⁴¹ The ER indicates that the applicant has considered increased DSM forecasts between 2007 and 2020. ER at 8.2-12 to -13. The ER shows a 192% increase in summer DSM from 1,768 MW to 3,390 MW, *id.* at 8.2-12, and a 164% increase in winter DSM from 1,555 MW to 2,544 MW. *Id.* at 8.2-13. The Petition does not specifically address this discussion, or explain how it would be affected by the new PSC goals to which it refers.

House of Representatives and intends to lower demand for nonrenewable generation sources. It would set a target of 20 percent renewable energy by 2022, but provides that 8 percent of the target can be met through energy efficiency.” *Id.* Considerations of pending legislation have been held to be “inappropriately rooted in speculation about future events.” *Private Fuel Storage* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 241 (1998); see also *Tennessee Valley Auth.* (Bellefonte Nuclear Power Plant, Units 3 and 4), LBP-08-16, 68 NRC 361, 410 (2008) (discussing contention admissibility, the Board stated “[n]or does potential congressional action on renewable portfolio standards and a carbon tax, both speculative possibilities at this point, provide the basis for a different [meaning admissible] result”). Because it relies entirely on speculation about future changes to regulatory requirements, the Petition’s assertion that “[t]he ER is devoid of any discussion on how federal mandates might affect demand for non-renewable power,” Petition at 57, does not provide the basis for a genuine dispute with the applicant on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi).

d. Uncertainty as to Ultimate Construction

As a fourth general basis for Proposed Contention NEPA 8.1, the Petition asserts that “FPL provides *no* discussion for the need for power from the proposed reactors; rather, FPL asks the Commission to rely on its interpretation of a state process that supports a claimed need, without ever making a case for the project on its merits.” Petition at 57 (emphasis in original). As a threshold matter, the Petition appears to mischaracterize the ER. The ER devotes an entire chapter to the discussion of the FPL system’s need for power. ER at Chapter 8. The ER discusses the Florida PSC process and how it provided data to inform that process, and quotes passages regarding the Florida PSC’s determinations. *Id.* Finally, the ER provides tabular data providing its history and forecast for “Energy Consumption, Capacity, and Peak Demand,” *id.* at 8.2-11, as well as FPL’s projected 2007-2020 summer and winter capacity needs. *Id.* at 8.2-12 to -13. Thus, the ER does provide a “discussion for the need for power

from the proposed reactors,” contrary to the Petition’s assertion. Moreover, Petitioners do not explain what they mean by “making a case for the projects on its merits” or state in what way they believe such a discussion is distinguishable from what is contained in the ER.⁴² Petition at 57. Further, the Petitioners fail to explain how the discussion in the ER fails to meet any applicable requirement. *Id.* The Petitioners accordingly neither explain in Proposed Contention NEPA 8.1 why FPL’s description of the state process (and the outcome of that process) is inadequate, nor demonstrate a genuine dispute with the ER on a material issue of law or fact as required by 10 C.F.R. § 2.309(f)(1)(vi).

Lastly, the Petition asserts that FPL’s “proposal before the NRC is speculative,” because “FPL has yet to make a decision on whether to finish construction [sic] Units 6 & 7.” Petition at 58. The Petition cites a report from FPL to the Florida PSC alleging that “construction of the plant is contingent on economics and state and federal energy policy.” *Id.* The Petition appears to assert that because FPL has not made a final decision regarding construction of Units 6 & 7, “FPL has little assurance in the viability of the project[.]” *Id.* However, Petitioners fail to state why this alleged uncertainty has any bearing on the analysis of the need for power, nor identify

⁴² Petitioners cite *Simmons v. U.S. Army Corps of Engineers*, 120 F.3d 664, 669 (7th Cir. 1997) for the proposition that the NRC “must exercise independent judgment in defining the purpose and need of a project and cannot rely exclusively on the statements and opinions of the applicant.” Petition at 57; see also Petition at 60. However, as the Applicant’s analysis of the need for power in the ER specifically invokes the findings of the Florida PSC, the Petitioners do not explain how NRC consideration of the need for power discussion in the ER would be relying “exclusively on the statements and opinions of the applicant.” Referring to State determinations of “need for power” is consistent with the NRC’s NEPA review. See Nuclear Energy Institute; Denial of Petition for Rulemaking, 68 Fed. Reg. 55,905, 55,909 (2003) (“[I]n considering the need for power as part of the NEPA process, the NRC does not supplant the States, which have traditionally been responsible for assessing the need for power generating facilities, their economic feasibility and for regulating rates and services.”). Furthermore, to the extent the Petitioners are implying that accepting “baseload generation” as the purpose and need for the project would impermissibly “defer” to the Applicant’s definition, Petitioners provide no explanation of why the Applicant’s stated purpose of “baseload generation” is unreasonable or unduly narrow, nor why this purpose would thereby prevent appropriate consideration of alternatives by the NRC in a way contrary to *Simmons*. Therefore, this unexplained invocation of *Simmons* does not support Petitioners’ Proposed Contentions NEPA 8.1 or 8.2.

any requirement for a COL applicant to make such a “final decision” in order to support a determination that a need for power exists.⁴³ The decision whether FPL will opt to finish construction, or not, is a business decision. An appeal board has stated that “the Licensing Board [] should not substitute its judgment for that of the applicant in selecting one among a number of reasonable business alternatives. It is not our mission to superintend utility management when it makes business judgments for which it is ultimately responsible.” *Washington Public Power Supply System* (WPPSS Nuclear Project No. 1), ALAB-771, 19 NRC 1183, 1190-91 (1984). The Commission affirmed that position when it stated that “[t]o the maximum extent practicable, both the NRC Staff, in its safety and environmental reviews, and the Board, in its adjudicatory role, should avoid second-guessing private business judgments.” *Private Fuel Storage* (Independent Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26, 36-37 (1998). The Petition thus has failed to demonstrate that the status of FPL’s decision whether to ultimately construct the new units is material to the findings the NRC must make to support the action involved in this proceeding and thus fails to meet 10 C.F.R. § 2.309(f)(1)(iv).

For the foregoing reasons, Proposed Contention NEPA 8.1 is inadmissible.

Summary of Proposed Contention NEPA 8.2

2. Proposed Contention NEPA 8.2

The state and regional evaluations of the need for power fail to satisfy the requirements for NUREG-1555’s exclusion of NRC independent review because they are not: (1) systematic, (2) comprehensive, (3) subject to confirmation, or (4) responsive to forecasting uncertainty.

⁴³ The NRC does not impose construction schedules on applicants, and the Commission recently modified 10 C.F.R. §§ 50.33(h), 52.77, and 52.79 specifically to exclude combined license applicants from the requirement to specify the earliest and latest dates for completion of construction. See Licenses, Certifications, and Approvals for Nuclear Power Plants, 72 Fed. Reg. 49,352, 49,397 (Aug. 28, 2007) (hereafter “2007 Part 52 Rule”).

Petition at 58. In support of this basis, the Petition asserts that “Florida’s state process for evaluating the need for power – described by FPL in Chapter 8 of the ER – is not integrated and is inherently unreliable in ensuring to the Commission that the state determination is comprehensive or responsive to uncertainty. The planning process in Florida... is disjointed, leaving no mechanism in Florida to respond to forecast failure.” *Id.* at 58-59. Further, the Petition asserts that FPL’s description of the state process “lacks detail on how the state planning processes works [sic] together to support the need determination for Units 6 & 7,” and that the “reason for this omission is that the state planning components are highly disjointed and not integrated in a way to ensure the Commission of accurate information regarding the need for power.” *Id.* at 59.

The Petition asserts several bases for this position. “First, the ‘need’ determination proceeding is the only FL PSC proceeding that can consider whether a need for power has been met, and grant a ‘determination of need’ for a specific proposed facility.” *Id.*

“Second, the submittal of ten year site plans is merely a ministerial planning process action.” *Id.* The Petitioners further assert that “a ten year site plan is not a detailed, integrated resources planning document; rather, it is a document based on limited information and no stakeholder input through evidentiary hearings.” *Id.* The Petitioners argue that, since the first reactor would allegedly not be complete until 2023, “[q]uite simply, the state process cannot respond to forecasting changes in a ten-year time span, let alone a 14 year time span.” *Id.* at 60.

Third, the Petition alleges that the state process has no mechanism to stop plant construction. *Id.* This then, the Petition asserts, “places all ability to reconsider the need for the plant wholly in the hands of the utility.” *Id.* This alleged deficiency, according to the Petition, forces the NRC to rely exclusively on “statements and opinions of the applicant.” *Id.* (referencing *Simmons v. U.S. Army Corps of Eng’rs*, 120 F.3d 664, 669 (7th Cir. 1997)).

Fourth, the Petition argues that “the disjointed Florida planning process is [an example of] the uncoordinated nature of FL PSC need determinations with FL PSC DSM goal setting.” *Id.* The Petition asserts that “[t]his creates a situation where FPL will resist lower cost prospective efficiency programs in meeting customer demand because it has already garnered a determination of need for its nuclear reactors based on lower efficiency goals.” *Id.* at 61.

Lastly, the Petitioners sum up their position by stating that “[t]he state proceedings for determination of need, the submittal of a ten year site plan, and the establishment of DSM goals, are simply not integrated or coordinated processes. Thus, the state determinations should not be relied upon by NRC in reviewing the need for power.” *Id.*

Staff Response to Proposed Contention NEPA 8.2: As explained below, Proposed Contention NEPA 8.2 is inadmissible because it fails to show a genuine dispute with the ER on a material issue of fact or law, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

The Petition’s overarching assertion is that the “state determination should not be relied upon by NRC in reviewing the need for power.” Petition at 61. The Petition challenges FPL’s application by challenging the underlying state and regional need for power determination. NRC policy is to give deference to state processes where those processes are reasonable. In response to a petition for rulemaking, the Commission stated that, “in considering the need for power as part of the NEPA process, the NRC does not supplant the States, which have traditionally been responsible for assessing the need for power generating facilities, their economic feasibility and for regulating rates and services.” Nuclear Energy Institute; Denial of Petition for Rulemaking, 68 Fed. Reg. 55,905, 55,909 (2003). The Commission stated further that “the NRC has acknowledged the primacy of State regulatory decisions regarding future energy options. However, this acknowledgement does not relieve the NRC from the need to perform a reasonable assessment of the need for power.” *Id.*

NRC staff guidance regarding the determination of “a reasonable assessment” with regard to State need for power analyses is found in the NRC’s *Environmental Standard Review*

Plan (ESRP), NUREG-1555 (2007). This guidance document informs the Staff's review and assessment of a State's process. The guidance states that:

Affected States and/or regions may prepare a need-for-power evaluation as part of a State or regional energy planning exercise. Similarly, State or regional agencies may require the applicant to document a need for power or plan for future plant construction. The applicant may choose to rely on those documents rather than prepare a description of the power system of its own. If so, NRC staff should review these documents to determine if they are (1) systematic, (2) comprehensive, (3) subject to confirmation, and (4) responsive to forecasting uncertainty. Of particular concern are third-party plans or reports restricted to boundaries smaller than relevant service and market areas. Another concern is plans and studies that do not extend far enough into the future to provide an adequate basis for comparison. If NRC staff conclude these other documents are acceptable, no additional independent review by NRC staff may be needed and that analysis can be the basis for ESRPs 8.2 through 8.4.

ESRP at 8.1-3. The NRC "reviewer may rely on the analysis in the applicant's environmental report (ER) after ensuring it is consistent with all available State or regional authorities' or RTO/ISO analyses, including appropriate regional NERC councils." *Id.* at 8.1-2.

As suggested by this NRC guidance, FPL asserts that it based its need for power analysis on the process it followed to obtain from the Florida PSC approval of its "Petition for Need Determination." ER at 8.1-6. In the ER, FPL specifically describes its basis for concluding that the State's analysis meets the four criteria of the NUREG-1555 guidance, namely whether the process is "systematic," "comprehensive," "subject to confirmation," and "responsive to forecasting uncertainty." ER at 8.3-1 to -3.

However, while it refers to these criteria in its brief summary of the contention, see Petition at 58, the Petition does not clearly explain in the bases for the contention how its criticisms of the State and FPL "need for power" processes are ultimately relevant to the considerations encompassed by the NUREG-1555 criteria. The Petition asserts that the Florida need for power determination process does not meet NUREG-1555 criteria because it is "not integrated," Petition at 58; is "inherently unreliable," *id.*, is "disjointed," *id.* at 59; is "impotent to act on the uncertainty under existing Florida statutes," *id.* at 60; and "cannot make a finding of 'imprudence' related to cost recovery." *Id.* As indicated by a closer examination of the reasons

the Petitioners articulate for these criticisms, the Petition's challenges to the Florida process do not appear to correspond to the four NUREG-1555 evaluation criteria. On its face, therefore, the Petition does not demonstrate that the inadequacies it asserts in the State process address standards that are pertinent to those criteria found in the NRC's guidance document.⁴⁴ As explained further below, without such an explanation of why these criticisms contradict the ER's asserted consistency with the NUREG-1555 criteria, the Petition does not provide sufficient information to show a genuine dispute with the ER on a material issue of fact or law, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

⁴⁴ Unlike Proposed Contention NEPA 8.1, Proposed Contention NEPA 8.2 does not explicitly refer to the Cooper Declaration as support for any of its claims. In determining whether a contention contains the necessary factual or expert support, "attaching a document in support of a contention without any explanation of its significance does not provide an adequate basis for a contention." See *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-10, 47 NRC 288, 298-99 (1998). In any event, the declaration of Dr. Cooper contains only two sentences that are explicitly linked to contention 8.2: "Regarding contention 8.2, in my 2009 and 2010 Testimony I note that the regulatory review process in Florida is not well integrated or comprehensive. A full range of alternatives is not reviewed and system wide need, resource flexibility and excess capacity are never considered (2009, pp. 33-36; 2010, pp. 35-38, 42)." Cooper Declaration at ¶ 8. Neither these two sentences nor the referenced pages from Dr. Cooper's prior testimony before the PSC explain how any of these alleged flaws – which Dr. Cooper raised before the PSC in the context of a challenge to the cost recovery request submitted by FPL to the PSC – reflect flaws in the state process for determining the need for power. Nor do the Petitioners explain how these statements relate to any information that is called for by the NRC guidance in NUREG-1555. Accordingly, the Petitioners do not explain how these references support the claims raised in Proposed Contention NEPA 8.2. "[N]either mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered contention." *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-3, 65 NRC 237, 253 (2007) (citing *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003)).

Dr. Cooper's declaration also states that "the energy forecasting in the ER suffers from the same inadequacies as FPL's forecasting in the FL PSC proceeding," that "the electricity demand forecast information in the ER is flawed and outdated," and that "the process for review at the FL PSC does not include a comprehensive analysis of the full range of alternatives available to the utility." Cooper Declaration at ¶ 6. Again, however, none of these conclusory statements identifies a specific disagreement with a statement in the ER, nor does Dr. Cooper explain why the PSC's consideration of alternatives fails to satisfy the NRC guidance in NUREG-1555 with respect to any of the four criteria. To the extent Dr. Cooper's declaration is intended to support Proposed Contention NEPA 8.2, it does not show that a genuine dispute exists with the ER on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

The ER discusses FPL's basis for concluding that both the Florida PSC and the Florida Reliability Coordinating Council (FRCC) processes meet each of the four NUREG-1555 criteria. ER at 8.3-1 to -3. However, Proposed Contention NEPA 8.2 contains no reference to section 8.3 of the ER. The Petition suggests that "[t]he planning process in Florida ... is disjointed, leaving no mechanism in Florida to respond to forecast failure." Petition at 59. The Petition asserts that "[t]here is no other statutorily prescribed state proceeding where a need determination can be challenged," that the "FL PSC does not have authority to change determinations of need after review of a ten year site plan...[but] can only *suggest* alternatives to the plan," that "the FL PSC has no statutory authority to rescind a determination of need once it is granted," and that the PSC "cannot halt construction of a nuclear reactor because it cannot make a finding of 'imprudence' related to cost recovery[.]" *Id.* at 59-60 (emphasis in original). However, the Petition does not explain in what way the scope of the PSC's authority to mandate a change to a utility's plan, including whether it can "rescind a determination" or "halt construction," has any bearing on whether the PSC's technical assessment of the existence of the need for power is systematic, comprehensive, subject to confirmation, or responsive to forecasting uncertainty, consistent with the guidance of NUREG-1555. To the extent the Petition is inferring that the Florida PSC must have plenary authority to subsequently revoke or otherwise revisit a determination of need in order for that determination to meet one or more of the four NUREG-1555 criteria, it does not explain the basis for that inference.

The Petition includes a general assertion that "a ten year site plan is...based on limited information and no stakeholder input through evidentiary hearings." Petition at 59. However, the ER states that FPL's "need-for-power planning is subject to FPSC, FOPC, and public and other stakeholder review, particularly regarding its petition for need for Units 6 & 7." ER at 8.3-2. Additionally, the ER states that "[s]everal interested parties intervened in the [Florida PSC] need determination proceeding, including the FOPC, the independent ratepayer advocate appointed by the Legislature; five utilities, Florida Municipal Electric Association (FMEA), Florida

Municipal Power Agency (FMPA), JEA, Orlando Utilities Commission (OUC), and Seminole Electric Cooperative, Inc.; and a private citizen. In addition to the pre-filed testimony, the public was provided the opportunity to provide testimony at two public hearings. Topics of interest voiced in the public testimony portion of the hearings included system reliability and integrity; fuel diversity; environmental compliance costs; conservation, DSM and renewables; and cost-effectiveness.” *Id.* at 8.1-4. In light of the ER’s description, the Petition does not explain its assertion that the state determination of need reflects no “stakeholder input,” Petition at 59, nor does the Petition describe in what way the extent of “stakeholder input” bears on any of the four NUREG-1555 criteria.

In any event, other than their unexplained criticism regarding limited “stakeholder input” into the need for power determination, the Petitioners neither directly address nor contradict the ER’s statement that the Florida PSC processes were “created through statutes and implemented by regulations [and] provide for a transparent, systematic means by which interested parties may participate in a legal process that assures the state of Florida adequately addresses the expected electricity demands within the state.” ER at 8.3-1. Nor does the Petition challenge the ER’s statement that “[t]he FRCC process is a national one, set up by the [North American Electric Reliability Corporation] to comply with the Energy Information Administration (EIA) data-gathering requirements.” *Id.* The Petition does not explain, for example, how in light of the asserted involvement of interested parties and the applicable data-gathering requirements, it contends that the process is not systematic, comprehensive, or subject to confirmation.

The Petition asserts that “[t]he likely reason for the omission [in the ER ‘of detail on how the state planning process works together to support the need determination for Units 6 & 7,] is that the state planning components are highly disjointed and not integrated in a way to ensure the Commission of accurate information regarding the need for power.” Petition at 59. The Petitioners suggest that this “disjointed” process is due in part to there being “no other statutorily

prescribed state proceeding where a need determination can be challenged.” *Id.* The Petitioners assert that the ten-year site plans are “merely a ministerial planning process action [and that] the FL PSC does not have the authority to change determinations of need after review of a ten year site plan.” *Id.* Additionally, Petitioners state that “another example of the disjointed Florida planning process is the uncoordinated nature of FL PSC need determinations with FL PSC DSM goal setting.” *Id.* at 60. Petitioners argue that the 2008 need determination did not consider “more aggressive” 2009 DSM goals. *Id.* at 61. However, Petitioners fail to explain why these various assertions regarding the role and authority of the PSC support their implication that the information-gathering and evaluation process used by the PSC in making its determination regarding the need for power is thereby not systematic, comprehensive, subject to confirmation, or responsive to forecasting uncertainty.⁴⁵

In short, these assertions by the Petitioners appear to relate not to the reliability of any need determination at the time it is made by the PSC, but rather to the extent of the PSC’s authority to, at some unspecified time in the future, mandate changes to that assessment of the need for power. The Petitioners simply argue that “the state determination should not be relied upon by NRC in reviewing the need for power,” but do not explain why the existence or absence

⁴⁵ In its discussion of the Applicant’s development of ten year site plans, the Petition asserts that the PSC is “impotent to act on the uncertainty under existing Florida statutes[.]” and that since the “first proposed reactor would not be complete until 14 years after FPL’s submission of its ER, ... the state process cannot respond to forecasting changes in a ten-year time span, let alone a 14 year time span.” Petition at 60. This assertion, apparently directed at whether the Florida process is “responsive to forecasting uncertainty,” reflects an assumption that in order to meet NRC guidance regarding this criterion, a state process should provide for re-evaluation of the need for power on some periodic basis and thus routinely “correct” for the existence of uncertainty in the initial determination. However, the NUREG-1555 guidance does not request information concerning how often demand forecasts will be “re-evaluated,” but rather information ensuring that the initially-submitted need for power determination reflects a range of demand scenarios, including “for midrange, high, low, 75th percentile, and 25th percentile conditions[.]” NUREG-1555 at 8.2.2-3 (2007). Accordingly, the Petition has not demonstrated why their criticism that “the FPL PSC is impotent to *act on the uncertainty* under existing Florida statutes,” Petition at 60 (emphasis added), supports their assertion that the state process therefore is contrary to NRC guidance.

of any specific Florida PSC authority is relevant to any of the NUREG-1555 criteria. *Id.*

“[P]etitioners must do more than submit ‘bald or conclusory allegation[s]’ of a dispute with the applicant. They must ‘read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant’s position and the petitioner’s opposing view,’ and ‘explain[] why they have a disagreement with [the applicant].” *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), LBP-03-12, 58 NRC 75, 81 (2003) (Internal citations omitted). Without such an explanation, the Petitioners have not shown why these assertions regarding the PSC’s authority are material to the applicant’s satisfaction of the NUREG-1555 criteria and thus have not articulated a genuine dispute with the ER’s use of the PSC determinations. 10 C.F.R. § 2.309(f)(1)(vi).

The Petition’s final basis offered in support of Proposed Contention NEPA 8.2 is that “the uncoordinated nature of FL PSC need determinations with FL PSC DSM goal setting” is a further example of “the disjointed Florida planning process[.]” Petition at 60. Noting that “FL PSC goals are set at least every five years,” the Petition asserts that “[t]his creates a situation where FPL will resist lower cost prospective efficiency programs in meeting customer demand because it has already garnered a determination of need for its nuclear reactors based on lower efficiency goals.” *Id.* at 60-61. As a threshold matter, as noted above, the Petition does not clearly explain to which of the four NUREG-1555 criteria it believes this basis relates, nor does it state how this claim specifically contradicts FPL’s discussion in ER § 8.3 of why the state process complies with NUREG-1555. The Petition does not claim that DSM was not considered in the need for power determination relied on in the ER, that the DSM information used in reaching that determination was not systematic, comprehensive, subject to confirmation, or responsive to forecasting uncertainty. Indeed, the portions of the PSC determination quoted in the ER address DSM and acknowledge the PSC’s view that changes in DSM would be unlikely

to alter the conclusion regarding the need for power to be provided by the new units. *See, e.g.*, ER at 8.1-5, -6.⁴⁶ Accordingly, for reasons similar to those discussed above with regard to the meaning of “responsive to forecasting uncertainty” in the NUREG-1555 guidance, the Petition does not explain why the mere possibility of changes to DSM goals subsequent to the initial PSC determination represents an inconsistency with the ER’s claim that it meets the applicable NUREG-1555 guidance.

For the above reasons, the Petitioners fail to demonstrate that a genuine dispute exists with the ER with respect to whether the need for power determination satisfies the four criteria in NUREG-1555, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

For the foregoing reasons, Proposed Contention NEPA 8.2 is inadmissible.

I. PROPOSED CONTENTION NEPA 9:

FPL failed to adequately address in its ER all reasonable DSM and renewable energy alternatives to the construction and operation of Units 6 & 7.

Petition at 61. The Petition asserts that “the ER does not adequately address energy efficiency alternatives and renewable energy alternatives to the proposed project.” *Id.* This challenge is comprised of two general bases.

First, the Petition challenges FPL’s Demand Side Management (DSM) goals by contending that “FPL fails to provide any discussion, let alone a rigorous discussion, of how its most recent L [sic] FPSC DSM goals will affect demand and mitigate the need for Units 6 & 7.” *Id.* at 62. Further, the Petition argues that “[e]ven if FPL concluded that meaningful DSM could

⁴⁶ The ER quotes the PSC as stating: “...FPL has demonstrated a reliability need in excess of these values for the years 2018 through 2020. A reduction in peak demand or an increase in renewable generation would likely result in the deferral of uncertified natural gas units. In addition, it is unrealistic to assume that FPL could achieve the amount of energy savings through DSM in ten years, that took 26 years to accomplish. As such, we find that there are no additional renewable energy sources or conservation measures which could effectively mitigate FPL’s need for Turkey Point 6 and 7.” *See* ER at 8.1-5, -6.

not totally supplant the need for Units 6 & 7, the ER must still consider how DSM could be used to mitigate impacts of the proposed action.” *Id.* The Petition characterizes FPL’s DSM goals as “weak,” and asserts that FPL “fails to discuss how much electricity demand the DSM goals are capturing (energy savings) annually or explore how the DSM plans could be improved to increase energy savings.” *Id.* The Petition references Dr. Mark Cooper’s Declaration and several reports in asserting that “efficiency could cut energy consumption by 25 percent to 30 percent at costs that are far below the current and projected future cost of new energy generation, such as nuclear power.” *Id.* at 63.

The Petitioners’ second basis for Proposed Contention NEPA 9 asserts that this “limited analysis ... takes place in a regulatory vacuum and inadequately addresses pending federal regulatory policy” *Id.* The Petition states that “Federal regulation ... could radically alter the need for power and demand for alternatives.” *Id.* at 64. Specifically, the Petition states that FPL should consider “HR 2454, which has already passed the U.S. House of Representatives.” *Id.* After some discussion of the proposed legislation and reference to an EPA study, the Petition asserts that “[a] reasonable range for the impact on Florida would be a 10 to 20 percent reduction in the demand for non-renewable generation.” *Id.* at 65. The Petition further states that such a reduction “would have a major impact, [and that] pursuant to NEPA and NRC regulations, FPL must provide discussion of all new renewable generation capacity options under the above regulatory framework [under] 10 C.F.R. § 51.45(b)(3).” *Id.*

Staff Response: As explained below, Proposed Contention NEPA 9 is inadmissible. Both of the bases the Petitioners advance for this contention, DSM goals and consideration of pending legislation, are inadmissible because the Petitioners fail to demonstrate that the issues raised are within the scope of the proceeding; fail to demonstrate that the issues raised are material to the findings the NRC must make to support the action involved in the

proceeding; and fail to raise a genuine dispute with the ER on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iii), (iv), and (vi).

1. DSM Goals

The Petition asserts that “FPL recites a litany of alleged successes in DSM and provides sweeping commentary that DSM ‘will continue to be an option to eliminate the need for additional capacity;’ however, FPL concludes that DSM will not be adequate to ‘eliminate the required increase in baseload capacity.’” Petition at 61-62. FPL states in the ER that “[t]he proposed action is for the NRC to issue a COL to authorize construction and operation of two approximately 1200 gross MWe nuclear power units to address future baseload generation needs.” ER at 9.0-1. Furthermore, FPL’s stated purpose and need for the project is to provide “additional baseload generation to maintain system reliability, increase fuel diversity, and allow progress toward meaningful CO₂ emissions reductions[.]” ER at 1.1-2. However, the Petitioners assert that “[e]ven if FPL concluded that meaningful DSM could not totally supplant the need for Units 6 & 7, the ER must still consider how DSM could be used to mitigate impacts of the proposed action.” Petition at 62.

In the ER, FPL considers DSM programs, including examples from both residential and business applications. ER at 9.2-5 to -6. FPL concludes that “While demand side management programs will continue as an option to eliminate the need for additional capacity for FPL, they will not be adequate to eliminate the required increase baseload capacity. Therefore, implementing further demand side management programs is not considered a potentially competitive option to the baseload generation capacity of the proposed project.” *Id.* at 9.2-6.

In light of the ER’s statement of the need for baseload electric power, Proposed Contention NEPA 9 fails to explain how energy conservation represents a reasonable alternative. Nor does it provide support to controvert the ER’s description of the project purpose. The Petition asserts that “[a]n alternative may not be disregarded merely because it

does not offer a complete solution to the problem.” Petition at 62, citing *Citizens Against Toxic Sprays, Inc. v. Bergland*, 428 F. Supp. 908, 933 (D. Ore. 1977). However, an alternative failing to meet the purpose and need of the project does not need to be further examined in the ER or EIS. See *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 806-08 (2005). A Licensing Board in another combined license proceeding recently found a similar energy conservation contention to be inadmissible because of a failure to explain how such measures would meet the project’s purpose of generating baseload electric power. See *South Carolina Elec. & Gas Co. and South Carolina Pub. Serv. Auth.* (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-09-2, 69 NRC 87, 109 (2009) (“Because a DSM program is not a substitute for the addition of baseload power, which is the accepted project purpose, this challenge raises matters outside the scope of this proceeding, thus failing to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iii), and raises matters that are not material to the determination the NRC must make, thus failing to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iv).”). The reasoning behind the Petitioners’ stated basis for Proposed Contention NEPA 9 fails to meet 10 C.F.R. § 2.309(f)(1)(iii) and (iv) for the same reasons.

The Petition asserts that “the ER describes FPL’s weak DSM goals as ‘aggressive,’ yet fails to discuss how much electricity demand the DSM goals are capturing (energy savings) annually or explore how the DSM plans could be improved to increase energy savings.” Petition at 62, citing ER at 9.2-6. The Petition asserts that “FPL must expand its discussion and provide analysis on how major national research organizations’ findings might affect the DSM landscape in Florida prior to the 2023 in-service time frame for the first reactor.” Petition at 63. The Petition references several reports, including one explained “by Dr. Mark Cooper in his attached declaration,” that collectively assert that “more aggressive efficiency policies would save a great

deal more energy.” *Id.*⁴⁷ However, the ER does discuss the amount of energy savings it expects DSM programs to realize from 2007 to 2020, with both summer and winter forecasts. ER at 8.2-12 to -13. “[P]etitioners must do more than submit ‘bald or conclusory allegation[s]’ of a dispute with the applicant. They must ‘read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant’s position and the petitioner’s opposing view,’ and ‘explain[] why they have a disagreement with [the applicant].’” *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), LBP-03-12, 58 NRC 75, 81 (2003) (Internal citations omitted). The Petitioners do not specify in Proposed Contention NEPA 9 how the efficiency programs or policies they think could be implemented actually controvert the ER’s projections, or why implementation of such programs would thereby represent a viable alternative to the proposed action of producing additional baseload generation.

Although the Petition asserts that “FPL’s references to its ten year site plan for past DSM achievements do not relieve its duty under 10 C.F.R. § 51.45(b)(3) to *fully analyze* the DSM alternative,” Petition at 62 (citing the ER at 9.2-5 (emphasis added)), the ER discusses DSM

⁴⁷ The Petition asserts that “three major national research organizations have affirmed the potential of efficiency to contribute to *an affordable, low carbon future*[.]” Cooper Declaration (Petitioners’ Exhibit 30), 2010 Testimony at 30 (emphasis added); that “[t]he American Council for an Energy-Efficient Economy (the ‘ACEEE’) took a somewhat different approach by modeling the energy efficiency provisions in *HR 2454* [for] reduction in energy use nationwide *by 2030*[.]” Petition at 63 (Petitioners’ Exhibit 35) (emphasis added); and that “[a]nother ACEEE study that was done specifically for Florida found that aggressive policies to reduce energy consumption could lower demand” *Id.* (Petitioners’ Exhibit 36). As discussed further *infra* in response to the second basis for Proposed Contention NEPA 9, to the extent this assertion is intended to suggest that the ER must consider the effects of future legislative or policy changes that may mandate changes in energy efficiency programs, it does not explain the regulatory basis for requiring such a discussion in the ER. Under NEPA “there is no need to consider alternatives of speculative feasibility or alternatives which could only be implemented after significant changes in governmental policy or legislation” See *Natural Resources Defense Council, Inc. v. Callaway*, 524 F.2d 79, 93 (2d Cir. 1975); see also *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), LBP-03-30, 58 NRC 454, 463, 479 (2003). In any event, the Petition does not explain how these referenced sources actually controvert the ER’s projections regarding DSM, or why implementation of such programs would thereby represent a viable alternative to the proposed new units.

alternatives, ER at 9.2-5 to -6, and provides forecasts of energy savings realized by their programs, ER at 8.2-12 to -13. As noted above, the Petitioners do not directly controvert the ER discussion or explain how the programs they suggest would affect the analysis of the need for the Turkey Point units in particular, nor explain why they would represent a reasonable alternative requiring discussion in the ER.⁴⁸ Furthermore, although the Petitioners suggest that “the ER must still consider how DSM could be used to mitigate impacts of the proposed action,” Petition at 62, they fail to explain or provide factual support regarding what “impacts” of the proposed action they believe would be “mitigated” by implementation of DSM and thus warrant discussion in the ER, contrary to 10 C.F.R. § 2.309(f)(1)(v), (vi).⁴⁹ See *USEC, Inc. (American Centrifuge Plant)*, CLI-06-10, 63 NRC 451, 456 (2006).

⁴⁸ The Petitioners assert that “FPL’s broad generalizations about DSM’s potential fall short of adequate analysis. The analysis must ‘rigorously explore and objectively evaluate *all* reasonable alternatives.’” Petition at 62 (citing 40 C.F.R § 1502.14(a)) (emphasis in original). As 10 C.F.R. § 51.45(b)(3) makes clear, NRC environmental reviews are focused on appropriate alternatives rather than every alternative. See also *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 551 (1978) (stating that “[t]o make an impact statement something more than an exercise in frivolous boiler-plate the concept of alternatives must be bounded by some notion of feasibility.”); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-03-30, 58 NRC 454, 479 (2003) (stating, “[A]n agency’s consideration of alternatives is sufficient if it considers an appropriate range of alternatives, even if it does not consider every available alternative.”) (quoting *Headwaters, Inc. v. BLM*, 914 F.2d 1174, 1181 (9th Cir. 1990), *reh’g en banc denied*, 940 F.2d 435 (1991)) (alteration in original). As explained above, the Petition does not explain how DSM would constitute a “reasonable alternative” to the application’s stated purpose of generating baseload electric power.

⁴⁹ Additionally, the Petition asserts that “FPL energy savings though [sic] DSM is relatively weak compared to leading utilities[.]” Petition at 62. However, the Petition offers no explanation why this alleged “relative” weakness represents a material dispute with the DSM forecasts presented in the ER. In determining contention admissibility, “[a]ny contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed.” See *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), LBP-08-9, 67 NRC 421, 433 (citing *Sacramento Mun. Util. Dist.* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), *review declined*, CLI-94-2, 39 NRC 91 (1994)). Accordingly, the Petition fails to demonstrate a genuine dispute with the ER on a material issue of fact or law, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

2. Pending Legislation

As the second basis for Proposed Contention NEPA 9, the Petition asserts that “FPL’s limited analysis of both DSM and renewable energy options takes place in a regulatory vacuum and inadequately addresses pending federal regulatory policy[.]” *Id.* at 63. As with Proposed Contention NEPA 8.1, *supra*, the Petition asserts that pending legislation should be part of the FPL’s analysis. The Petitioners state that “[p]ursuant to NEPA and NRC regulations, FPL must provide discussion of all new renewable generation capacity options under the above regulatory framework [per] 10 C.F.R. § 51.45(b)(3).” *Id.* at 65. This argument fails to support the admissibility of Proposed Contention NEPA 9 for reasons similar to those described in response to the Petitioners’ claims in Proposed Contention NEPA 8.1: the potential significance of pending legislation is speculative and therefore not required to be addressed in a NEPA analysis. Considerations of pending legislation have been held to be “[] inappropriately rooted in speculation about future events[.]” *Private Fuel Storage* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 241 (1998); see also *Tennessee Valley Auth.* (Bellefonte Nuclear Power Plant, Units 3 and 4), LBP-08-16, 68 NRC 361, 410 (2008) (discussing contention admissibility, the Board stated “[n]or does potential congressional action on renewable portfolio standards and a carbon tax, both speculative possibilities at this point, provide the basis for a different [i.e., admissible] result”). Because it relies entirely on speculation about future changes to regulatory requirements, the Petition’s assertion that “FPL provides no discussion such discussion [sic] in its ER,” Petition at 65, does not provide the basis for a genuine dispute with the applicant on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi).

For the foregoing reasons, Proposed Contention NEPA 9 is inadmissible.

CONCLUSION

In view of the foregoing, the Petitioners, Mark Oncavage, Dan Kipnis, SACE, and NPCA have demonstrated standing to intervene in this proceeding. However, the Petitioners have not submitted at least one admissible contention. Accordingly, the Petition should be denied.

Respectfully submitted,

/Signed (electronically) by/

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Dated at Rockville, Maryland
this 13th day of September, 2010

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
)
FLORIDA POWER AND LIGHT COMPANY) Docket Nos. 52-040 & 52-041
)
(Turkey Point Nuclear Plant, Units 6 & 7))

CERTIFICATE OF SERVICE

I hereby certify that copies of the "NRC STAFF'S ANSWER TO 'PETITION FOR INTERVENTION' OF MARK ONCAVAGE, DAN KIPNIS, SOUTHERN ALLIANCE FOR CLEAN ENERGY, AND NATIONAL PARKS CONSERVATION ASSOCIATION," has been served on the following persons by Electronic Information Exchange on this 13th day of September, 2010:

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Dated at Rockville, Maryland
this 13th day of September, 2010