

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

E. Roy Hawkens, Chairman
Dr. Michael F. Kennedy
Dr. William C. Burnett

In the Matter of

FLORIDA POWER & LIGHT COMPANY

(Turkey Point Units 6 and 7)

Docket Nos. 52-040-COL and 52-041-
COL

ASLBP No. 10-903-02-COL-BD01

February 28, 2011

MEMORANDUM AND ORDER
(Ruling on Petitions to Intervene)

TABLE OF CONTENTS

INTRODUCTION - 1 -

I. PROCEDURAL BACKGROUND - 2 -

II. APPLICABLE LEGAL STANDARDS - 5 -

 1. Legal Standards Governing Standing for Individuals - 6 -

 2. Legal Standards Governing Representational Standing for Organizations - 7 -

 3. Legal Standards Governing Standing for Municipalities - 7 -

B. LEGAL STANDARDS GOVERNING CONTENTION ADMISSIBILITY - 8 -

III. JOINT PETITIONERS ESTABLISH STANDING, AND THEY PROFFER ONE
CONTENTION, CONTENTION 2, THAT IS ADMISSIBLE IN PART - 10 -

A. JOINT PETITIONERS ESTABLISH STANDING - 10 -

B. JOINT PETITIONERS PROFFER ONE CONTENTION, CONTENTION 2, THAT IS
ADMISSIBLE IN PART - 11 -

 1. Contention NEPA 1 Is Not Admissible - 12 -

 a. Contention NEPA 1.1 Is Not Admissible - 13 -

 b. Contention NEPA 1.2 Is Not Admissible - 19 -

 c. Contention NEPA 1.3 Is Not Admissible - 23 -

 d. Contention NEPA 1.4 Is Not Admissible - 26 -

 e. Contention NEPA 1.5 Is Not Admissible - 27 -

 2. Contention NEPA 2 Is Admissible in Part - 31 -

 a. Contention NEPA 2.1 Is Admissible In Part - 33 -

 b. Contention NEPA 2.2 Is Not Admissible - 40 -

 c. Contention NEPA 2.3 Is Not Admissible - 45 -

 3. Contention NEPA 3 Is Not Admissible - 47 -

 4. Contention NEPA 4 Is Not Admissible - 55 -

 5. Contention NEPA 5 Is Not Admissible - 57 -

 6. Contention NEPA 6 Is Not Admissible - 62 -

 7. Contention NEPA 7 Is Not Admissible - 70 -

 8. Contention NEPA 8 Is Not Admissible - 73 -

 a. Contention NEPA 8.1 Is Not Admissible - 75 -

 b. Contention NEPA 8.2 Is Not Admissible - 78 -

 9. Contention NEPA 9 Is Not Admissible - 81 -

- IV. CASE ESTABLISHES STANDING, AND IT PROFFERS TWO CONTENTIONS, CONTENTIONS 6 AND 7, THAT ARE ADMISSIBLE IN PART - 85 -
 - A. CASE ESTABLISHES REPRESENTATIONAL STANDING - 85 -
 - B. CASE PROFFERS TWO CONTENTIONS, CONTENTIONS 6 AND 7, THAT ARE ADMISSIBLE IN PART - 85 -
 - 1. Contention 1 Is Not Admissible - 85 -
 - 2. Contention 2 Is Not Admissible - 89 -
 - 3. Contention 3 Is Not Admissible - 93 -
 - 4. Contention 4 Is Not Admissible - 95 -
 - 5. Contention 5 Is Not Admissible - 96 -
 - 6. Contention 6 Is Admissible In Part - 100 -
 - 7. Contention 7 Is Admissible In Part - 107 -
 - 8. Contention 8 Is Not Admissible - 112 -
- V. PINECREST ESTABLISHES STANDING, BUT FAILS TO PROFFER AN ADMISSIBLE CONTENTION; IT IS NEVERTHELESS ELIGIBLE TO PARTICIPATE AS AN INTERESTED LOCAL GOVERNMENTAL BODY - 114 -
 - A. PINECREST ESTABLISHES STANDING - 114 -
 - B. PINECREST FAILS TO PROFFER AN ADMISSIBLE CONTENTION - 115 -
 - 1. Contention 1 Is Not Admissible - 115 -
 - 2. Contention 2 Is Not Admissible - 116 -
 - 3. Contention 3 Is Not Admissible - 117 -
 - C. PINECREST SATISFIES THE REQUIREMENTS FOR PARTICIPATING AS AN INTERESTED LOCAL GOVERNMENTAL BODY - 118 -
- VI. CONCLUSION - 119 -

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

E. Roy Hawkens, Chairman
Dr. Michael F. Kennedy
Dr. William C. Burnett

In the Matter of
FLORIDA POWER & LIGHT COMPANY
(Turkey Point Units 6 and 7)

Docket Nos. 52-040-COL and 52-041-
COL

ASLBP No. 10-903-02-COL-BD01

February 28, 2011

MEMORANDUM AND ORDER
(Ruling on Petitions to Intervene)

INTRODUCTION

Pending before this Licensing Board are three Petitions to Intervene challenging a combined license application (COLA) filed by Florida Power & Light Company (FPL) for two nuclear power reactors, Turkey Point Units 6 and 7, to be located near Homestead, Florida. The Petitions to Intervene were filed by: (1) Mark Oncavage, Dan Kipnis, Southern Alliance for Clean Energy, and National Parks Conservation Association (hereinafter referred to collectively as Joint Petitioners); (2) Citizens Allied for Safe Energy, Inc. (CASE); and (3) Village of Pinecrest, Florida (Pinecrest), which also requests, in the alternative, to participate as an interested local governmental body.

For the reasons discussed below, we conclude: (1) Joint Petitioners establish standing and proffer one admissible contention; (2) CASE establishes standing and proffers two admissible contentions; and (3) Pinecrest establishes standing but fails to proffer an admissible contention. We therefore grant Joint Petitioners' and CASE's Petitions to Intervene, and we

deny Pinecrest's Petition to Intervene. We grant, however, Pinecrest's request to participate as an interested local governmental body.

I. PROCEDURAL BACKGROUND

On June 30, 2009, FPL submitted an Application for a combined license (COL) for two AP1000 pressurized water nuclear reactors to be located adjacent to the existing Turkey Point power plants, Units 1 through 5, at the Turkey Point site near Homestead, Florida. See Letter from Mano K. Nazar, Senior Vice President and Chief Nuclear Officer, FPL, to Michael Johnson, Director, NRC Office of New Reactors (June 30, 2009). The Application references the standard design certification for the AP1000 issued to Westinghouse Electric Company, as amended, including Revisions 16 and 17. The proposed nuclear reactors would be known as Turkey Point Units 6 and 7.¹

On August 3, 2009, the NRC Staff published a notice in the Federal Register of the receipt and availability of the Application. See 74 Fed. Reg. 38,477 (Aug. 3, 2009). On September 4, 2009, the Staff accepted the Application for docketing. See 74 Fed. Reg. 51,621 (Oct. 7, 2009).

On June 14, 2010, the NRC issued 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,

¹ Units 6 and 7 would, as planned, be located on a 218-acre plant area situated within the approximately 11,000-acre Turkey Point plant property in Miami-Dade County, Florida, located about 25 miles south of Miami and 9 miles southeast of Homestead. Units 1 through 5 occupy about 195 acres on the Turkey Point plant property. Units 1 and 2 are natural gas/oil steam electric generating units that have been in service since 1967 and 1968, respectively. Units 3 and 4 are pressurized water nuclear reactor units that have been in service since 1972 and 1973, respectively. Unit 5 is a natural gas combined-cycle unit that began operating in 2007. See Turkey Point Units 6 & 7 COL Application, Part 3 -- Environmental Report, Rev. 0 at 3.1-1 [hereinafter cited as ER].

Opportunity To Petition for Leave 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) [hereinafter Notice of Hearing].

In response to the Notice of Hearing, the following entities filed a Petition to Intervene: (1) Joint Petitioners;² (2) CASE;³ and (3) Pinecrest, which requested, in the alternative, to participate as an interested local governmental body pursuant to 10 C.F.R. § 2.315(c).⁴

FPL opposes all three Petitions, arguing that none proffers an admissible contention.⁵ The NRC Staff opposes the Petitions of Joint Petitioners and Pinecrest on the ground that they

² Joint Petitioners' Petition for Intervention (Aug. 17, 2010) [hereinafter Joint Pet.].

³ CASE [Revised] Petition to Intervene and Request for a Hearing (dated Aug. 17, 2010) [hereinafter CASE Rev. Pet.]. CASE filed its revised Petition on August 20 to replace its original August 17 Petition, which may be fairly characterized as a working draft rather than a finished product. Compare CASE Rev. Pet. with CASE Petition to Intervene and Request for a Hearing (Aug. 17, 2010). As FPL correctly states, the Revised Petition "corrects many of the numerous errors in the original Petition, making CASE's Petition easier to follow and more readable." FPL's Motion to Strike Proposed Contention 8 in CASE's Revised Petition to Intervene in Turkey Point Units 6 and 7 Combined Construction and Operating License Application (Sept. 13, 2010) at 1 n.1 [hereinafter FPL Motion to Strike Proposed Contention 8]. For that reason, neither FPL nor the NRC Staff objects to CASE's reliance on the Revised Petition, to the extent the Revised Petition does not advance late-filed arguments that were not included in the original Petition. See id. at 1-2; NRC Staff's Answer to FPL Motion to Strike (Sept. 21, 2010). We agree that CASE's Revised Petition is "easier to follow and more readable," and we therefore will treat it as CASE's originally filed Petition, except to the extent it advances late-filed arguments.

⁴ Petition by the Village of Pinecrest, Florida for Leave to Intervene in a Hearing on FPL's Combined Construction and Operating License Application for Turkey Point Units 6 & 7, or in the Alternative, Participate as a Non-Party Local Government (Aug. 16, 2010) [hereinafter Pinecrest Pet.]. Pursuant to section 2.315(c), a local governmental body that is not admitted as a party shall, upon request, be permitted to participate in a hearing as an interested non-party. In that capacity, its representative may, inter alia, "introduce evidence, interrogate witnesses where cross-examination by the parties is permitted, advise the Commission without [being required] to take a position with respect to the issue, file proposed findings . . . , and petition for review by the Commission" 10 C.F.R. § 2.315(c).

⁵ FPL's Answer Opposing Joint Petitioners' Petition to Intervene and Request for Hearing on Turkey Point Units 6 & 7 Combined Construction and Operating License Application (Sept. 13, 2010) at 4 [hereinafter FPL Answer to Joint Pet.]; FPL's Answer Opposing CASE's

fail to proffer an admissible contention.⁶ The NRC Staff avers, however, that CASE proffers two admissible contentions and, accordingly, the Staff does not oppose granting CASE's Petition.⁷ And if a hearing is granted, the Staff does not oppose Pinecrest's request to participate as an interested local governmental body. See NRC Staff Answer to Pinecrest Pet. at 17.

Joint Petitioners and CASE filed timely Replies, reiterating that they satisfy the requirements to intervene in this proceeding.⁸ Pinecrest also filed a timely Reply, arguing principally that it desires to participate as an interested local governmental body pursuant to 10 C.F.R. § 2.315(c) (see supra note 4) even if its contentions are deemed inadmissible.⁹

On October 12, 2010, FPL moved to strike portions of the Replies filed by Joint Petitioners and CASE, arguing that the Replies included new issues and claims not found in,

Revised Petition to Intervene and Request for Hearing in Turkey Point Units 6 and 7 Combined Construction and Operating License Application (Sept. 13, 2010) at 2 [hereinafter FPL Answer to CASE Rev. Pet.]; FPL's Answer Opposing Pinecrest's Petition to Intervene in the Turkey Point Units 6 & 7 Combined Construction and Operating License Application Proceeding (Sept. 9, 2010) at 2 [hereinafter FPL Answer to Pinecrest Pet.].

⁶ NRC Staff's Answer to "Petition for Intervention" of Joint Petitioners (Sept. 13, 2010) at 1 [hereinafter NRC Staff Answer to Joint Pet.]; NRC Staff's Answer to Petition to Intervene by Pinecrest (Sept. 10, 2010) at 1 [hereinafter NRC Staff Answer to Pinecrest Pet.].

⁷ NRC Staff's Answer to CASE Petition to Intervene and Request for a Hearing (Sept. 13, 2010) at 1, 49, 59 [hereinafter NRC Staff Answer to Case Rev. Pet.].

⁸ Joint Petitioners' Reply to FPL Answer Opposing Petition to Intervene and NRC Staff Answer to Petition for Intervention (Oct. 1, 2010) at 1 [hereinafter Joint Petitioners Reply]; CASE Reply to FPL's Answer Opposing CASE's Revised Petition to Intervene and Request for Hearing in Turkey Point Units 6 and 7 Combined Construction and Operating License Application (Sept. 29, 2010) at 45 [hereinafter CASE Reply to FPL Answer]; CASE Reply to NRC Staff's Answer to "CASE Petition to Intervene and Request for a Hearing" (Sept. 29, 2010) [hereinafter CASE Reply to NRC Staff Answer]. The Replies filed by Joint Petitioners and CASE were timely pursuant to this Board's unpublished Order granting an extension of time. See Licensing Board Order (Granting, In Part, Joint Petitioners' and CASE's Motions for Extension of Time) (Sept. 17, 2010) (unpublished).

⁹ Pinecrest's Reply to FP&L's Answer Opposing its Petition to Intervene in the Turkey Point Units 6 & 7 Combined Construction and Operating License Application Proceeding (Sept. 16, 2010) at 1 [hereinafter Pinecrest Reply].

and beyond the scope of, the Petitions to Intervene.¹⁰ The NRC Staff agrees in part with FPL's motions.¹¹ Joint Petitioners and CASE oppose FPL's motions.¹²

On November 8, 2010, this Board issued an Order that listed questions on contention admissibility for the participants to address at oral argument. See Licensing Board Order (Outlining Format and Questions for Oral Argument) (Nov. 8, 2010) (unpublished). On November 19, 2010, we held oral argument in Homestead, Florida. See Licensing Board Transcript, FPL Turkey Point, Units 6 & 7 at 18-265 (Nov. 19, 2010) [hereinafter cited as Tr.].

II. APPLICABLE LEGAL STANDARDS

To participate in this proceeding as an intervenor, a petitioner must (1) establish standing, and (2) proffer at least one admissible contention. See 10 C.F.R. § 2.309(a). Immediately below, we summarize the legal standards governing standing and contention admissibility. We then apply these standards to the Petitions to Intervene filed by Joint Petitioners (infra Part III), CASE (infra Part IV), and Pinecrest (infra Part V).

¹⁰ FPL's Motion to Strike Portions of Joint Petitioners' Reply to FPL Answer Opposing Petition to Intervene and NRC Staff Answer to Petition to Intervene (Oct. 12, 2010) at 1 [hereinafter FPL Motion to Strike Portions of Joint Petitioners' Reply]; FPL's Motion to Strike Portions of CASE's Reply to FPL's Answer Opposing Revised Petition to Intervene and Request for Hearing (Oct. 12, 2010) at 1 [hereinafter FPL Motion to Strike Portions of CASE Reply].

¹¹ NRC Staff's Answer to FPL Motion to Strike Portions of Joint Petitioners' Reply (Oct. 21, 2010) at 1; NRC Staff's Answer to FPL Motion to Strike Portions of CASE's Reply (Oct. 21, 2010) at 1.

¹² Joint Petitioners' Answer in Opposition to FPL Motion to Strike Portions of Joint Petitioners' Reply to FPL Answer Opposing Petition to Intervene and NRC Staff Answer to Petition to Intervene (Oct. 22, 2010) at 1; CASE Answer in Opposition to FPL Motion to Strike Portions of CASE's Reply to FPL's Answer to CASE's Answer to FPL's Answer Opposing Revised Petition to Intervene and Request For Hearing (Oct. 22, 2010) at 2 [hereinafter CASE Answer to FPL Motion to Strike Portions of CASE Reply].

A. LEGAL STANDARDS GOVERNING STANDING

In this case, the following three categories of petitioners seek to establish standing: (1) individuals who live within 50 miles of the proposed reactors, (2) organizations seeking representational standing on behalf of members who live within 50 miles of the proposed reactors, and (3) a municipality whose residents live within 50 miles of the proposed reactors. We discuss the legal standards governing standing for each of these entities in turn.

1. Legal Standards Governing Standing for Individuals The standing requirements for NRC adjudicatory proceedings derive from the Atomic Energy Act (AEA), which requires the NRC to provide a hearing “upon the request of any person whose interest may be affected by the proceeding.” 42 U.S.C. § 2239(a)(1)(A).

Under the general standing requirements in our implementing regulations, a petitioner must state (10 C.F.R. § 2.309(d)(1)):

- (i) The name, address and telephone number of the requestor or petitioner;
- (ii) The nature of the requestor’s/petitioner’s right under the [relevant statute] 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.

In determining whether a petitioner has demonstrated standing, the Commission applies contemporaneous judicial concepts of standing, which require a petitioner to “(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 Corp. and Gen. Atomics (Gore, Oklahoma Site), CLI-94-12, 40 NRC 64, 71-72 (1994) (quoting Lujan v. Defenders of Wildlife, 504 U.S. 555, 560-61 (1992) (citations and internal quotations omitted)). In the context of reactor licensing proceedings, however, a petitioner is deemed to have standing pursuant to the

Commission's so-called "proximity" presumption rule by showing that he or she resides in, or frequents the area within, a 50-mile radius of the facility. See PPL Bell Bend, L.L.C. (Bell Bend Nuclear Power Plant), CLI-10-07, 71 NRC __, __ (slip op. at 6) (Jan. 7, 2010).

2. Legal Standards Governing Representational Standing for Organizations An organization may establish standing to intervene based on a theory of representational standing. To demonstrate representational standing, an organization must: (1) show that at least one of its members might be affected by the proceeding, which can be accomplished by showing that a member satisfies either the 50-mile "proximity" presumption or traditional standing elements; (2) identify that member by name and address; and (3) show that the member has authorized the organization to represent him or her and to request a hearing on his or her behalf. See Consumers Energy Co. (Palisades Nuclear Power Plant), CLI-07-18, 65 NRC 399, 409 (2007); GPU Nuclear Inc. (Oyster Creek Nuclear Generating Station), CLI-00-06, 51 NRC 193, 202 (2000). Additionally, the interests the "organization seeks to protect must be germane to its own purpose," and "neither the asserted claim nor the requested relief must require an individual member to participate in the organization's legal action." Palisades, CLI-07-18, 65 NRC at 409; see also Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 323 (1999).¹³

3. Legal Standards Governing Standing for Municipalities Pursuant to Commission regulation, a municipality is deemed to have standing in a reactor licensing proceeding that involves a facility located within its boundaries. See 10 C.F.R. § 2.309(d)(2).

¹³ An organization may also establish organizational standing. See Int'l Uranium (USA) Corp. (White Mesa Uranium Mill), CLI-01-21, 54 NRC 247, 252 (2001). Organizational standing, however, is not implicated in this proceeding.

Where, as here, a municipality seeks to participate in a reactor licensing proceeding that does not involve a facility within the municipality's boundaries, it can, for purposes of establishing standing, rely on the 50-mile "proximity" presumption to the same extent as an individual¹⁴ or an organization.¹⁵ Thus, a municipality satisfies Commission standing requirements in a reactor licensing proceeding by showing either that its residents live within 50 miles of the facility, or that its boundaries extend to within 50 miles of the facility.

B. LEGAL STANDARDS GOVERNING CONTENTION ADMISSIBILITY

For a timely-filed contention to be admissible, it must satisfy the requirements in 10 C.F.R. § 2.309(f). Pursuant to those standards, an admissible contention must: (1) "[p]rovide a specific statement of the issue of law or fact to be raised"; (2) "[p]rovide a brief explanation of the basis for the contention"; (3) "[d]emonstrate that the issue raised in the contention is within the scope of the proceeding"; (4) "[d]emonstrate that the issue raised . . . is material to the findings the NRC must make to support the action that is involved in the proceeding"; (5) "[p]rovide a concise statement of the alleged facts or expert opinions . . . together with references to the specific sources and documents on which the requestor/petitioner intends to rely"; and (6) "provide sufficient information to show that a genuine dispute exists . . . on a

¹⁴ See Power Auth. of the State of New York (James A. FitzPatrick Nuclear Power Plant and Indian Point Nuclear Generating No. 3), CLI-00-22, 52 NRC 266, 295 (2000) (Commission recognizes that the Town of Cortlandt established standing in a license transfer proceeding because it is the "locus of the Indian Point 3 plant and therefore is in a position analogous to that of an individual living or working within a few miles of a plant").

¹⁵ See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-98-13, 48 NRC 26, 33-34 (1998) (Commission recognizes that a governmental body's interest in protecting the individuals and territory that fall under that body's authority establishes an organizational interest for standing purposes). Pursuant to the rationale in Private Fuel Storage, it may reasonably be presumed that the interests a municipality seeks to represent on behalf of its residents are germane to its own purposes. See id. at 32; accord Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant), LBP-99-25, 50 NRC 25, 29 (1999).

material issue of law or fact,” including “references to specific portions of the application . . . the petitioner disputes . . . 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” 10 C.F.R. § 2.309(f)(1).¹⁶

The multi-factor contention-admissibility test in section 2.309(f)(1) -- which is “strict by design” (Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 118 (2006)) -- was crafted by the Commission to “raise the threshold bar for an admissible contention.” Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999). Under the previous contention-admissibility rule, a contention could be admitted and litigated “based on little more than speculation Admitted intervenors often had negligible knowledge of nuclear power issues and, in fact, no direct case to present, but instead attempted to unearth a case through cross-examination.” Id. “Congress therefore called upon the Commission to make ‘fundamental changes’ in its public hearing process to assure that ‘hearings serve the purpose for which they were intended: to adjudicate genuine, substantive safety and environmental issues placed in contention by qualified intervenors.’” Id. (quoting H.R. Rep. No. 97-177, at 151 (1981)). The Commission thus “toughened its contention [admissibility] rule [in 1989 to] . . . ensure that only intervenors with genuine and particularized concerns participate in NRC hearings.” Id.¹⁷

¹⁶ A contention must 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 merely expresses the petitioner’s view of what a governing policy ought to be; (4) it seeks to raise an issue improper for adjudication in the proceeding or not applicable to the facility in question; or (5) it seeks to raise an issue that is not concrete or is otherwise not litigable. See Philadelphia Elec. Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20-21 (1974).

¹⁷ As the Commission has instructed, the contention-admissibility rule serves to ensure that admitted contentions (1) focus on real disputes that can be resolved in an adjudication,

That the Commission's contention-admissibility rule is designedly strict is not to say that it should serve as a "fortress to deny intervention." Oconee, CLI-99-11, 49 NRC at 335 (quoting Peach Bottom, 8 AEC at 21). Rather, consistent with section 2.309(f), licensing boards are bound to admit for litigation "contentions that are material and supported by reasonably specific factual and legal allegations." Id.

III. JOINT PETITIONERS ESTABLISH STANDING, AND THEY PROFFER ONE CONTENTION, CONTENTION 2, THAT IS ADMISSIBLE IN PART

A. JOINT PETITIONERS ESTABLISH STANDING

Joint Petitioners consist of two individuals, Mark Oncavage and Dan Kipnis, and two organizations, Southern Alliance for Clean Energy (SACE) and National Parks Conservation Association (NPCA). We conclude that all four entities satisfy Commission standing requirements.¹⁸

First, Mr. Oncavage and Mr. Kipnis established their standing pursuant to the proximity presumption rule (see supra Part II.A.1), because they both submitted declarations demonstrating they live within 50 miles of the Turkey Point site. See Joint Pet., Exh. 1, Declaration of Mark Peter Oncavage at para. 2 (Aug. 13, 2010); Declaration of Daniel C. Kipnis at para. 2 (Aug. 12, 2010) [hereinafter Joint Pet. Exh. 1].

Relying on the theory of representational standing (see supra Part II.A.2), SACE and NPCA both showed the interests they seek to protect in this proceeding are germane to their

(2) establish a sufficient factual and legal foundation to warrant further inquiry, and (3) put other parties on notice of the disputed issues so they will know precisely those claims they must support or oppose. See Oconee, CLI-99-11, 49 NRC at 334.

¹⁸ Neither FPL nor the NRC Staff challenges the standing of the four entities who comprise Joint Petitioners. See FPL Answer to Joint Pet. at 7; NRC Staff Answer to Joint Pet. at 9-10.

organizational purposes,¹⁹ and they both provided the names of members who (1) established standing to intervene in their own right by satisfying the proximity presumption rule, and (2) authorized SACE and NPCA, as appropriate, to represent their interests in this proceeding, thus absolving them from participating as individuals. See Joint Pet. Exh. 1. SACE and NPCA therefore satisfy the standards for representational standing.

B. JOINT PETITIONERS PROFFER ONE CONTENTION, CONTENTION 2, THAT IS ADMISSIBLE IN PART

Each of Joint Petitioners' proffered contentions alleges a deficiency in FPL's Environmental Report (ER). Before addressing the admissibility of those contentions, we provide a brief discussion of the standards governing the environmental documents prepared by an applicant and the NRC Staff.

Pursuant to Commission regulations that implement the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4331 et seq., every COL application must be accompanied by an ER to aid the Commission in its preparation of an Environmental Impact Statement (EIS) in compliance with section 102(2) of NEPA. See 10 C.F.R. § 51.14(a).²⁰ An ER must discuss: (1) the impacts of the proposed action on the environment; (2) adverse environmental effects of

¹⁹ SACE identifies itself as a non-profit, public-interest organization that "promotes responsible energy choices to solve global warming problems and ensure[s] clean, safe, and healthy communities throughout the southeast." Joint Pet. at 2. NPCA identifies itself as a non-profit, public interest organization that is committed to preserving our nation's parks, including Biscayne National Park and Everglades National Park. Id. at 2-3.

²⁰ In enacting NEPA, Congress's twin aims were to: (1) require an agency to consider every significant aspect of the environmental impact of a proposed action; and (2) ensure the agency will inform the public that it has considered environmental concerns in its decision-making process. See Baltimore Gas & Elec. Co. v. NRDC, 462 U.S. 87, 97 (1983). To effect these aims, NEPA requires an agency to "take a 'hard look' at the environmental consequences before taking a major action" and to report the result of that hard look in an EIS. Id. Section 102(2) of NEPA, 42 U.S.C. § 4332(2), prescribes the scope of environmental concerns that must be considered in the EIS.

the proposed action that cannot be avoided; (3) alternatives to the proposed action; (4) the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity; and (5) any irreversible and irretrievable commitments of resources associated with the proposed action. See 10 C.F.R. § 51.45(b). The ER shall “include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects.” Id. § 51.45(c). The ER “must also contain an analysis of the cumulative impacts of the activities to be authorized by the [COL].” Id. The ER shall discuss environmental impacts “in proportion to their significance” (10 C.F.R. § 51.45(b)(1)), and it “should contain sufficient data to aid the Commission in its development of an independent analysis.” Id. § 51.45(c).

Guided by the above standards, we now analyze the admissibility of the NEPA contentions proffered by Joint Petitioners.

1. Contention NEPA 1 Is Not Admissible Joint Petitioners proffer the following contention, which they characterize as Contention NEPA 1, relating to the alleged environmental impacts of FPL’s proposed radial collector wells: “The ER fails to adequately address direct, indirect, and cumulative impacts of the radial collector wells on the Biscayne Aquifer and the Biscayne Bay Ecosystem.” Joint Pet. at 9. In support of Contention NEPA 1, Joint Petitioners advance five discrete underlying contentions, which they label as Contentions NEPA 1.1 through NEPA 1.5. We address these five underlying contentions in turn, concluding that none is admissible and, accordingly, that Contention NEPA 1 is not admissible.

Preliminarily, because all five contentions underlying Contention NEPA 1 concern FPL’s proposed radial collector wells, we will examine the purpose and construction of those wells as described in the ER. During normal operations of proposed Units 6 and 7, FPL intends to

dissipate waste heat by mechanical draft cooling towers. Two sources of makeup cooling water will be available: (1) the primary source will consist of reclaimed water (discussed infra Part III.B.2) that will be used after it is processed by the Miami-Dade Water and Sewer Department (MDWASD) and conveyed via pipelines to the Turkey Point site; and (2) the secondary source -- which will be used when reclaimed water is inadequate in quantity or quality to meet the needs of the cooling system -- will consist of four radial collector wells designed principally to withdraw seawater from under Biscayne Bay. See ER at 5.2-1, 5.2-8.

The radial collector wells will be located on the Turkey Point peninsula adjacent to Biscayne Bay. See ER Figure 3.1-3. Each well will consist of a central reinforced concrete caisson extending below ground level with lateral pipes projecting from the caisson and extending horizontally for a length of up to 900 feet in the Biscayne Aquifer at a depth of about 40 feet below the bottom of Biscayne Bay. The radial collector wells are designed to withdraw seawater from the Biscayne Aquifer, which would be recharged by water flowing downward from Biscayne Bay. As designed, the four wells collectively would provide up to about 86,400 gallons/minute of cooling water -- or approximately 124 million gallons/day -- and would meet 100 percent of the cooling tower needs to operate Units 6 and 7 if the primary source of cooling water were unavailable. See ER at 2.3-2, 2.3-46, 5.2-8, tbl. 3.3-2.²¹

a. Contention NEPA 1.1 Is Not Admissible Contention NEPA 1.1 alleges that “[t]he 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

²¹ The ER indicates that about 60 million gallons/day of reclaimed water would be necessary to provide cooling for the operation of Units 6 and 7 (ER at 5.2-16), whereas the amount of seawater makeup from the radial collector wells to provide such cooling could be up to about 124 million gallons/day. See ER at 5.2-17; Tr. at 203. The difference in required makeup water to provide cooling is the result of the higher blow down flow necessary when seawater is used in the cooling system. See ER at 3.4-2 to 3.4-3.

frequency and amount of water the radial collector wells will withdraw from the Biscayne Aquifer.” Joint Pet. at 10. Joint Petitioners advance the following three arguments for this contention. First, Joint Petitioners claim the ER fails adequately to discuss whether the amount of reclaimed water from MDWASD will be sufficient to serve as the primary source of cooling water for Units 6 and 7, and relatedly, it fails adequately to discuss whether the radial collector wells will be a feasible, secondary source of cooling water. See id. at 15. Second, Joint Petitioners assert that “[w]ithout any information on the amount of water that will be withdrawn [by the radial collector wells] and how often it will be withdrawn,” FPL fails to provide the NRC with adequate information to assess the impacts on 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. Third, Joint Petitioners assert that, contrary to FPL’s assumption, the radial collector wells might withdraw fresh water from the Biscayne Aquifer or Biscayne Bay, which might, in turn, affect the salinity of the Bay and impact the Bay’s ecosystem. See id. at 13-14.

FPL and the NRC Staff argue that Contention NEPA 1.1 is inadmissible. See FPL Answer to Joint Pet. at 26-40; NRC Staff Answer to Joint Pet. at 12-18. We agree.

First, contrary to Joint Petitioners’ assertion, the ER comprehensively discusses (1) whether reclaimed water from MDWASD will be adequate to serve as the primary source of cooling water for Units 6 and 7, and (2) whether the radial collector wells will be a feasible, secondary source of cooling water. As discussed in the ER (see ER at 5.2-16), the South Florida Water Management District (SFWMD) water use permit -- which expires in 2027 -- requires MDWASD to increase the use of reclaimed water to at least 170 million gallons/day for reuse projects.²² Also included in the permit “is the requirement that MDWASD work with FPL

²² See also ER at 5.2-16 (SFWMD estimates that by 2025 MDWASD will increase the reclaimed water available for reuse to 193 million gallons/day).

to provide up to 70 [million gallons/day] of reclaimed water” (id.), which would be more than enough for the operation of Units 6 and 7. See id. (the ER indicates the amount of reclaimed water FPL would need from MDWASD for the operation of Units 6 and 7 would be about 60 million gallons/day); accord ER at 3.4-2. The ER acknowledges that occasions might arise when, in light of demands from other reuse projects, reclaimed water from MDWASD “may not be sufficient to meet all of the water demand for the operation of Units 6 and 7.” ER at 5.2-16. “To compensate for this potential shortfall, a second source for makeup water would consist of [four] radial collector wells that would withdraw saltwater from under Biscayne Bay.” Id. The ER indicates the four wells collectively would be able to provide 100 percent of the cooling water necessary for operation of Units 6 and 7. See ER at 5.2-17. We conclude the above discussion in the ER refutes the first argument underlying NEPA Contention 1.1. To the extent Joint Petitioners attempt to rely on that argument, NEPA Contention 1.1 is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failure to identify a genuine dispute regarding a material issue of law or fact. See FPL Answer to Joint Pet. at 26-30; NRC Staff Answer to Joint Pet. at 16-18.²³

Nor does the admissibility of NEPA Contention 1.1 fare any better under the second argument advanced by Joint Petitioners. Joint Petitioners criticize the ER for failing to provide “any information on the amount of water that will be withdrawn [by the radial collector wells] and how often it will be withdrawn” (Joint Pet. at 11) -- a failure Joint Petitioners assert deprives the NRC Staff of information it needs to assess the impacts on the salinity regime of the Biscayne Bay ecosystem. Id. at 11-12. Once again, Joint Petitioners’ assertion ignores critical factual

²³ To the extent Joint Petitioners assert the ER fails to consider alternative sources of cooling water (Joint Pet. at 15), they ignore the ER’s discussion on that topic. See ER at 9.4-17 to 9.4-21, tbl. 9.4-4. Joint Petitioners fail to challenge any aspect of that discussion and, thus, fail to identify a genuine dispute with the ER, contrary to 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to Joint Pet. at 38-40; NRC Staff Answer to Joint Pet. at 17-18.

information in the ER. Although it is true that it fails to specify the volume of water that will be withdrawn by the radial collector wells at any given time, the ER indicates a total maximum flow rate using all four wells of 124 million gallons/day, which assumes no reclaimed water is provided by MDWASD. See ER at 2.3-46, 3.4-3; see also supra note 21. Joint Petitioners do not dispute this analysis. Nor do they provide supporting information to dispute the ER's conclusion that effects on the salinity regime of Biscayne Bay based on operation of the radial collector wells at maximum flow rate will be minimal.

The ER states in pertinent part:

Operation of radial collector wells installed beneath Biscayne Bay would not impact the water quality of the Bay. Although recharge would occur from the bay, it is estimated to be a small percentage of natural freshwater recharge. Effects on salinity of the bay, based on the predicted amount of withdrawal versus the natural recharge, would be minimal.

Monitoring wells would be installed and used to monitor the groundwater level and water quality at and near the radial collector well locations to ensure impacts to local water quality, particular[ly] surface water quality, are minimal.

Impacts to water quality from operation of the radial collector wells would be SMALL and not require mitigation.

ER at 5.2-21.²⁴ The ER also states:

²⁴ Notably, as FPL explains, the ER's conclusion that the radial collector wells would have minimal "[e]ffects on salinity of the Bay" (ER at 5.2-21) is consistent with the findings of a salinity impact analysis FPL included with material it provided to the State of Florida in its Site Certification Application, which stated:

The salinity impact analysis shows that operation of the radial collector wells will have no significant adverse impact on the average salinity of the Bay. Salinity changes attributable to the radial collector wells (changes that are calculable, but not likely measureable), tend to moderate the extreme salinity variations. Because the radial collector wells reduce the salinity extremes, they tend to move the system back toward the more natural salinity condition that existed before the development.

FPL Answer to Joint Pet. at 36 n.12 (quoting Joint Pet., Exh. 23, Florida Department of Environmental Protection, 3rd Round Plant and Non-Transmission Completeness Responses

Based on groundwater modeling . . . , the radial collector wells would be recharged at a rate ranging from 92 to 100 percent (114 [million gallons/day] to 124 [million gallons/day at maximum flow]) from Biscayne Bay. This would be predominantly localized in the area of the radial collector wells. The remaining recharge would be from groundwater beneath the plant property. The amount of saltwater used (up to approximately 124 [million gallons/day] if 100 percent saltwater) compared to the size of the saltwater resource available would be insignificant. Impacts to Biscayne Bay surface waters would be SMALL and would not require mitigation.

Monitoring of the water quality from radial collector wells would be performed to determine whether the water being pumped is saltwater by monitoring the groundwater elevation data in the near shore areas adjacent to the radial collector well locations.

ER at 5.2-17. To the extent Contention NEPA 1.1 asserts the ER fails to provide information regarding the amount of water the radial collector wells will withdraw and the impact of such withdrawal on the salinity of the Biscayne Bay ecosystem, that assertion is refuted by the above discussion in the ER. Accordingly, we conclude this aspect of Contention NEPA 1.1 is not admissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failing to identify a genuine dispute regarding a material issue of law or fact. See FPL Answer to Joint Pet. at 32; NRC Staff Answer to Joint Pet. at 13-16.²⁵

FPL-Turkey Point Units 6 & 7 Site Certification Application at 8 (July 2010)). Although this analysis is not discussed in the ER, Joint Petitioners provided a general discussion of it in their Exhibit 23. In analyzing the admissibility of a proffered contention, a licensing board need not turn a blind eye to those portions of a petitioner's exhibits that might militate against admissibility. See Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), vacated on other grounds, CLI-90-04, 31 NRC 333 (1990) ("[B]oards must do more than uncritically accept a party's mere assertion that a particular document supplies the basis for its contention, without even reviewing the document itself to determine if it . . . appears to support a litigable contention.").

²⁵ We emphasize that, as relevant here, preparation of the ER is the first step in the NEPA process. Its purpose is to aid the NRC Staff in the performance of its NEPA responsibilities, which consist of preparing the draft EIS (10 C.F.R. §§ 51.70, 51.71), releasing the draft EIS to the public for comments (id. §§ 51.73, 51.74), and preparing and distributing the final EIS after receipt and consideration of comments. Id. §§ 51.90, 51.91, 51.93, 51.94. A decision by a licensing board rejecting a contention challenging the adequacy of a portion of an ER does not necessarily mean the NRC will satisfy its NEPA obligations by simply importing that portion of the ER into the EIS. Rather, the EIS must comply with NEPA and the above-

Finally, we conclude Contention NEPA 1.1 is not admissible pursuant to the third argument advanced by Joint Petitioners, who allege that, contrary to FPL's assumption, the radial collector wells might withdraw fresh water from the Biscayne Aquifer and Biscayne Bay, which might, in turn, affect the salinity of the Bay and impact the Bay's ecosystem. See Joint Pet. at 13-14. To the extent Joint Petitioners allege the ER does not contemplate the possibility of withdrawing fresh water, they are incorrect. The ER explicitly states the radial collector wells will withdraw water from the Biscayne Aquifer which, in turn, will be recharged from Biscayne Bay, and that the recharge from the Bay would include some fresh water. See ER at 5.2-21. But the ER states the freshwater recharge from the bay is "estimated to be a small percentage of natural freshwater recharge" and, accordingly, the impact on the salinity of the Bay "would be minimal." Id. Thus, the predicate of the claim underlying Joint Petitioners' contention (i.e., that the ER does not contemplate that the radial collector wells will withdraw fresh water) is factually incorrect. Moreover, Joint Petitioners fail to refute with supporting facts the ER's conclusion that the impact of any withdrawal of fresh water by the wells will be minimal. We therefore conclude Contention NEPA 1.1, pursuant to its third underlying argument, fails to identify a genuine dispute regarding a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to Joint Pet. at 36-38; NRC Staff Answer to Joint Pet. at 13-14.²⁶

cited Commission regulations, which describe the scope of the "detailed statement" (42 U.S.C. § 4332(2)(C)) that must be contained in the EIS. When the NRC Staff issues the EIS, Commission regulations provide an opportunity to either amend admitted contentions or proffer new contentions based on "data or conclusions in the NRC draft or final [EIS] . . . or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's documents." 10 C.F.R. § 2.309(f)(2).

²⁶ In their effort to support the admissibility of Contention NEPA 1.1, Joint Petitioners rely on comments and questions provided to FPL by state agencies in the context of FPL's separate Site Certification Application. See, e.g., Joint Pet. at 12-14. It is well established, however, that the mere existence of such comments and questions, if generated by the NRC Staff, do not, in and of themselves, establish grounds for a litigable contention. See Nuclear

b. Contention NEPA 1.2 Is Not Admissible Contention NEPA 1.2 alleges that “[t]he 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.” Joint Pet. at 15. Joint Petitioners advance two arguments for this contention. First, they assert that the ER’s reliance on the results of an Aquifer Performance Test (APT) is misplaced, because the APT used a well-pumping rate that was about 1/10th of the pumping rate of the radial collector wells, and the APT’s geological interpretations of the Biscayne Aquifer are flawed in any event. Id. at 15-18. Second, they allege that the ER’s reliance on groundwater modeling is misplaced, because the model’s assumptions of steady state, constant-head boundary, and constant density do not represent actual conditions and, accordingly, cannot predict environmental impacts caused by operation of the radial collector wells. See id. at 18-20.

FPL and the NRC Staff argue that Contention NEPA 1.2 is inadmissible. See FPL Answer to Joint Pet. at 41-46; NRC Staff Answer to Joint Pet. at 18-21. We agree.

First, we agree with FPL that Joint Petitioners’ attack on the ER’s alleged reliance on the APT is “unfounded.” See FPL Answer to Joint Pet. at 41. FPL points out that the APT referred to by Joint Petitioners “is not a part of FPL’s ER,” because the APT report was not completed until August 2009, several months *after* the filing of the COL Application in June 2009. Id.²⁷

Mgmt. Co., LLC (Monticello Nuclear Generating Plant), CLI-06-06, 63 NRC 161, 164 (2006). This principle applies a fortiori in the context of comments and questions generated by a state agency that is examining a state application to determine compliance with state legal and technical standards. Here, Joint Petitioners fail to explain why these comments and questions proffered by the state agency demonstrate a material deficiency in FPL’s COL Application.

²⁷ FPL explains the APT was part of a report it provided to the Florida Department of Environmental Protection, which administers and oversees the processing of FPL’s Site Certification Application under Florida’s Power Plant Siting Act. See FPL Answer to Joint Pet. at 20-22, 41 n.16. FPL observes (id. at 42) that Joint Petitioners discuss Miami-Dade County’s

Accordingly, states FPL, the ER neither refers to nor relies on the APT, and contrary to Joint Petitioners' assertion, the APT "could not have had any bearing on the conclusions reached in the ER regarding the salinity effects of radial collector well operation." Id. Joint Petitioners do not challenge FPL's statement that the ER neither refers to nor relies on the APT. We therefore conclude that Joint Petitioners' first argument in support of Contention NEPA 1.2 fails to demonstrate a genuine dispute with the ER involving the APT. See 10 C.F.R. § 2.309(f)(1)(vi).

Joint Petitioners' second argument in support of Contention NEPA 1.2 claims the ER relies on a groundwater model that uses flawed assumptions. Unlike the APT, the groundwater model is referenced and relied on in the ER. See ER at 2.3-35 to 2.3-36. But, in attacking the groundwater model, Joint Petitioners fail to identify specific portions of the ER they dispute, relying instead almost exclusively on comments from state agencies seeking additional information as part of their review of FPL's site certification application under Florida's Power Plant Siting Act. See Joint Pet. at 18-20. Neither Joint Petitioners, nor the relevant portions of the state agency comments referenced by Joint Petitioners, explain how any alleged deficiencies in the groundwater modeling assumptions in the ER are significant for purposes of NEPA review and, thus, material to this proceeding.²⁸

comments, but they fail "to tie the County's comments to the ER's discussion of the environmental impacts" in a manner that satisfies Commission admissibility standards. We agree.

²⁸ To the extent Joint Petitioners rely on documents that did not originate with Florida agencies (see Joint Pet. at 19) (citing Joint Pet., Exh. 7, Joan A. Browder et al., Biscayne Bay Conceptual Ecological Model, 25 Wetlands 854 (2005); Joint Pet., Exh. 8, Environmental Changes Associated with a Florida Power Plant), those documents -- like the documents from the state agencies -- fail to explain how alleged deficiencies in the groundwater modeling assumptions would likely be material to *this* proceeding. Nor do Joint Petitioners allege facts or provide expert opinions in support of such an explanation. See NRC Staff Answer to Joint Pet. at 20 n.9.

Moreover, Joint Petitioners fail directly to challenge the explanations FPL provided in its COL Application for the groundwater modeling assumptions it employed and the conclusions it reached. In this regard, FPL used a MODFLOW groundwater model, which the ER describes as “a constant-density, three-dimensional finite-difference model, with modular capability to add various equation solvers and boundary conditions to the basic model.” ER at 2.3-34. As Joint Petitioners observe, FPL used this groundwater model “to evaluate the origin of the water when the radial collector wells would be in operation and the resultant drawdown and velocities where the bay and aquifer meet.” Joint Pet. at 18.²⁹ Despite stating the model’s particularized purpose, Joint Petitioners fail to challenge its determination that “approximately 92 to 100 percent of recharge to the radial collector wells would come from Biscayne Bay and up to 8 percent” would come from groundwater. ER at 5.2-9. Nor do Joint Petitioners challenge the ER’s determination that the “flow rate at the sediment-water interface resulting from the radial collector well operation would be approximately 0.00001 foot per second.” ER at 5.3-2.

Finally, Joint Petitioners fail to challenge the reasons underlying FPL’s decision to employ model assumptions based on steady state, constant-head boundary, and constant density. For example, regarding the steady-state assumption, the COL Application explains that the average groundwater levels measured between June 2008 and January 2009 are assumed to represent steady-state conditions for the Units 6 and 7 site and can therefore be used as the calibration targets for a steady-state simulation. See Turkey Point Units 6 and 7 COL Application, Part 2 FSAR [Final Safety Analysis Report] Section 2.4.12, app. 2CC, Rev. 0, at

²⁹ In addition to simulating the impacts of operation of the radial collector wells, FPL states that it used the MODFLOW model “to simulate the impacts of construction dewatering, [and] construction of Units 6 [and] 7 (site grade increase and use of diaphragm walls for groundwater control).” ER at 2.3-35. As stated in the ER (id.), the results of the model simulations are in the COL Application in FPL’s Final Safety Analysis Report Section 2.4.12, Appendix 2CC.

2CC-25 [hereinafter FSAR]. Regarding FPL's use of the constant-head boundary assumption, the COL Application states that the model assumes the "groundwater level in the grid cells coinciding with Biscayne Bay" is fixed, and it explains this level "is based on the average level from tidal monitoring at Virginia Key." See FSAR Section 2.4.5, app. 2CC at 2CC-22.

Regarding the constant-density assumption, the COL Application indicates that for the limited purposes of the model -- i.e., evaluating the zone of influence of the radial collector wells and the approach velocity of the water -- FPL concluded the density variations would be insignificant compared to the hydraulic gradient caused by the pumping and, accordingly used a constant-density model, choosing seawater as the reference fluid. See FSAR Section 2.4.5, app. 2CC at 2CC-7, 2CC-26.

Joint Petitioners fail to explain why the assumptions underlying FPL's groundwater model are deficient, nor do they point to specific errors in the model, much less provide alleged facts or expert opinions to support a position that a specified error exists. We therefore conclude that Contention NEPA 1.2, to the extent it is grounded on alleged flawed assumptions in the groundwater model, fails to explain the materiality of the claim (10 C.F.R. § 2.309(f)(1)(iv)), fails to provide facts or expert opinions to support a position (id. § 2.309(f)(1)(v)), and fails to identify a genuine dispute with the ER. Id. § 2.309(f)(1)(vi).³⁰

³⁰ Joint Petitioners also attack the MODFLOW groundwater model because it does "not assess the changes in salinity over time and space in the Bay." Joint Pet. at 20. As discussed above in text, however, the groundwater model is not intended to analyze the salinity regime in Biscayne Bay or the Biscayne Aquifer. Rather, it analyzes the origin of the water when the radial collector wells are in operation and the resultant draw down and velocities where the Bay and aquifer meet. A discussion of the impact of the wells on the salinity regime is provided elsewhere in the ER. See supra Part III.B.1.a.

c. Contention NEPA 1.3 Is Not Admissible Contention NEPA 1.3 asserts “[t]he 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.” Joint Pet. at 20. Underlying this contention are two arguments. First, in what we will refer to as the “wildlife species” argument, Joint Petitioners assert the ER lacks “comprehensive, seasonally based biological studies on . . . wildlife utilization . . . and . . . species abundance for the area within and surrounding the proposed radial wells.” Id. Joint Petitioners acknowledge the ER includes avian surveys from 1972 and between 2005-2009, but they view those surveys as deficient for not including “any information on bird utilization of the area surrounding the plant site during the April-June breeding season,” as well as details on the level of site usage by the wood stork. Id. at 21 (referencing, inter alia, ER at tbl. 2.4-1). Second, in what we will refer to as the “seagrass and benthic fauna” argument, Joint Petitioners complain that the ER improperly lacks a “baseline survey of seagrass cover and benthic fauna in the vicinity of the proposed radial collector wells.” Id. at 20-21. Without these data, Joint Petitioners assert the ER lacks an environmental baseline for purposes of evaluating the environmental impacts from the radial collector wells. Id. at 21-22.

FPL and the NRC Staff argue that Contention NEPA 1.3 is not admissible. See FPL Answer to Joint Pet. at 46-52; NRC Staff Answer to Joint Pet. at 22-25. We agree.

With regard to Joint Petitioners’ “wildlife species” argument, we find it significant that the ER states “[w]ildlife species existing near the radial collector wells and associated pipeline corridor would be similar to those observed on the Turkey Point plant property.” ER at 2.4-16. Joint Petitioners do not attack the ER’s conclusion that wildlife species existing near the radial collector wells “would be similar” to those species on the rest of the plant property. See id. Nor

do they attack the ER's analyses of wildlife species on the rest of the plant property.³¹ Rather, Joint Petitioners would prefer if the ER contained particularized studies that focused on species near the radial collector wells. In an effort to support that preference, Joint Petitioners rely on the following statement made by Miami-Dade County incident to its review of FPL's Site Certification Application: "studies are needed to properly document the use and value of the habitat in order to understand the potential impacts of the proposed project on flora and fauna of the region." Joint Pet., Exh. 3, Miami-Dade County Third Completeness Comments for Plant and Non-Transmission Line Portions of the FPL Site Certification Application – Turkey Point Units 6 & 7 at 9 (May 28, 2010). That statement, however, falls far short of rendering Contention NEPA 1.3 admissible. That statement -- which was made by a state agency requesting additional information in the context of a state licensing proceeding (see supra note 26) -- does not suggest that wildlife species near the radial collector wells are significantly different from, or exist at significantly different population levels than, wildlife species in other areas of the Turkey Point property. Nor does that statement indicate it is reasonably foreseeable that wildlife species on the Turkey Point property (or near the radial collector wells) will be impacted by the radial collector well system. Accordingly, we conclude that Contention

³¹ See, e.g., ER at 2.4-8 ("Wildlife species found within the Turkey Point plant property are common to the region and would be expected to be found in off-site project areas associated with Units 6 & 7: access roads, reclaimed water pipelines, transmission corridors and FPL owned fill source. . . . Although the Turkey Point plant property hosts such potential disease vectors as ticks and mosquitoes, no vector-borne diseases resulting from them are known.); ER at 2.4-9 ("Four federally-listed species have been observed within the Turkey Point plant property: American crocodile, Eastern indigo snake, Florida manatee, and wood stork. As described below, several state-listed species have also been observed. Approximately 170 animal and plant species are either federal- or state-listed as endangered, threatened, or candidates, or designated (not listed) species of concern for Miami-Dade County, with the vast majority being plant species."); ER at 2.4-15 ("The industrial wastewater facility supports a variety of aquatic species typical of a shallow, subtropical, hypersaline environment, including phytoplankton, zooplankton, marine algae, rooted plants, crabs, and estuarine fish . . .").

NEPA 1.3, to the extent it is grounded on the “wildlife species” argument, is not admissible because Joint Petitioners fail to raise a genuine dispute of material fact with the ER, contrary to 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to Joint Pet. at 46-48; NRC Staff Answer to Joint Pet. at 22-23.³²

With regard to Contention NEPA 1.3’s “seagrass and benthic fauna” argument, the ER notes the presence of seagrasses near Turkey Point (see ER at 2.4-15, 2.4-16, 2.4-19), and, based on groundwater modeling, it specifically concludes the impact of the radial collector wells on aquatic vegetation in general, as well as on “aquatic species,” will be small. See ER at 5.3-3. Joint Petitioners provide no alleged facts or expert opinions to challenge that modeling or conclusion. Although they allege that “[h]ypersaline conditions resulting from the withdrawal of freshwater via radial wells may adversely affect those seagrass communities” (Joint Pet. at 22), this allegation rests on and simply repeats an underlying assertion (i.e., that the radial collector wells may create harmful hypersaline conditions) for which Joint Petitioners failed to provide adequate support in Contention NEPA 1.1 (see supra Part III.B.1.a), and for which they fail to

³² We note that Joint Petitioners’ arguments challenging the ER’s avian surveys are inadequate to render Contention NEPA 1.3 admissible. Joint Petitioners assert (Joint Pet. at 21) that the ER’s avian surveys -- located in Table 2.4-1 -- should include numbers during the April-June breeding season, as well as surveys beyond 1972 and 2005-2009. But Joint Petitioners do not identify a deficiency in the “recent, but limited surveys between 2005-2009” (id.), nor do they say what is wrong with the avian studies that have been conducted during the months of April through June (see ER at tbl. 2.4-1), aside from baldly asserting the studies should include “comprehensive seasonal data.” Joint Pet. at 21. Joint Petitioners dismiss the ER’s discussion of the wood stork as nothing more than “opportunistic observations” (id.), but they fail to acknowledge that the ER summarizes the presence of the wood stork near Turkey Point (see ER at 2.4-10) and that the wood stork is included in FPL’s general avian surveys. See ER at tbl. 2.4-1. Finally, Joint Petitioners fail to explain why information regarding avian “feeding, roosting, nesting, and breeding behavior” (Joint Pet. at 21) is required to appear in the ER beyond what already appears for the wood stork specifically (see ER at 2.4-10) and birds in general (ER at tbl. 2.4-1) to develop a sufficient baseline for understanding impacts of the proposed action on such species. Accordingly, Joint Petitioners have not raised a genuine dispute of material fact or law with this aspect of Contention NEPA 1.3.

provide adequate support here. We therefore conclude that Contention NEPA 1.3, as explained by the “seagrass and benthic fauna” argument, is not admissible because it fails to show a genuine dispute exists on a material issue of law or fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi).³³

Contention NEPA 1.3 is therefore not admissible.

d. Contention NEPA 1.4 Is Not Admissible Contention NEPA 1.4 asserts “[t]he ER [at 2.4-14 to 2.4-31] 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.” Joint Pet. at 22. This contention is grounded on an argument that is substantially identical to the “seagrass and benthic fauna” argument underlying Contention NEPA 1.3; namely, according to Joint Petitioners, “[s]uch data is necessary to [establish an environmental baseline and to] determine the extent to which the radial wells’ disruption of the Bay’s salinity regime may impact specific species and their habitats.” Id. In particular, Joint Petitioners assert that [h]ypersaline conditions resulting from the withdrawal of fresh water via radial wells may adversely affect th[e] seagrass communities.” Id.

FPL and the NRC Staff argue that Contention NEPA 1.4 is not admissible. See FPL Answer to Joint Pet. at 53-57; NRC Staff Answer to Joint Pet. at 25-26. We agree.

Contention NEPA 1.4, like Contentions NEPA 1.1 and 1.3, arises from a concern that the radial collector wells will change the “Bay’s salinity regime” and thereby impact aquatic species

³³ Joint Petitioners juxtapose seemingly inconsistent arguments regarding the salinity conditions required for the survival of seagrasses. On the one hand, they claim that seagrasses “require a *consistent* salinity regime” (Joint Pet. at 21) (emphasis added), and shortly thereafter they declare that “sensitive seagrasses require a *variable* salinity regime.” Id. at 22 (emphasis added). From these disparate statements, one might reasonably conclude that the “seagrass” component of Contention NEPA 1.3 is also not admissible because it fails to provide a “specific statement of the issue of law or fact to be raised.” 10 C.F.R. § 2.309(f)(1)(i).

and their habitats. See Joint Pet. at 22. For the same reason we concluded Contention NEPA 1.3 is not admissible (supra Part III.B.1.c), Contention NEPA 1.4 is not admissible; namely, contrary to 10 C.F.R. § 2.309(f)(1)(vi), Joint Petitioners fail to show a genuine dispute exists on a material issue of law or fact. Additionally, Contention NEPA 1.4 is inadmissible because, contrary to 10 C.F.R. § 2.309(f)(1)(v), Joint Petitioners fail to provide alleged facts or expert opinions for the notion that the radial collector wells will have an impact, much less a significant impact, on the Bay's salinity regime.³⁴

e. Contention NEPA 1.5 Is Not Admissible Contention NEPA 1.5 asserts that “[t]he ER provides insufficient data on the direct, indirect and cumulative impacts of the radial collector wells.” Joint Pet. at 23. Joint Petitioners raise the following claims of omission in support of this contention: (1) the ER fails to discuss the existing hypersaline plume emanating from the current cooling canal operations that might, in combination with the radial collector wells, impact the groundwater and surface water (id. at 23-24); (2) the ER fails to discuss how the radial collector wells may adversely affect the successful implementation of the Comprehensive Everglades Restoration Plan (CERP), and specifically the Biscayne Bay Coastal Wetlands (BBCW) Project (id. at 24-25);³⁵ and (3) the ER fails to discuss the potential impacts of sea level rise on the radial collector well system. Id. at 25-26.³⁶

³⁴ Joint Petitioners assert (Joint Pet. at 22) that seagrass communities may be affected by “[h]ypersaline conditions resulting from the withdrawal of fresh water via radial wells.” But they allege no facts or expert opinions to support a conclusion that the withdrawal of fresh water by the radial wells will create hypersaline conditions. Nor do they address the ER's conclusion (ER at 5.2-21) that the impact of any withdrawal of fresh water by the radial wells will be minimal. See supra Part III.B.1.a.

³⁵ The ER states that, pursuant to the Federal Water Resources Development Act, CERP was authorized in 2000 “to guide the restoration, protection, and preservation of the water resources of central and southern Florida.” ER at 2.3-5. CERP will include more than 60 projects that will necessitate more than 30 years of construction. See id. These projects will accomplish CERP's goal by “captur[ing] and stor[ing] freshwater flows in surface and

FPL and the NRC Staff argue that Contention NEPA 1.5 is not admissible. See FPL Answer to Joint Pet. at 57-63; NRC Staff Answer to Joint Pet. at 27-36. We agree.

First, Joint Petitioners err in claiming (Joint Pet. at 23-24) the ER fails to discuss the hypersaline plume beneath the Turkey Point plant that might, in combination with the radial collector wells, impact the groundwater and surface water. The ER explicitly discusses the possibility of discharges of hypersaline water from the cooling canals into the aquifer. See ER at 5.2-22.³⁷ Further, the ER explicitly concludes that impacts on groundwater quality due to operation of the radial collector wells will be small (see ER at 5.2-23), and impacts on surface water quality due to operation of the radial collector wells will be minimal. See ER at 5.2-21; see also ER at 5.2-17, 5.2-19. Joint Petitioners do not address these portions of the ER, nor do they provide adequate information to show a genuine dispute with the ER. This aspect of Contention NEPA 1.5 is therefore not admissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

subsurface reservoirs” and “direct[ing the freshwater] to the wetlands, lakes, rivers, and estuaries of south Florida while also ensuring future urban and agricultural water supplies.” Id. The BBCW Project is one such project, which “is designed to rehydrate wetlands and reduce point source discharge to Biscayne Bay by the installation of spreader swales, flow ways, levees, culverts, and filling existing canals. The project [covers 13,600 acres and] includes the operation of pump stations and stormwater treatment areas.” ER at 5.11-2.

³⁶ To the extent Contention NEPA 1.5 also argues the ER contains no discussion of the direct, indirect, and cumulative impacts the operation of the radial collector wells might have on groundwater, surface water, disruption of saltwater regime, and benthic flora and fauna (see Joint Pet. at 23), this argument is substantially identical to claims raised and rejected in Contentions NEPA 1.2 and 1.3. See supra Parts III.B.1.b and III.B.1.c. To the extent Contention NEPA 1.5 argues the ER fails to discuss environmental impacts that might result from *construction* of the radial wells (Joint Pet. at 23), it is factually incorrect. See, e.g., ER at 4.3-23.

³⁷ The ER does not use the term “hypersaline plume.” Rather, it observes that “water in the industrial wastewater facility is hypersaline with salinity concentrations approximately twice that of Biscayne Bay.” ER at 2.3-11. Because 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,” the ER acknowledges that “[p]otential seepage would flow into the Biscayne aquifer which contains saltwater and receives hypersaline water from the industrial wastewater facility.” ER at 5.2-22 to 5.2-23; see also infra note 70 (describing cooling canals).

Moreover, because Joint Petitioners fail to explain why a radial collector well's capture or redirection of water affected by hypersaline water, even if it were to occur, would be significant to FPL's conclusion regarding groundwater quality, this aspect of their contention is not admissible pursuant to 10 C.F.R. § 2.309(f)(1)(iv). See FPL Answer to Joint Pet. at 60-61; NRC Staff Answer to Joint Pet. at 30-31.

In their second argument underlying Contention NEPA 1.5, Joint Petitioners claim (Joint Pet. at 24-25) the ER fails to discuss how the radial collector wells may adversely affect the successful implementation of CERP, and specifically the BBCW Project. They are incorrect. The ER, in fact, discusses the cumulative environmental impact of radial collector wells and CERP. In its analysis of cumulative surface water effects, the ER states that "CERPs would rehydrate wetlands that provide water flow into Biscayne Bay, positively impacting Biscayne Bay." ER at 5.11-5. After mentioning the potential cumulative impact from the Everglades Mitigation Bank (EMB) and reiterating that impacts "on Biscayne Bay from operation of the radial collector wells would be SMALL" (id.), the ER concludes that "the cumulative impact on Biscayne Bay would be SMALL." Id. In its analysis of cumulative groundwater effects, 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 [e.g., CERPs and EMB], the cumulative impact to groundwater resources would be SMALL." ER at 5.11-6; see also ER at 5.11-7. In their discussion of Contention NEPA 1.5, Joint Petitioners do not cite any of these portions of the ER, nor do they contradict FPL's reasoning and conclusions with respect to the anticipated positive impacts of CERP regarding cumulative impacts.

In sum, although Joint Petitioners assert that radial collector well operations may disadvantage CERPs by "extract[ing] fresh water from the aquifer" (Joint Pet. at 25), they fail, contrary to 10 C.F.R. § 2.309(f)(1)(vi), to provide sufficient information showing either that

(1) the likely effects of such extractions would adversely impact the implementation of CERP or the BBCW Project, or (2) the ER is flawed in concluding that operation of the radial collector wells, when considered in conjunction with the “positive impacts to water quality” resulting from CERP, would have no adverse cumulative impacts. Contention NEPA 1.5 is therefore not admissible pursuant to Joint Petitioners’ second argument.³⁸

Finally, the third argument underlying Contention NEPA 1.5 does not render the contention admissible. Joint Petitioners claim that “sea level rise could affect these radial well operations. . . . during a time when the ecosystem will be subject to increased saltwater intrusion.” Joint Pet at 25-26. But they provide no alleged facts or expert opinions to support the notion that radial collector well operations might be affected by sea level rise, contrary to 10 C.F.R. § 2.309(f)(1)(v). Additionally, they provide no explanation of what “direct, indirect, or cumulative impact” has been omitted from the ER or why such an omission would be environmentally significant and thus material to the outcome of this proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iv) and (vi). See FPL Answer to Joint Pet. at 62-63; NRC Staff Answer to Joint Pet. at 34-36.

Contention NEPA 1.5 is therefore not admissible.³⁹

³⁸ Relying on Exhibit 10 (Joint Pet. at 24) (citing Joint Pet., Exh. 10, Florida Department of Environmental Protection, FPL Turkey Point 6 & 7 Completeness Determination (Plant) at 4 (Jan. 13, 2010)), Joint Petitioners assert that operation of the radial collector wells could be “detrimental to CERP objectives of restoring more fresh water flow to Biscayne Bay.” Even if we assumed arguendo that this exhibit provided the necessary alleged facts to satisfy section 2.309(f)(1)(iv) and (v), we would still rule this aspect of Contention NEPA 1.5 is not admissible pursuant to section 2.309(f)(1)(vi), because Joint Petitioners fail to show the existence of a genuine dispute of fact with the ER’s relevant analyses and conclusions.

³⁹ FPL has moved to strike portions of Joint Petitioners’ Reply that allegedly add new assertions regarding (1) the adequacy of the ER’s analysis of the impacts to Biscayne Bay salinity levels (Joint Petitioners Reply at 12-13; FPL Motion to Strike Portions of Joint Petitioners’ Reply at 6); (2) unaddressed concerns by Florida regarding the saltwater plume underneath Turkey Point (see Joint Petitioners Reply at 15-17; FPL Motion to Strike Portions of

2. Contention NEPA 2 Is Admissible in Part In Contention NEPA 2, Joint Petitioners allege “[t]he ER fails to adequately address the direct, indirect, and cumulative impacts of the reclaimed wastewater system on groundwater, air, surface water, wetlands, and CERP.” Joint Pet. at 26. Joint Petitioners then break this contention into three underlying contentions -- Contentions NEPA 2.1 through NEPA 2.3 -- that challenge various aspects of the ER’s discussion of the reclaimed wastewater system. We address the three underlying contentions in turn, concluding that Contention NEPA 2.1 is admissible in part, but the remainder of Contention NEPA 2 is not admissible.

At the outset, to provide a factual backdrop for our analysis, we examine the purpose and proposed operation of the reclaimed wastewater system. As stated in the ER and as previously noted (supra Part III.B.1), FPL plans to use reclaimed wastewater from MDWASD as the principal source of makeup cooling water for mechanical draft towers that would dissipate waste heat generated by proposed Units 6 and 7. See ER at 1.1-3. The reclaimed wastewater will be conveyed by pipelines to the Turkey Point site after it is processed by MDWASD. See ER at 5.2-1, 5.2-7. FPL plans to discharge some of the reclaimed wastewater into the Boulder Zone of the Lower Floridan Aquifer, which is approximately 2,800 feet below ground, via underground injection wells. See ER at 2.3-2, 2.3-15 to 2.3-16, 5.2-9. The Floridan Aquifer is one of two aquifers under proposed Units 6 and 7 at Turkey Point, and is divided into the following three levels, in descending order: the Upper Floridan Aquifer, the middle confining

Joint Petitioners’ Reply at 7), and (3) sea level rise leading to increased groundwater intrusion. See Joint Petitioners Reply at 23-24; FPL Motion to Strike Portions of Joint Petitioners’ Reply at 7-8). We grant FPL’s motion pertaining to the first two matters, because those assertions did not appear in the Joint Petitioners’ original Petition. With regard to third matter, we deny FPL’s motion, finding that, contrary to FPL’s assertion, Joint Petitioners referred to increased saltwater intrusion as a result of sea level rise in their Petition to Intervene, which could plausibly entail increased saltwater intrusion into groundwater. See Joint Pet. at 25. Nevertheless, even considering the information in Joint Petitioners’ Reply, we conclude Contention 1.5 is not admissible for the reasons discussed above in text.

unit, and the Lower Floridan Aquifer. See ER at 2.3-16, 2.3-18 to 2.3-19, 2.3-32. The ER describes the Floridan Aquifer as “a vertically continuous sequence of interbedded carbonate rocks of Tertiary age that are hydraulically interconnected by varying degrees and with permeabilities several orders of magnitude greater than the hydrogeologic systems above and below.” ER at 2.3-15. The “highly permeable” Boulder Zone of the Lower Floridan Aquifer is capped by “thick confining units.” ER at 2.3-19. The ER indicates the “Upper Floridan Aquifer is a major source of potable groundwater in much of Florida.” ER at 2.3-18, 2.3-32.

Under a delegation by the U.S. Environmental Protection Agency (EPA), the Florida Department of Environmental Protection (FDEP) controls the permitting of discharge of wastewater via injection wells into the Boulder Zone in Florida. See ER at 2.3-19; Joint Pet. Exh. 12, 70 Fed. Reg. 70,513, 70,515-16 (Nov. 22, 2005). As Class I injection wells under EPA regulations, FPL’s injection wells at Turkey Point would be “required to have a dual-zone monitoring system that consists of a zone open below the deepest USDW [Underground Source of Drinking Water] and a zone located in the USDW for geochemical and pressure monitoring.” ER at 2.3-47. Further, the ER states that

[t]he 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 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.

ER at 5.2-11. Based on the requirements of this monitoring program and results obtained from the 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.” Id.

a. Contention NEPA 2.1 Is Admissible In Part In Contention NEPA 2.1, Joint Petitioners assert “[t]he 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.” Joint Pet. at 26. This contention focuses on alleged impacts from the “upward migration of injectate and infiltration of contaminants” caused by use of underground injection wells to insert “plant liquid effluents, including chemical and radioactive waste, into the Lower Floridan Aquifer.” Joint Pet. at 26. First, Joint Petitioners insist the ER does not explain what the impacts to groundwater would be from injection of radioactive isotopes. Id. at 30. Second, Joint Petitioners argue that the ER does not disclose “a complete and accurate assessment” of the final destinations, types, formulations, and toxicities of pollutants which the treated wastewater would emit. Id. at 28-30. Third, Joint Petitioners challenge FPL’s assumption that treated wastewater inserted by the proposed injection wells into the Boulder Zone would remain separate from groundwater and sources of drinking water, citing documents from the EPA concerning nearby sites that experienced vertical migration of water between the Boulder Zone and Upper Floridan water when injection wells such as those proposed for Turkey Point were used. Id. at 27-28.

FPL and the NRC Staff argue that Contention NEPA 2.1 is not admissible. See FPL Answer to Joint Pet. at 66-76; NRC Staff Answer to Joint Pet. at 38-46. We conclude that Contention NEPA 2.1 is admissible in part.

We begin by addressing those aspects of Contention NEPA 2.1 that are *not* admissible, followed by that aspect of the contention we conclude is admissible. First, Joint Petitioners claim the ER “does [not] discuss potential impacts to groundwater quality of discharging

radioactive materials into the Lower Floridan Aquifer.” Joint Pet. at 30. They are incorrect. Regarding radioactive effluents, the ER states the “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. For so-called “off-normal operations,” the ER includes a “conceptual exposure scenario[, which] considers a receptor created by the drilling of a water supply well into the Boulder Zone for potable water use,” and declares that this hypothetical, “[a]lthough unrealistic, . . . 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.” Id. (emphasis added). Using the LADTAP II computer program, FPL 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. Even though these doses are not due to normal operations, they conform to the 10 CFR 50, Appendix I guidelines of 3 mrem total body and 10 mrem organ.

ER at 5.4-3.

Joint Petitioners neither acknowledge nor challenge this bounding analysis or its conclusion.⁴⁰ Although they cite Revision 17 of the AP1000 Design Control Document (DCD) (see Joint Pet. at 29-30), they ignore the fact that it contains the radiological effluents expected to be emitted. See Westinghouse AP1000 Design Control Document Rev. 17 -- Tier 2 Ch.11 -- Radioactive Waste Management -- Section 11.2, Liquid Waste Management Systems (Sept. 22, 2008) at tbl. 11.2-7. Because the ER, through its reference to the DCD, in fact, contains the discussion on radiological constituents and radiological impacts that Joint Petitioners claim is

⁴⁰ In their Reply Brief, Joint Petitioners challenge for the first time FPL’s reliance on the LADTAP II computer program. See Joint Petitioners Reply at 28. We agree with FPL that this new argument exceeds the scope of what Joint Petitioners advanced in their original Petition, and we therefore decline to consider it. See FPL Motion to Strike Portions of Joint Petitioners’ Reply at 8.

missing, this aspect of Contention NEPA 2.1 is inadmissible pursuant to 10 C.F.R.

§ 2.309(f)(1)(vi) for failing to raise a genuine dispute of material fact or law with the ER.

Second, Joint Petitioners claim that FPL's ER fails to address certain chemicals typically found in treated wastewater, such as "arsenic, cadmium, copper, lead, manganese, mercury, nickel, silver, and zinc." Joint Pet. at 28. Joint Petitioners again are incorrect. The ER contains a list of chemicals and their respective concentrations that FPL anticipates will be in the wastewater (see ER at tbl. 3.6-2), and that list includes each of the above chemicals (although it omits some other constituents that we discuss below). This aspect of Contention NEPA 2.1 is thus not admissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failing to raise a genuine dispute of material fact or law with the ER.

Third, Joint Petitioners claim the ER fails to analyze the presence of "pharmaceuticals and personal care products ('PPCPs') [that] are routinely found in treated municipal wastewater." Joint Pet. at 28-29. But Joint Petitioners fail to support their assertion that PPCPs routinely are found in treated municipal wastewater.⁴¹ This aspect of Contention NEPA 2.1 is thus not admissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failing to provide adequate supporting information to demonstrate a genuine dispute of material fact or law.

⁴¹ In an effort to support their assertion that PPCPs are routinely found in municipal wastewater, Joint Petitioners provide an "id." cite (Joint Pet. at 29) that refers to two tables in their Exhibit 14, which is entitled "United States Environmental Protection Agency, EPA 816-R-03-010, Relative Risk Assessment of Management Options for Treated Wastewater in South Florida (Apr. 2003)" [hereinafter EPA Relative Risk Assessment]. We were unable to find a reference to PPCPs in those tables. Although Joint Petitioners' Exhibit 12, entitled "Underground Injection Control Program -- Revision to the Federal Underground Injection Control Requirements for Class I Municipal Disposal Wells in Florida, 70 Fed. Reg. 70,513 (Nov. 22, 2005)" [hereinafter EPA Final Rule], states that pharmaceutical products and disinfection byproducts "*may* be present in treated municipal wastewater" (70 Fed. Reg. at 70,525) (emphasis added), Joint Petitioners did not ground this aspect of their contention on the EPA Final Rule, which appears to provide only conjectural support in any event.

We now turn to the admissible aspect of Contention NEPA 2.1. First, we conclude Contention NEPA 2.1 presents “a specific statement of the issue of law or fact to be raised or controverted” (10 C.F.R. § 2.309(f)(1)(i)), as we have revised and narrowed it: namely, the ER fails to analyze and discuss the potential impacts on groundwater quality of injecting into the Floridan Aquifer via underground injection wells heptachlor, ethylbenzene, toluene, selenium, thallium, and tetrachloroethylene, which have been found in injection wells in Florida but are not listed in FPL’s ER as wastewater constituent chemicals. See Joint Pet. at 26, 28 (citing EPA Relative Risk Assessment at app. 1, tbl. 1-1 and 1-2).

Second, Contention NEPA 2.1 includes “a brief explanation of [its] basis” (10 C.F.R. § 2.309(f)(1)(ii)) insofar as Joint Petitioners assert that there has been migration of fluid between the Boulder Zone and the Upper Floridan Aquifer and FPL’s ER improperly fails to discuss the impact to the Upper Floridan Aquifer of the above-specified chemicals that have been typically found in Florida wastewater. See Joint Pet. at 26-28.

Third, Contention NEPA 2.1 is within the scope of this proceeding, as required by 10 C.F.R. § 2.309(f)(1)(iii). The Notice of Hearing states it concerns FPL’s COL Application for Turkey Point Units 6 and 7. See Notice of Hearing, 75 Fed. Reg. at 34,778. Because Contention NEPA 2.1 raises a challenge to FPL’s ER, which is a required portion of FPL’s COL Application (see 10 C.F.R. § 51.50(c)), Contention NEPA 2.1 is within the scope of this proceeding.

Fourth, Contention NEPA 2.1 satisfies the materiality requirement of 10 C.F.R. § 2.309(f)(1)(iv). As previously stated (supra Section III.B), FPL’s ER must describe, inter alia, (1) reasonably foreseeable environmental impacts, which shall be discussed in proportion to their significance; and (2) adverse environmental effects that cannot be avoided should the proposal be implemented. See 10 C.F.R. § 51.45(b)(1)-(2). Here, Joint Petitioners have

asserted (with adequate supporting information, as discussed below) that certain specified chemicals might be in the wastewater discharged via deep injection wells into the Boulder Zone of the Lower Floridan Aquifer, and that the wastewater could possibly migrate into the Upper Floridan Aquifer, contaminating the groundwater (including potential drinking water) with these chemicals. Although FPL's ER discusses other chemicals in the wastewater (ER at tbl. 3.6-2), it fails to address the particular chemicals identified by Joint Petitioners, let alone analyze the likely impact of those particular chemicals on the groundwater. It cannot be gainsaid that, to the extent these chemicals are in the wastewater, their impact on groundwater -- if significant -- is material to the findings the NRC must make in deciding whether to grant FPL's COL Application. FPL has an obligation to discuss in the ER any such environmental impact caused by these chemicals in proportion to their significance. The ER is silent, however, with respect to these particular chemicals and their resulting impact.

Fifth, Contention NEPA 2.1 provides alleged facts or expert opinions as required by 10 C.F.R. § 2.309(f)(1)(v) to support the claims that the wastewater contains chemical contaminants that are not discussed in the ER, and that when FPL discharges the wastewater via the deep injection wells, the chemicals might migrate from the Boulder Zone to the Upper Floridan Aquifer. Joint Petitioners attached three documents to support these assertions: two sections from an EPA Relative Risk Assessment of the threat from deep injection wells in Florida (see EPA Relative Risk Assessment) and an announcement of a final rule issued by the EPA, based on that assessment, to impose an alternative method that operators of such wells may use when dealing with these threats. See EPA Final Rule. The EPA Relative Risk Assessment lists chemical effluents -- including those specified in Contention NEPA 2.1 as revised -- that have been found in treated wastewater in Miami-Dade County, Florida, where FPL seeks to build Units 6 and 7. See EPA Relative Risk Assessment at A1-6 to A1-11. And

the EPA Final Rule acknowledges that fluids discharged via deep injection wells have migrated in some cases from the Boulder Zone to the Upper Floridan Aquifer. See EPA Final Rule, 70 Fed. Reg. at 70,516. Moreover, FPL's ER also supports the possibility that fluids could migrate from the Boulder Zone to the Upper Floridan Aquifer. See ER at 2.3-15 (describing Floridan Aquifer as "a vertically continuous sequence of interbedded carbonate rocks of Tertiary age that are hydraulically interconnected by varying degrees").

In our view, the above documents are adequate at the contention admissibility stage to support a claim that (1) it is reasonably foreseeable that the chemicals specified by Joint Petitioners are in the wastewater, and (2) the release of these chemicals into the Boulder Zone by the injection wells may have an environmental impact. Accordingly, we believe Joint Petitioners have provided "a concise statement of the alleged facts . . . which support [their] position on the issue" as well as specific references to "sources and documents on which" they purport "to rely to support [their] position on the issue." See 10 C.F.R. § 2.309(f)(1)(v).⁴²

Finally, Contention NEPA 2.1 satisfies the requirement in 10 C.F.R. § 2.309(f)(1)(vi) to show that a genuine dispute exists on a material issue of law or fact. Contention NEPA 2.1 hinges on the premise that wastewater injected into the Boulder Zone can migrate, with its chemical contaminants, up to the Upper Floridan Aquifer, which could be a source of drinking

⁴² To be sure, the presence of these chemicals in wastewater in Miami-Dade County does not necessarily mean they will be present in the wastewater at the Turkey Point site. Nor is it clear that any such chemicals, to the extent they are present in the wastewater, will necessarily have a significant environmental impact. Nevertheless, Turkey Point's location within Miami-Dade County at least raises a question whether these chemicals are constituents of the wastewater at Turkey Point. And if these chemicals are in the wastewater, the information provided by Joint Petitioners provides adequate support under 10 C.F.R. § 2.309(f)(1)(v) for their claim that wastewater and its chemical contaminants can migrate to the Upper Floridan Aquifer.

water.⁴³ In particular, Joint Petitioners have shown that a genuine dispute of fact exists as to (1) whether the wastewater used by FPL will, like other wastewater found in Miami-Dade County, contain heptachlor, ethylbenzene, toluene, selenium, thallium, and tetrachloroethylene, which are not listed in FPL's ER as wastewater constituent chemicals (see Joint Pet. at 28) (citing EPA Relative Risk Assessment at app. 1, tbl. 1-1 and 1-2); and (2) whether the wastewater discharged via deep well injection will, along with these particular chemical contaminants, migrate from the Boulder Zone to the Upper Floridan Aquifer. See id. at 27-28. The ER fails to discuss these chemicals or their impact on the groundwater.

FPL and the NRC Staff point to the effectiveness of FPL's monitoring programs to avoid environmental impacts (including the comprehensiveness of the Florida licensing process required to obtain permits for these deep injection wells) and the fact that the Boulder Zone lies deep below the Upper Floridan Aquifer, to demonstrate that migration and its related environmental impacts are not likely. See FPL Answer to Joint Pet. at 69-72; NRC Staff Answer to Joint Pet. at 39-40. To the extent the chemicals specified by Joint Petitioners are in the wastewater, however, we do not view the existence of the monitoring programs to necessarily be an adequate substitute for the ER's failure to discuss these chemicals and their potential

⁴³ Joint Petitioners refer to the Lower Floridan Aquifer as a source of drinking water. See Joint Pet. at 26-27. We agree with the NRC Staff (NRC Staff Answer to Joint Pet. at 38 n.18) that Joint Petitioners intended to refer, instead, to the *Upper* Floridan Aquifer as a possible source of drinking water. See ER at 2.3-18, 2.3-32. Although there is information in the ER discounting the possibility that the Upper Floridan Aquifer in the vicinity of Turkey Point is a possible source of drinking water (see ER at 2.3-31, 2.3-48), there is no question that the "Upper Floridan aquifer is a major source of potable groundwater in much of Florida." ER at 2.3-18, 2.3-32. Under these circumstances, we believe that, if FPL's wastewater contains chemical contaminants that migrate to the Upper Floridan Aquifer, there is a genuine dispute of fact as to the impact of such migration on drinking water. In any event, FPL's failure to discuss the impact, vel non, of the migration of the specified chemicals on groundwater renders the ER deficient.

impacts. This is especially so in light of the ER's explicit analyses of other specific chemicals expected to be discharged and their respective concentrations. See ER at tbl. 3.6-2.

Nor is the admissibility of Contention NEPA 2.1 foreclosed by the ER's conclusion that "[b]ased on the above analyses, 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 concerns embedded in this contention, which are adequately supported for purposes of contention admissibility, are that (1) the ER does not exclude the possibility that wastewater can migrate to the Upper Floridan Aquifer, and (2) the ER's failure to mention particular chemical contaminants that are likely contained in the wastewater renders the ER's analyses deficient and its conclusion questionable.⁴⁴

We therefore conclude that Contention NEPA 2.1, as revised supra p. 36, is admissible. See Crow Butte Res., Inc. (North Trend Expansion Project), CLI-09-12, 69 NRC 535, 552 (2009) (citations omitted) ("Our boards may reformulate contentions to 'eliminate extraneous issues or to consolidate issues for a more efficient proceeding.'").

b. Contention NEPA 2.2 Is Not Admissible Contention NEPA 2.2 is a contention of omission alleging that "[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." Joint Pet. at 30. This contention has three underlying arguments: (1) "there

⁴⁴ It is to be acknowledged that there is information in the record that tends to weaken a conclusion that wastewater will migrate to the Upper Floridan Aquifer and cause environmental harm. See, e.g., EPA Final Rule, 70 Fed. Reg. at 70,518-19; Tr. at 223-25. At this juncture, however, Joint Petitioners need not *prove* wastewater will migrate to the Upper Floridan Aquifer and adversely impact the environment. They need simply provide sufficient support to raise a genuine issue of disputed fact. In our judgment, they have satisfied that burden. In this regard, we note that the ER contains a bounding analysis that purports to show the environmental impact of radiological effluents would not be significant (see ER at 5.4-2 to 5.4-3), but it contains no analogous analysis showing the environmental impact of non-radiological chemical effluents would not be significant.

is no discussion in the ER as to how the construction and operation of pipelines within [the wetlands south of SW 256 Street] will impact these wetlands” (Joint Pet. at 30); (2) “the 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” (id. at 30-31); and (3) “[t]here is no mention in the ER of the potential conflict the placement of these pipelines [on the east side of the L-31 right-of-way for the Comprehensive Everglades Restoration Project (CERP) Biscayne Bay Coastal Wetlands (BBCW) Project] poses to [that] Project.” Id. at 31.

FPL and the NRC Staff argue that Contention NEPA 2.2 is not admissible. See FPL Answer to Joint Pet. at 76-80; NRC Staff Answer to Joint Pet. at 47-50. We agree.

Regarding the first two arguments underlying Contention NEPA 2.2, Joint Petitioners err in asserting (1) the ER contains “no discussion” as to impact of the pipelines on wetlands south of SW 256 Street (Joint Pet. at 30), and (2) the ER “fails to discuss” how the construction and operation of these pipelines within the corridor that is collocated with the existing FPL transmission right-of-way will impact the mangrove wetlands. Id. at 30-31. The ER describes the pipelines as being “72-inch diameter or equivalent,” and states they “would extend approximately 9 miles to bring reclaimed water from the SDWWTP [South District Wastewater Treatment Plant] to the FPL reclaimed water treatment facility.” ER at 4.3-10.⁴⁵ The ER then discusses the impact of the pipelines and measures to mitigate such impacts:

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

⁴⁵ See also ER at 4.3-9 (discussing overall impacts on wetland habitats of construction of Units 6 and 7 and ancillary facilities, and a three-pronged approach to wetland mitigation that FPL will employ).

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. . . . [including] 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 [Everglades Mitigation Bank (EMB)] credits.

Id. The ER concludes that, because “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 . . . , impacts of the reclaimed water pipelines on terrestrial resources would be SMALL.” Id.

The ER acknowledges that construction of the reclaimed water pipelines generally “would alter the surface water flow in the vicinity during construction activities.” ER at 4.2-19. In particular, “the storage of excavated soils and/or spoils, stockpiling fill material, and the storage of equipment and supplies could impact surface water flow.” Id. “Use of a stormwater detention basin would also alter the surface water flow.” Id. Dewatering of surface water could also be required during the excavation necessary to trench pipelines beneath an existing access road, and the ER states that “[d]isposal of the water after it passes through a detention basin could alter the surface drainage downstream of the detention basin.” Id. The ER concludes, however, that the impacts on surface water from these construction activities would be temporary because “disturbed areas would be recontoured and restored to preconstruction conditions.” Id.

In short, states the ER, impacts to surface water “would be SMALL and would not require additional mitigation other than those described above.” Id.⁴⁶

The ER also acknowledges possible impacts to wetlands from drainage ditches constructed during installation of the pipelines, but observes that such impacts would be mitigated by

restoration of the excavated trench with native wetland soils. Wetland soils removed during trench excavation would be stockpiled and replaced following pipeline installation to allow the natural vegetative community to re-establish on the canal bank. The replacement of native soils at original grade would result in no net loss of wetland acreage or wetland functions following pipeline installation.

ER at 4.3-22.

The above discussion reveals that Joint Petitioners are incorrect in claiming the ER fails to discuss impacts to wetlands related to the construction and operation of the reclaimed water pipelines. Moreover, Joint Petitioners neither explain how an environmental impact attributable to the proposed action has been inadequately addressed in the ER, nor do they identify a dispute with the conclusions in the ER. Accordingly, to the extent Contention NEPA 2.2 is grounded on the first two arguments advanced by Joint Petitioners, it is not admissible for failing to raise a genuine dispute of material fact or law, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

⁴⁶ Regarding mitigative measures to ameliorate the impact on surface waters, the ER states (ER at 4.2-23):

During any required dewatering activities along the . . . water pipelines, surface water flow could be affected because of the release of groundwater to the ground surface or to nearby surface water bodies. As a mitigative measure, sheet piles could be used to limit the extent of potential impacts to surrounding areas where needed. Water 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 [National Pollutant Discharge Elimination System] permit requirements and SWPPPs [Stormwater Pollution Prevention Plans] for the construction activities.

Regarding the third argument underlying Contention NEPA 2.2, Joint Petitioners fail to provide alleged facts or expert opinions to support the existence of a “potential conflict” between placement of the pipelines and the CERP BBCW Project. See Joint Pet. at 31. Joint Petitioners rely on their Exhibit 15 to support the existence of a “potential conflict.”⁴⁷ That reliance is misplaced, because Exhibit 15 appears to contemplate that FPL’s use of the right-of-way can be accomplished without affecting the CERP BBCW Project. See Joint Pet., Exh. 15 at 14 (“[P]lease 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 . . . CERP [BBCW] Project . . .”). In any event, Joint Petitioners fail to provide alleged facts or expert opinions, via Exhibit 15 or any other submission, necessary to show that it is reasonably foreseeable, rather than simply speculative, that installation of the reclaimed water pipelines would result in a conflict with the CERP BBCW Project. This aspect of Contention 2.2 is therefore not admissible pursuant to 10 C.F.R. § 2.309(f)(1)(v).⁴⁸

Contention 2.2 is thus not admissible.⁴⁹

⁴⁷ See Joint Pet. at 31 (citing Joint Pet., Exh. 15, South Florida Water Management District Third Completeness Review -- Part A Responses, FPL Turkey Point Units 6 & 7, PAO3-45A3, Site Certification Application, Power Plant & Associated Facilities (Non-Electrical) at 14 (May 28, 2010) [hereinafter Joint Pet., Exh. 15]).

⁴⁸ Even if Joint Petitioners had alleged facts or expert opinions to support the existence of a “potential conflict,” they fail to explain why the environmental significance of these impacts would contradict the ER’s conclusions, contrary to 10 C.F.R. § 2.309(f)(1)(iv).

⁴⁹ We grant FPL’s request to disregard arguments at pages 30-32 in Joint Petitioners’ Reply to the extent they seek to expand the scope of Contention NEPA 2.2 from a contention of omission to a contention of adequacy. See infra note 53 (discussing distinction between contentions of omission and adequacy); FPL Motion to Strike Portions of Joint Petitioners’ Reply at 8; see Tr. at 226-27.

c. Contention NEPA 2.3 Is Not Admissible Contention NEPA 2.3 asserts that “[t]he ER fails to discuss the impacts to CERP associated with the use of reclaimed wastewater to cool Units 6 [and] 7.” Joint Pet. at 31. Specifically, Joint Petitioners allege that the ER “fails to discuss” whether the use of up to 90 million gallons daily of reclaimed water from the South District Water Treatment Plant would adversely affect the CERP, and specifically the BBCW Project, whose objective “is to restore fresh water flows in and around the littoral zone of Biscayne Bay.” *Id.* at 31-32. See supra note 35 (discussing CERP and BBCW Project).

FPL and the NRC Staff argue that Contention NEPA 2.3 is not admissible. See FPL Answer to Joint Pet. at 80-83; NRC Staff Answer to Joint Pet. at 51-54. We agree.⁵⁰

First, Contention NEPA 2.3 is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(v), because Joint Petitioners fail to allege facts or proffer expert opinions to support their assertion that FPL’s use of reclaimed water might adversely affect the ability of Miami-Dade County to

⁵⁰ If Contention NEPA 2.3 were construed, arguendo, to fault FPL for failing to discuss the impact of its proposed project solely on Florida’s restoration projects, we believe it would not raise a disputed issue of *material* fact or law. The NRC regulations implementing NEPA require an applicant to submit an ER discussing “[t]he impact of the proposed action *on the environment*” (10 C.F.R. § 51.45(b)(1) (emphasis added)) and “appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources” (*id.* § 51.45(b)(3)) (citing NEPA § 102(2)(E), 42 U.S.C. § 4332(2)(E)). We agree with FPL and the NRC Staff that this regulation requires an analysis of the *environmental* impacts of and alternatives to the proposed action; it does *not* extend to the impacts on another ongoing or proposed restoration effort in isolation from environmental impacts. See FPL Answer to Joint Pet. at 80-81; NRC Staff Answer to Joint Pet. at 51. This conclusion does not mandate summary rejection of Contention NEPA 2.3, however, because we construe it as arguing that the ER failed to discuss the impact the use of reclaimed water will have on fresh water flows around Biscayne Bay due to its impact on the CERP BBCW Project. So viewed, we believe this contention warrants further analysis regarding its admissibility.

Curiously, Joint Petitioners premise Contention NEPA 2.3 on the notion that Units 6 and 7 will use “as many as 90 million gallons of reclaimed water per day.” Joint Pet. at 32. As discussed supra note 21, however, the ER contemplates that only 60 million gallons of reclaimed water per day will be necessary to provide cooling for the operation of Units 6 and 7. See also supra Part III.B.1.a.

restore fresh water flows in and around the littoral zone of Biscayne Bay by providing freshwater to the CERP BBCW Project. See Joint Pet. at 31-32. Joint Petitioners refer to their Exhibits 16 and 40⁵¹ to support this assertion, but neither of these documents supports the notion that the BBCW Project (and hence, the fresh water flows around Biscayne Bay) would likely be adversely affected by FPL's use of reclaimed water. Moreover, contrary to Joint Petitioners' apparent belief that the BBCW Project is wholly dependent on treated wastewater from Miami-Dade County, Exhibit 16 states (Joint Pet., Exh. 16 at 16) that "due to the 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]."

Second, because Joint Petitioners fail to explain the potential impact of FPL's proposed use of treated wastewater on the CERP BBCW Project (and hence on the environment), they also fail to demonstrate that any such impact would be material to the findings the NRC must make in this proceeding, contrary to 10 C.F.R. § 2.309(f)(1)(iv). And even if *some* impact were reasonably foreseeable, Joint Petitioners do not explain why such impacts would be so potentially significant as to warrant analysis in the ER. See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348 (2002) (NEPA demands a discussion on the environmental impact of any proposed major federal action "significantly affecting the quality of the human environment.") (quoting 42 U.S.C. § 4332(2)(C)(i)).

Finally, Joint Petitioners err in asserting the ER contains "no discussion" of other potential sources of water that could be used instead of reclaimed water. See Joint Pet. at 32.

⁵¹ See Joint Pet. at 31-32 (citing Joint Pet., Exh. 16, "Central and Southern Florida Project, Comprehensive Everglades Restoration Plan, Project Management Plan, Biscayne Bay Coastal Wetlands (Aug. 2002) [hereinafter Joint Pet., Exh. 16], and Joint Pet., Exh. 40, MWH, Biscayne Bay Coastal Wetlands Rehydration Pilot Project, Preliminary Engineering Report (June 2009)).

Section 3.3 of the ER contains an extensive discussion of the radial collector wells, which FPL will use as an alternative or supplemental source of water. Additionally, Section 9.4.2.3 of the ER states: “Potential [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 considered marine sources, groundwater sources, reclaimed water sources, onsite surface water sources, and offsite surface water sources, and it performed an “initial environmental screening of the alternative designs . . . to eliminate those systems that are unsuitable for use at the Units 6 [and] 7 site.” Id. Contention NEPA 2.3 fails to acknowledge these analyses, much less identify a genuine dispute with them, thus rendering this contention inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi). We thus conclude Contention NEPA 2.3 is not admissible.

In sum, we conclude Contention NEPA 2 is admissible in part. Specifically, Contention NEPA 2.1, as revised supra p. 36, is admissible; however, the remainder of Contention NEPA 2 is not admissible.

3. Contention NEPA 3 Is Not Admissible Contention NEPA 3 asserts the “ER fails to adequately address the direct, indirect, and cumulative impacts of constructing and operating the transmission lines associated with Units 6 and 7 on [1] wetlands (including the Everglades), [2] wildlife (including wading birds, migratory birds, and federally endangered and threatened species), and [3] CERP,” the Comprehensive Everglades Restoration Plan. Joint Pet. at 32. Regarding impacts to wetlands, Joint Petitioners claim the ER fails to address impacts the transmission lines will have on sheet flow, vegetation, hydrology, and flood plain characteristics, which Joint Petitioners claim could “result in decreased stormwater capacity and altered surface

water flows,” as well as “visual impacts to visitors of Everglades National Park.” Id. at 34-35. Regarding impacts to wildlife, Joint Petitioners claim the ER fails to discuss the effect the transmission lines will have on “aquatic species (fisheries, amphibians, invertebrates), birds (including tree island rookeries), and . . . federally listed species, including the wood stork, eastern indigo snake, and Florida panther.” Id. at 34. Finally, Joint Petitioners state that construction of the transmission lines might require FPL to construct fill roads that may impede implementation of “Alternative O” to CERP, which “calls for additional surface water flows east of U.S. [Route] 1 to be diverted southward through existing wetland slough systems to hydrate wetlands to the south.” Id. at 35-36. Joint Petitioners claim the “ER fails to discuss the potential impacts of constructing fill roads in this area.” Id. at 36.⁵²

FPL and the NRC Staff argue that Joint Petitioners’ Contention NEPA 3 is not admissible. See FPL Answer to Joint Pet. at 84-91; NRC Staff Answer to Joint Pet. at 54-64. We agree.

We begin our analysis by examining the nature of Contention NEPA 3 to determine whether it should be characterized as a contention of omission, a contention of adequacy, or both.⁵³ We conclude it is one of omission. Our conclusion is driven by our examination of the

⁵² Joint Petitioners acknowledge FPL has not selected the route it will use for its transmission lines, and the choice of the corridor is within the jurisdiction of state agencies. They correctly observe, however, that the impacts of the possible routes must be analyzed for FPL to give the NRC the requisite information to make an informed decision on FPL’s license. See Joint Pet. at 36 & n.6 (citing Calvert Cliffs’ Coordinating Committee, Inc. v. U.S. Atomic Energy Comm’n, 449 F.2d 1109, 1123 (D.C. Cir. 1971)).

⁵³ A contention of omission is one that alleges an application suffers from an improper omission, whereas a contention of adequacy raises a specific substantive challenge to how particular information or issues have been discussed in the application. See AmerGen Energy Co., L.L.C. (Oyster Creek Nuclear Generating Station), LBP-06-16, 63 NRC 737, 742 (2006). It is possible for a contention to contain an omission component and an adequacy component. See id. at 742 n.7.

contention, including its underlying arguments. See Duke Energy Corp. (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-02-28, 56 NRC 373, 383 n.45 (2002).

First, with regard to the impacts on wetlands, Joint Petitioners assert 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. There is *no discussion* with respect to the specific impacts to these wetlands” Joint Pet. at 33-34 (emphasis added).⁵⁴ Second, with regard to the impacts on wildlife, Joint Petitioners assert the ER contains “*no discussion* of the potential impacts to federally listed species, including the wood stork, eastern indigo snake, and Florida panther.” Id. at 34 (emphasis added). Nor, assert Joint Petitioners, does the ER contain any discussion regarding the impacts on “aquatic species” or “birds.” Id.⁵⁵ Third, Joint Petitioners claim the “ER *fails to discuss* the potential impacts of constructing fill roads” on “Alternative O” of the

⁵⁴ See also Joint Pet. at 33 (“Although the transmission line component of the project threatens to impact more than 300 acres of wetlands . . . the ER fails to discuss . . . impacts of constructing and operating the transmission lines”); id. at 35 (“[T]ransmission lines could alter the hydrology and flood plain characteristics within these areas. . . . None of these impacts [is] considered.”).

⁵⁵ See also Joint Pet. at 34 (“There is no discussion of the potential impacts to [Wood Stork] rookeries.”); id. at 35 (“The ER fails to discuss . . . the potential impacts to the panther and other protected species.”).

CERP. Id. at 36 (emphasis added).⁵⁶ When we examine Contention NEPA 3 in its entirety, we are compelled to characterize it as a contention of omission.⁵⁷

So viewed, it is not admissible pursuant to its underlying three arguments. First, Joint Petitioners err in asserting the ER contains “no discussion” (Joint Pet. at 34) regarding the impacts the proposed transmission lines will have on wetlands. For example, the ER states:

Although impacts to wetlands could potentially occur, they would be limited by careful siting and construction practices to avoid and minimize adverse effects. Where wetland impacts do occur, compensatory mitigation, as required by state and federal agencies, would be provided. Given the careful consideration of land use in the route selection process (Subsection 2.2.2) and the availability of a viable method for mitigation, impacts to offsite land use would be SMALL.

ER at 4.1-7.⁵⁸ The ER contains extensive discussion of practices that will be employed during construction of the transmission lines. See ER at 4.2-14 to 4.2-18. With regard to wetlands, the ER states FPL would use “restrictive land-clearing processes in forested wetland areas” and “turbidity screens and erosion-control devices in areas of wetlands and water resources” (ER at 4.1-6, 4.2-15), concluding that the impacts from construction of the transmission lines would be small. ER at 4.2-18.

⁵⁶ See also Joint Pet. at 36 (“The ER’s failure to discuss the specific impacts of [the] transmission lines in these corridors violates 10 C.F.R. § 51.45 because it fails to provide the Commission with the necessary information [with] which to make an informed decision of the impacts and alternatives of the project.”).

⁵⁷ The sole indicia that conceivably could militate in favor of construing Contention NEPA 3 as a contention of adequacy is where Joint Petitioners use the phrase “fails to adequately address” (Joint Pet. at 32) in the contention itself. But when this isolated phrase is juxtaposed against the remainder of Joint Petitioners’ discussion of Contention NEPA 3, it is simply not enough, standing alone, to add an adequacy component to the contention. Moreover, Joint Petitioners’ use of this phrase can be reconciled with our conclusion that Contention NEPA 3 is a contention of omission, because if an ER improperly omits discussion of a topic, it fails a fortiori adequately to address that topic.

⁵⁸ Joint Petitioners do *not* challenge the ER’s conclusion that compliance with state and federal requirements will ultimately lead to small impacts.

The ER also addresses reasonably foreseeable impacts on surface and groundwater resources from operation of the transmission lines. It states in relevant part:

Potential operational impacts along the offsite portions of the proposed transmission rights-of-way would be similar to the segments on the Turkey Point plant property. During operations, potential impacts from maintaining hydrologic flow could occur. As described in Section 3.7, FPL regularly inspects transmission lines. Vehicular traffic could result in the rutting of the access roads along the rights-of-way, which could impact surface flow in the vicinity of disturbances. Should soil disturbance be required during maintenance operations within the rights-of-way, silt fence technology would be used to minimize impacts to nearby surface waterbodies/drainage features.

To reduce the potential for erosion through surface water runoff, areas of disturbed soils would be repaired, areas recontoured, and vegetative cover reestablished, if necessary, in a timely manner. Accordingly, impacts to hydrologic flow from operation of the offsite transmission lines would be SMALL and would not require further mitigation.

* * * *

It could be necessary to perform maintenance that would require excavating and dewatering along the transmission lines. The dewatering activity could create temporary drawdown of the water table. Dewatering could impact areas off the right-of-way. However, the water table and flow would return to normal once dewatering ceased. Impacts to groundwater hydrologic flow from operation of the offsite transmission lines would be SMALL and would not require mitigation.

ER at 5.2-13. Finally, in its discussion of the transmission corridors, the ER acknowledges the possibility for visual impacts to occur, and concludes that such impacts will be small. See ER at 4.4-5 to 4.4-7 (concluding “the presence of these new lines would have a SMALL impact and would not warrant additional mitigation measures”).

In short, the ER contains a relatively extensive discussion regarding the impact of transmission lines on wetlands. Joint Petitioners’ assertion to the contrary is factually incorrect, and to the extent Contention NEPA 3 is premised on that error, it is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failing to raise a genuine dispute of fact.

Contention NEPA 3 is likewise inadmissible as a contention of omission to the extent it argues that FPL’s ER contains “no discussion” of the potential impacts to federally listed species

(e.g., the wood stork, the eastern indigo snake, and the Florida panther), to aquatic species, or to birds. See Joint Pet. at 34. Chapter 2 of the ER provides extensive information on wood storks, the eastern indigo snake, and the Florida panther, stating in relevant part:

[Wood storks] feed by touch, literally bumping into their prey, and thus require shallow wetlands relatively clear of vegetation in order to forage efficiently. They are seen in low numbers in the shallow portions of the industrial wastewater facility during the winter months. . . . They do not nest on or near the Turkey Point plant property but have historically nested in two colonies . . . near (within 5 miles) the proposed Turkey Point-to-Levee transmission corridors[.] Portions of both corridors fall within the core foraging areas of both colonies (radius of 18.4 miles around each colony). Wood storks could also be found within aquatic habitats associated with the access roads, reclaimed water pipelines, and FPL-owned fill source

The Eastern indigo snake . . . inhabits a variety of habitats in the southeastern United States from scrub and sandhill to wet prairies and mangrove swamps. Their existence is frequently linked to gopher tortoise populations and use of their subterranean burrows. Indigo snakes have been observed south of the industrial wastewater facility in the Everglades Mitigation Bank (in 2004) and within an area . . . adjacent to the FPL child daycare facility (in 1981). Eastern indigo snakes could also be found within appropriate habitats found near the access roads, reclaimed water pipelines, FPL-owned fill source, and transmission corridors. . . .

* * * *

The Florida panther . . . inhabits the Everglades region. Their population size within the region is estimated at fewer than 60 animals. They use a combination of upland hammocks and dense saw palmetto thickets and prey on deer and feral hogs. While there have been no confirmed sightings on the Turkey Point plant property, there have been more than 60 sightings of panthers over the last 20 years in the Everglades National Park (ENP) area crossed by the two alternative routes for the Clear Sky-to-Levee transmission corridor.

ER at 2.4-10 to 2.4-11.

In addition to discussing the local population of wood storks, eastern indigo snakes, and Florida panthers, the ER describes FPL's conclusions as to the impacts of construction of the transmission lines on these species, concluding that the impacts due to temporary disturbance to the wetlands would be "SMALL and mitigated by standard industry construction practices."

See ER at 4.3-14. As to impacts on these species resulting from the operation of the transmission lines, the ER states:

Based on the maintenance procedures established by FPL and the analysis of transmission system operation impacts on terrestrial resources the NRC completed for the [Generic Environmental Impact Statement (GEIS)] (NUREG-1437), potential impacts associated with routine right-of-way maintenance activities on terrestrial resources would be SMALL. However, the presence of known populations of certain threatened and endangered species near these right-of-way would result in agency consultations and possible mitigation actions, as discussed in Subsection 4.3.1.3.1.

ER at 5.6-4. See also ER Section 4.3.1.3 (terrestrial ecological impacts, including with respect to animal species); ER Section 4.3.2.3.3 (aquatic ecological impacts including with respect to aquatic species); ER Section 5.6.1 (environmental impacts of transmission systems on terrestrial resources, including with respect to avian species).

In short, contrary to the second argument underlying Contention NEPA 3, FPL's ER contains information -- indeed, a significant amount of information -- regarding the impact of transmission lines on endangered species, aquatic species, and birds. Because Joint Petitioners fail to raise a genuine dispute of fact with regard to FPL's conclusions or the information leading to these conclusions, this aspect of Contention NEPA 3 is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

Finally, in the third argument underlying Contention NEPA 3, Joint Petitioners state the "ER fails to discuss the potential impacts [on Alternative O to CERP] of constructing fill roads" incident to building the transmission lines. See Joint Pet. at 35-36. Joint Petitioners are incorrect. Incident to the ER's analysis of the cumulative impact on the wetlands of constructing the transmission lines, the ER observes that (1) the purpose of CERP "is to make beneficial hydrologic alterations that would have large beneficial surface water impacts," and (2) the Everglades Mitigation Bank (EMB) "continue[s] to preserve wetlands and would not contribute or detract from surface water and water use impacts." ER at 4.7-5. In constructing the

transmission lines, states the ER, FPL would use “environmental best management practices, including erosion-control devices, matting to reduce compaction caused by equipment, use of wide-track vehicles when crossing wet-lands, and restoration activities after construction,” and the impacts caused by such construction would be “temporary and localized.” Id. The ER concludes the “cumulative impacts to surface water [of building the transmission lines] would be positive and LARGE owing to the EMB and CERP projects. The hydrologic alterations resulting from construction of Units 6 [and] 7 would be only a SMALL detractor to this overall beneficial impact of restoring wetlands in the area.” ER at 4.7-5 to 4.7-6.⁵⁹

Although the ER does not specifically mention “Alternative O” to CERP, Joint Petitioners fail to show the absence of a specific discussion of Alternative O is a material omission, and they fail to provide supporting information to show a genuine factual dispute with the analysis and conclusion in the ER as to the cumulative impacts (taking CERP into account) of constructing the transmission lines. These failures are fatal to the admissibility of Contention NEPA 3, as propounded by its third argument, pursuant to 10 C.F.R. § 2.309(f)(1)(iv) and (vi).⁶⁰

⁵⁹ The ER also includes a discussion of the impact from transmission line corridors on water quality in relation to CERP. See ER at 4.7-7 (“The application of the erosion and pollution prevention plans and environmental best management practices to the CERP projects would minimize impacts to water quality to those that are SMALL and temporary. The cumulative impact to surface water quality, should any of these individual SMALL, temporary impacts become additive, would also be SMALL given the application of control measures that protect water quality.”).

⁶⁰ In their Reply, Joint Petitioners argue Contention NEPA 3 is not merely a contention of omission; rather, it “raises a clear issue with the ER’s adequacy” Joint Petitioners Reply at 41. We disagree. As explained supra notes 54-57 and accompanying text, guided by the fact that all three arguments underlying Contention NEPA 3 explicitly assert omissions in the ER, coupled with the fact that, as originally pleaded, Contention NEPA 3 did not identify an allegedly deficient portion of the ER, much less explain or discuss with specificity the alleged deficiency, we conclude Contention NEPA 3 is fairly characterized as a contention of omission. We therefore grant FPL’s request that we disregard Joint Petitioners’ belated attempt in their Reply to expand the scope of Contention NEPA 3 by alleging it contains an inadequacy component. See FPL Motion to Strike Portions of Joint Petitioners’ Reply at 9.

4. Contention NEPA 4 Is Not Admissible Contention NEPA 4 claims “[t]he ER fails to adequately address the direct, indirect, and cumulative impacts of constructing and operating the access roads associated with Units 6 [and] 7 on wetlands and wildlife.” Joint Pet. at 36. Joint Petitioners acknowledge the ER states that construction and operation of access roads could result in “vegetation loss and temporary habitat destruction.” Id. at 37 (quoting ER at 4.1-6). They also acknowledge the ER concludes that “land use impacts from the improvements associated with the construction of Units 6 [and] 7 would be SMALL and not require additional mitigation.” Id. (quoting ER at 4.1-11). Joint Petitioners nevertheless assert the ER’s conclusion is deficient, because it allegedly lacks “any support or analysis -- besides the bare assurance of local government approval, the granting of easements, and the use of best management practices.” Joint Pet. at 37. Additionally, Joint Petitioners claim Section 4.1 of the ER is deficient because it fails to consider that access road construction and operation will result in 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).” Id.;Tr. at 174.

FPL and the NRC Staff argue that Contention NEPA 4 is not admissible. See FPL Answer to Joint Pet. at 92-104; NRC Staff Answer to Joint Pet. at 64-70. We agree.

First, contrary to Joint Petitioners’ position, the ER provides substantial “support [and] analysis” for FPL’s conclusion that the impacts of the access roads on wetlands and wildlife will be small. For example, the ER (1) describes the extent of the road expansion, i.e., how long the roads will be, over how many acres they are expected to traverse, and where they are expected to traverse (see ER at 2.4-5 to 2.4-6, 4.1-4, 4.3-1, 5.1-5); (2) outlines what mitigative measures

are likely to be taken on wetlands due to road expansion (see ER at 2.4-16, 4.1-9 to 4.1-11, 4.2-6, 4.3-8 to 4.3-9, 4.3-25, 4.6-6, 10.1-4); and (3) acknowledges permanent and temporary wetland habitat losses will occur as a result of this expansion. See ER at 4.3-9, 4.3-14 to 4.3-15; see also FPL Answer to Joint Pet. at 95-98; NRC Staff Answer to Joint Pet. at 66 n.25. Unlike Joint Petitioners, we view the above cited sections of the ER as more than a consideration of simply “vegetation loss and temporary habitat destruction” (Joint Pet. at 37) (quoting ER at 4.1-6), or “the bare assurance of local government approval, the granting of easements, and the use of best management practices.” Id. Accordingly, to the extent Contention NEPA 4 attacks as deficient FPL’s discussion in support of its conclusion that the impacts of the access roads on wetlands and wildlife will be small, we conclude it fails to raise a genuine dispute of material fact with the relevant portions of the ER, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

The remainder of Contention NEPA 4 is in the nature of a contention of omission, alleging the ER fails to discuss specific aspects of the impact of access roads on wildlife and wetlands.⁶¹ Yet, the ER contains much of what the Joint Petitioners assert is absent. The ER, in fact, addresses the impacts FPL’s access roads will have on wildlife. In particular, the ER: (1) surveys avian and reptile populations in existing access roads and the transmission line corridors (see ER at 2.4-7 to 2.4-8); (2) describes the possible path for new roads and road

⁶¹ In support of the contention, Joint Petitioners use language such as “there is also no information in the ER regarding,” “the ER also contains no information on,” “[t]here is no discussion and analysis of . . . nor discussion of,” and “the ER fails to consider.” Joint Pet. at 37-38. In particular, Joint Petitioners assert the ER does not include information “regarding the potential overlap of wildlife corridors with the proposed access roads,” as well as endangered species affected by the roads such as the Eastern Indigo Snake and Florida Panther. Id. at 37. They also assert “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.” Id. at 38.

improvements to assist in minimizing environmental impacts by preferring to use existing rights-of-way (see ER at 4.1-10); (3) identifies species that have, or have had, habitats proximate to access roads, such as crocodiles, wood storks, Eastern indigo snakes, and Florida panthers (see ER at 2.4-10 to 2.4-11, 2.4-13, 4.3-5, 4.3-14); and (4) recognizes the threat that traffic on these roads would pose to crocodiles. See ER at 4.3-15, 4.6-6. Moreover, the ER includes plans for mitigating impacts to wildlife and wildlife habitats from access roads such as: (1) monitoring for species occurrence (see ER at 4.3-5); (2) installing warning signs (see ER at 4.6-6); (3) reducing speed limits (see ER at 4.3-12); (4) constructing wildlife corridors to mitigate threats from traffic (see ER at 4.6-6, 10.1-7); (5) installing ditches, swales, and culverts to manage surface water runoff (see ER at 4.1-11, 4.2-6, 4.2-20, 4.3-8) and to allow sheet flow of water (see ER at 4.3-9); and (6) removing access roads after construction is completed. See ER at 5.1-5; see also FPL Answer to Joint Pet. at 99-103. Joint Petitioners erroneously allege the ER fails to address these topics. This error renders Contention NEPA 4 inadmissible pursuant to section 2.309(f)(1)(vi).

Contention NEPA 4 is, therefore, not admissible.

5. Contention NEPA 5 Is Not Admissible Contention NEPA 5 alleges FPL's "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." Joint Pet. at 38.

FPL and the NRC Staff argue that Contention NEPA 5 is not admissible. See FPL Answer to Joint Pet. at 104-15; NRC Staff Answer to Joint Pet. at 71-80. We agree.⁶²

⁶² In Contention NEPA 5, Joint Petitioners also re-assert claims they previously advanced in Contentions NEPA 3 and 4: namely, they allege the ER fails to "discuss and

In the first argument underlying Contention NEPA 5, Joint Petitioners attack the ER for allegedly failing to consider “all reasonable alternatives to the proposed transmission line corridors and associated access roads.” Joint Pet. at 38.⁶³ We believe this attack is misguided. The ER explains that “[a]pproval of the proposed transmission line corridors is under the authority of the Florida Power Plant Siting Act.” ER at 3.7-3. In its quest to minimize impacts to the environment as part of that state approval, FPL performed a corridor selection process in which a route “study area was defined, candidate routes were delineated, and routes evaluated using both qualitative and quantitative criteria. . . . The end result of the selection process was the identification of a preferred corridor to submit for licensing approval for each transmission line.” ER at 3.7-3.

The ER further provides a description of the methodology and criteria used during the corridor selection process and the results of the analyses. See ER Section 9.4.3. For example, the ER states the “corridor selection process was based primarily on the geographic location of the starting and ending substations,” and because “much of the west study area is dominated by low-density residential development, agricultural and nursery operations, conservation lands,

analyze any specific impacts of [the] transmission line corridor and access road construction on wetlands.” See Joint Pet. at 41. For the reasons discussed supra Parts III.B.3 and III.B.4, we conclude this aspect of Contention NEPA 5 is not admissible. See FPL Answer to Joint Pet. at 105-06 nn.39 & 40.

⁶³ The NRC Staff argues that NEPA’s requirement to discuss alternatives “to the proposed action” does not extend to the construction of transmission line corridors, which, according to the NRC Staff, is not “construction” as defined in 10 C.F.R. § 50.10 and, accordingly, is not considered to be part of the “major Federal action” that is approved by the Commission if a COL is issued. See NRC Staff Answer to Joint Pet. at 78; Tr. at 250-53. Although the NRC Staff’s argument appears to have some weight (but cf. Pub. Serv. Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-422, 6 NRC 33, 82-90 (1977), aff’d, New England Coalition on Nuclear Pollution v. NRC, 582 F.2d 87 (1st Cir. 1978)), we need not resolve it, because, as discussed above in text, we conclude this aspect of Contention NEPA 5 is inadmissible for failing to raise a genuine dispute of material fact or law with the ER. See FPL Answer to Joint Pet. at 110-15; NRC Staff Answer to Joint Pet. at 79-80.

mining activities, and relatively few existing linear features (roads, other transmission lines) with which to collocate, there were immediately only a few obvious choices for routes.” ER at 9.4-27.

After identifying the alternative routes that it determined would minimize environmental impacts (see ER Figures 9.4-11 and 9.4-12), FPL identified several route segments using predetermined route selection guidelines. For the two main route alternatives selected, this effort produced 99 and 134 potential alternative route alignments between the Clear Sky substation and the pre-existing substations to which it would connect. FPL then developed alternative route segments that could connect those substations when combined (see ER at 9.4-28), with the objective of selecting preferred East and West Corridors. In achieving that objective, FPL performed a “systematic, quantitative evaluation of each route alternative using environmental, land use, cost, and engineering criteria.” Id. The proposed siting criteria included (1) length of wetlands crossed; (2) land use considerations to minimize potential disruption to such areas as parks, wildlife refuges, estuarine sanctuaries, landmarks, and historical sites; and (3) opportunities to collocate with existing linear facilities (e.g., farm roads, canals, railroads, FPL transmission lines, and other transportation rights-of-way). See ER at tbl. 9.4-7; ER at 4.1-4, 4.1-5.⁶⁴ These evaluations, which FPL states “included numerous meetings and extensive feedback from interested parties” (FPL Answer to Joint Pet. at 114), resulted in a selection of “the West Preferred, West Secondary and East Preferred routes.” ER at 9.4-29; see also ER Section 9.4.3.2.

Although Joint Petitioners attack as deficient the number of alternatives considered by FPL, and although they complain FPL relied too much on its state power plant siting application to explain the alternatives it considered, Joint Petitioners fail to identify any reasonable

⁶⁴ “As part of the transmission corridor selection process, ecological . . . surveys were performed along the proposed corridors.” ER at 3.7-3.

alternative route that was not considered in the ER (Tr. at 185), nor do they raise any specific dispute with the transmission line corridor selection methodology described in the ER. In these circumstances, we conclude Joint Petitioners fail to raise a genuine dispute of material fact or law with alternatives to transmission line corridors and associated access roads considered in FPL's ER. Contention NEPA 5, as described by its first argument, is thus not admissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi). See Mt. Lookout-Mt. Nebo Prop. Prot. Ass'n v. FERC, 143 F.3d 165, 172-73 (4th Cir. 1998) (holding that the Federal Energy Regulatory Commission's consideration of three alternative routes was sufficient to meet the agency's NEPA obligations to consider reasonable transmission line route alternatives).⁶⁵

Nor is Contention NEPA 5 admissible pursuant to its second argument, which challenges the adequacy of the ER's discussion of mitigation measures for construction of the transmission corridors and access roads. Specifically, Joint Petitioners assert 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." Joint Pet. at 43 (quoting ER at 4.3-9). Joint Petitioners claim FPL's failure to elaborate on these mitigation measures renders the ER non-compliant with 10 C.F.R. § 51.45(c), which requires a "full discussion" of mitigation plans. See id.

The flaw in Joint Petitioners' argument is that it overlooks those portions of the ER that, in fact, elaborate on these mitigation measures. Specific examples of active mitigation to the impacts of transmission line corridors and their associated access roads include "restrictive

⁶⁵ Although Joint Petitioners correctly assert (Joint Pet. at 42) the NRC cannot "abdicate its responsibilities under NEPA" by blindly accepting Florida's certification of the transmission line corridors, that assertion is beside the point. We do not analyze here the not-yet-ripe issue of whether the NRC will properly perform its NEPA review; rather, we analyze whether Joint Petitioners have demonstrated that Contention NEPA 5 is admissible. We resolve the latter issue in the negative.

land-clearing processes in forested wetland areas (right-of-way clearing and preparation),” “turbidity screens and erosion-control devices in areas of wetlands and water resources (access road/structure pad construction),” “existing access roads for ingress and egress to rights-of-way where available (access road/structure pad construction),” “erosion-control devices, matting to reduce compaction caused by equipment, use of wide-track vehicles when crossing wetlands, and restoration activities after construction.” ER at 4.1-6 to 4.1-7; see also FPL Answer to Joint Pet. at 107 & n.41. The ER addresses implementation of mitigation measures such as removing excavated soils, recontouring affected construction areas as necessary, restoring the corridor to preconstruction conditions, restoring vegetative cover where needed (see ER at 4.2-15), and “employing silt fences, mulching, and avoiding wetlands and other sensitive habitats to the extent practicable.” ER at 4.3-12; see also FPL Answer to Joint Pet. at 106, 108. Further, the ER describes a land exchange proposal that would avoid and reduce potential wetlands impacts by relocating an eight-mile segment of the corridor from within the Everglades National Park to the periphery of the Park. See ER at 2.4-6; FPL Answer to Joint Pet. at 106-07. The ER also describes the Everglades Mitigation Bank (EMB), which FPL can use as mitigation credit for impacts to wetlands. The EMB “contains approximately 13,000 acres of relatively undisturbed freshwater and estuarine wetlands west and south of the industrial wastewater facility. . . . This land is owned and managed by FPL and it operates as a commercial mitigation bank with wetland habitat credits that can be purchased to offset regional wetland impacts.” ER at 2.4-13.⁶⁶

⁶⁶ Regarding the mitigative benefits of the EMB, the ER also states: “The EMB contains the following vegetative habitats: sawgrass marsh, wet prairie, hypersaline mangrove, tidal mangrove, coastal band mangrove, and coastal ridge mangrove. . . . The EMB is home to 14 species of amphibians, 39 species of reptiles, 14 species of terrestrial mammals, and approximately 150 species of birds.” ER at 2.4-13; see also ER at 2.4-22.

In short, Joint Petitioners err in claiming the ER provides only “cursory” (Joint Pet. at 43) references to mitigation plans for construction of the transmission corridors and access roads. Because Joint Petitioners fail to acknowledge the above mitigation plans, much less raise a specific challenge to them, Contention NEPA 5, as grounded on its second argument, is inadmissible for failing to demonstrate a genuine dispute with the ER on a material issue. See 10 C.F.R. § 2.309(f)(1)(vi).

6. Contention NEPA 6 Is Not Admissible Contention NEPA 6 asserts that FPL’s “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.” Joint Pet. at 47. This contention repeats the same salinity concerns raised in Contention NEPA 1, but it frames them in terms of attacking the ER’s alleged failure to address several impacts that, when coupled with the “existing plume of saltwater that is found underneath the plant” (id.), may “have the cumulative effect of increasing salinities in the project area.” Id. at 48. Specifically, Joint Petitioners argue the ER’s cumulative impacts analysis fails to consider salinity increases due to: (1) salt drift from cooling tower operations (id.); (2) the extraction of freshwater by radial collector wells from the Biscayne Aquifer and Biscayne Bay (id.); (3) the consumption of municipal wastewater that may otherwise be used to supply freshwater into Biscayne Bay (id.); (4) sea level rise and storm surge that may result in the cooling canals becoming part of Biscayne Bay (id.); (5) the use of injection wells that may increase salinities in the Floridan Aquifer (id.); and (6) the annual agricultural draw downs of the groundwater in Southern Miami-Dade County. Id. at 49-50.

FPL and the NRC Staff argue that Contention NEPA 6 is not admissible. See FPL Answer to Joint Pet. at 116-29; NRC Staff Answer to Joint Pet. at 81-96. We agree.

To facilitate our analysis of the admissibility of Contention NEPA 6, we will examine each of the six discrete arguments on which it is grounded. As shown below, none of the arguments -- viewed individually or cumulatively -- explains how, much less provides sufficient information to show that, Contention NEPA 6 raises a genuine dispute with any of the analyses and conclusions in the ER, contrary to 10 C.F.R. § 2.309(f)(1)(vi).⁶⁷

First, Joint Petitioners provide no alleged facts or expert opinions for the proposition that “drift from cooling tower operations” would have the potential to affect salinity levels in surrounding waters. Joint Pet. at 48.⁶⁸ The ER analyzes salt drift from the cooling system, stating that the “AERMOD model was used to predict the amount of salt deposits from operation of Units 6 [and] 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),” but that “[b]eyond the makeup water reservoir, the deposition rates are predicted to decrease rapidly.” ER at 5.3-8, 5.3-9. The ER states that “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.” ER at 5.3-9.

The ER evaluates the impacts of salt drift on wildlife 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 [and] 7 cooling towers into the

⁶⁷ In this contention, Joint Petitioners once again assert (Joint Pet. at 47) the ER fails to acknowledge a hypersaline plume beneath the Turkey Point site. As discussed supra Part III.B.1.e, this assertion is wrong.

⁶⁸ Although Joint Petitioners attach several exhibits in support of Contention NEPA 6, they cite none of them specifically in support of this argument. Nor do they dispute any portion of the ER where the impacts of salt drift are discussed.

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.” ER at 5.3-9. The ER concludes that “impacts from salt drift on local terrestrial ecosystems would be SMALL and would not warrant mitigation beyond the crocodile management program identified above.” Id. Regarding impacts on 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.

Because Joint Petitioners fail to provide any information supporting their claim that salt drift might affect the salinity of surrounding waters, and because they fail to specify the relevant portions of the ER whose analyses they dispute, this aspect of their contention is not admissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to Joint Pet. at 118-119; NRC Staff Answer to Joint Pet. at 82-84.

Regarding the second argument underlying Contention NEPA 6, as discussed supra Part III.B.1.a, Joint Petitioners provide no alleged facts or expert opinions in support of the proposition that the salinity of surrounding waters could increase from the “use of radial wells that could extract freshwater from the Biscayne Aquifer and Biscayne Bay” (Joint Pet. at 48) and, accordingly, this aspect of their contention is not admissible pursuant to 10 C.F.R. § 2.309(f)(1)(v). Moreover, Joint Petitioners fail to address or to dispute the ER’s conclusion that the impact of radial collector wells will be minimal. Specifically, the ER states: (1) “the impacts to aquatic life as a result of radial collector well operation would be SMALL and not warrant mitigation” (ER at 5.3-3); (2) “[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” (id.); and (3) “impacts to important aquatic species from operation of the radial collector wells would be SMALL and would not require mitigation.” Id. Joint Petitioners’ failure to specify a deficiency in the ER’s analyses and conclusions renders this aspect of Contention NEPA 6 inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failing to identify a genuine dispute with the ER’s conclusions (ER Section 5.11) that the impacts to water quality or aquatic resources, cumulative or otherwise, would be small. See FPL Answer to Joint Pet. at 119; NRC Staff Answer to Joint Pet. at 84-85.

With regard to the third argument underlying Contention NEPA 6, Joint Petitioners fail to provide alleged facts or expert opinions to support their claim that cumulative salinities, including the “existing problems posed by the groundwater plume,” 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” (Joint Pet. at 48), thus rendering this sub-contention inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(v).⁶⁹ Moreover, in advancing this argument, Joint Petitioners fail to acknowledge those portions of the ER that discuss CERP, including an analysis of cumulative impacts. See, e.g., ER at 5.11-5 (stating, in its analysis of cumulative surface water impacts, the “CERPs would rehydrate wetlands that provide water flow into Biscayne Bay, positively impacting Biscayne Bay”); ER at 5.11-6 (stating,

⁶⁹ Joint Petitioners fail to explain how the CERP BBCW project could potentially be affected by FPL’s “reservation of municipal wastewater,” other than to say the wastewater “may otherwise be used to supply freshwater into . . . Biscayne Bay” (Joint Pet. at 48), and they thus fail to explain their assertion that the environmental impact of FPL’s wastewater allotment could or would be significant. This failure renders this aspect of Contention NEPA 6 inadmissible for failing to demonstrate the issue is material to the granting of the COL. See 10 C.F.R. § 2.309(f)(1)(iv).

in its analysis of cumulative groundwater impacts, 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. (“Considering the . . . impacts to groundwater resources from the other projects considered for cumulative impacts, the cumulative impact to groundwater resources would be SMALL.”); id. (stating, regarding water quality, that “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.”). Having failed to challenge the relevant analyses and conclusions in the ER (see ER Section 5.11), the third aspect of Contention NEPA 6 fails to identify a genuine dispute with the ER on a material issue of law or fact, rendering it inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to Joint Pet. at 126-27; NRC Staff Answer to Joint Pet. at 86-88.

In the fourth argument underlying Contention NEPA 6, Joint Petitioners assert the cooling canals used to cool the existing Units 1 through 4 could, as a result of saltwater intrusion from “sea level rise and storm surge,” become “essentially part of the Bay” due to the failure of FPL to “elevate the entire project area.” See Joint Pet. at 48. But Joint Petitioners do not explain why FPL’s discussion of the cooling canals is inadequate, rendering this aspect of their contention inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

The ER discusses the cooling canals in the Section entitled “Hydrology” (ER Section 2.3.1) and the Section entitled “Cumulative Impacts Related to Station Operation” (ER Section

5.11).⁷⁰ Significantly, with regard to cumulative impacts on surface water, the ER states the “cooling canals of the industrial wastewater facility would be impacted by salt deposition from operation of the Units 6 [and] 7 cooling towers However, . . . [w]ith continued implementation of the management/conservation plan, the cumulative impact . . . would be SMALL.” ER at 5.11-5. With regard to cumulative impacts on groundwater, the ER concludes 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.” ER at 5.11-6. And with regard to cumulative impacts on water quality, the ER concludes that “[c]onsidering that the existing units use of groundwater does not overlap with the uses for operation of Units 6 [and] 7 . . . 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.

Joint Petitioners do not cite any of these portions of the ER, nor do they dispute the reasoning and conclusions with respect to the impacts relating to the cooling canals, thus rendering Contention NEPA 6, to the extent it is grounded on the fourth argument, inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi). Moreover, Joint Petitioners fail to explain how construction and operation of Units 6 and 7 would affect, much less increase, salinity levels in the cooling canals and, accordingly, their assertion that elevation of the “entire project area” (Joint Pet. at 48) is a topic that should have been included in the ER in the event sea level rise

⁷⁰ The feeder and return canals are described in the ER as “shallow, generally 1 to 3 feet deep, with the exception of the westernmost return canal . . . , which extends to a depth of -18 feet [National Geodetic Vertical Datum of 1929 (NGVD 29)] (-19.6 feet NAVD 88).” ER at 2.3-10. These canals have water levels that “rise and fall with the tide in Biscayne Bay,” with groundwater flow interacting with water in the 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.

or storm surge causes the cooling canals to become “essentially part of the Bay” (id.) is also unsupported, contrary to 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to Joint Pet. at 127; NRC Staff Answer to Joint Pet. at 88-90.

In the fifth argument underlying Contention NEPA 6, Joint Petitioners allege the ER fails adequately to consider the “use of injection wells that may result in increased salinities in the Floridan Aquifer.” Joint Pet. at 48. However, Joint Petitioners provide no alleged facts or expert opinions in support of the notion that there is a relationship between the injection wells and increased salinities in the Floridan Aquifer, contrary to 10 C.F.R. § 2.309(f)(1)(v). See NRC Staff Answer to Joint Pet. at 90.

Finally, regarding the sixth argument underlying Contention NEPA 6, Joint Petitioners assert the ER improperly fails to discuss the cumulative impact of the annual agricultural draw downs of the groundwater in Southern Miami-Dade County on local salinity levels in the Biscayne Aquifer and Biscayne Bay. See Joint Pet. at 49-50.⁷¹ But the flaw in this argument is Joint Petitioners’ failure to explain the connection between this alleged deficiency, the ER, and the proposed action. The Commission has admonished that 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

⁷¹ Joint Petitioners state (Joint Pet. at 49) that water managers from the South Florida Water Management District conduct annual agricultural draw downs in the autumn in Southern Miami-Dade County to “manipulate groundwater storage . . . to support agricultural interests.” The draw downs are based on “demands for lower groundwater stages at the end of the wet season to support the production of row crops such as potatoes. Farmers assert that lower groundwater levels are needed to assist farmers in reaching their farmlands by tractor to plant potatoes and other deep-rooted crops[, which] need lower water levels to grow.” Id. Joint Petitioners claim an average of 21.4 billion gallons of freshwater from the Biscayne Aquifer are released annually into Biscayne Bay to accomplish the draw down. See id.

reasons for the petitioner's belief." USEC, Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 456 (2006) (internal footnotes omitted). In the instant case, Joint Petitioners fail to explain how the seasonal draw downs would exacerbate, or even interact with, impacts from construction and operation of Units 6 and 7. Nor do Joint Petitioners explain how the seasonal draw downs affect the ER's conclusions regarding the significance of the proposed action's impact, or how that cumulative impact might be different from any potential significance attributable to these draw downs that are entirely independent of the proposed action. Hence, to the extent Contention NEPA 6 is grounded on the sixth argument, it is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to Joint Pet. at 120-23; NRC Staff Answer to Joint Pet. at 91-93.⁷²

In short, none of the individual arguments underlying Contention NEPA 6 renders it admissible. Nor do these arguments, when viewed jointly, warrant admitting Contention NEPA 6. Contention NEPA 6 is therefore not admissible.⁷³

⁷² We note that the long history of environmental impacts caused by management of the Everglades is discussed in the ER. See ER at 2.3-3 to 2.3-5. The ER also acknowledges that local pumping lowers the groundwater levels, which, together with the high permeability of the Biscayne aquifer, has led to saltwater intrusion that affects the entire coastal zone. See ER at 2.3-17. And FPL's Final Safety Analysis Report (FSAR) explicitly discusses local groundwater pumping for agricultural purposes, observing that this takes place during the dry season, which amplifies its effects. See FSAR at 2.4.12-11. Contrary to Joint Petitioners' assertion, these discharges to surface water and groundwater are incorporated into the baseline for the ER's cumulative impacts analysis (see ER at 5.11-1), which strengthens our conclusion that Contention NEPA 6, as characterized by the sixth argument, is inadmissible for failing to demonstrate a genuine dispute with the COLA regarding agricultural draw downs. We also agree with FPL that Joint Petitioners raise for the first time and without justification in their Reply new issues regarding the cumulative effects of draw downs, and we decline to consider those untimely issues. See FPL Motion to Strike Portions of Joint Petitioners Reply at 9-10.

⁷³ Joint Petitioners also assert that the potentially large increase in salinity levels around the Turkey Point site could adversely impact the "native ecosystem and the wildlife" (Joint Pet. at 51) and, accordingly, must be analyzed. Id. at 52. As discussed above, however, Joint Petitioners fail to support their assertion in Contention NEPA 6 that construction and operation of proposed Units 6 and 7 would result in a large increase in salinity levels around the Turkey

7. Contention NEPA 7 Is Not Admissible Contention NEPA 7 alleges that the “ER fails to address the direct, indirect, and cumulative impacts of sea level rise on the construction and operation of Units 6 [and] 7 and the ancillary facilities.” Joint Pet. at 52. In particular, Joint Petitioners assert the “ER entirely fails to discuss and analyze the potential impacts of [a predicted] 1.5 to 5 foot rise in sea level on Units 6 [and] 7.” Id. Although Joint Petitioners acknowledge (see id.) the power plant would be constructed at an elevation of 19.0 to 25.5 feet NAVD 88 (which stands for North American Vertical Datum of 1988), they state that other associated facilities, “including the containment building, auxiliary building, and turbine building . . . will be located below plant grade,” and that the ER fails to discuss the impacts of sea level rise on these facilities, which Joint Petitioners claim “violates 10 C.F.R. § 51.45(b).” Id. at 53.

FPL and the NRC Staff argue that Contention NEPA 7 is not admissible. See FPL Answer to Joint Pet. at 129-34; NRC Staff Answer to Joint Pet. at 97-102. We agree.

Joint Petitioners characterize Contention NEPA 7 as an environmental contention, alleging the ER violates 10 C.F.R. § 51.45(b) because it fails to address the impact of sea level rise on the construction and operation of Units 6 and 7 and the ancillary facilities. See Joint Pet. at 53. It appears, however, that Joint Petitioners’ concern underlying Contention NEPA 7 is the operational *safety* of Units 6 and 7 in light of the possibility of sea level rise. In other words, Contention NEPA 7 is concerned with the adequacy of the ER’s safety analysis. The ER is *not*

Point site. The ER nevertheless provides an extensive discussion of the cumulative impacts of construction and operation of the proposed Units on the ecosystem and wildlife. See ER at 5.3-9, 5.11-5; FPL Answer to Joint Pet. at 123-26, 128; NRC Staff Answer to Joint Pet. at 94-95.

Nor is Contention NEPA 6 rendered admissible by Joint Petitioners’ assertion that “increased mining operations . . . could also accelerate the mixing of surface water and salt-intruded aquifers.” See Joint Pet. at 50 (citing Joint Pet. Exh. 25, South Florida Water Management District, Miami-Dade Canal Agricultural Drawdown Study (Feb. 12, 2008)). Joint Petitioners fail to explain how this assertion supports a conclusion that FPL’s ER incorrectly omitted a cumulative impacts analysis.

the vehicle for the NRC Staff's safety review, and Joint Petitioners fail to explain why section 51.45(b) -- which is a NEPA-implementing regulation that requires an applicant to discuss the impact of the proposed action "*on the environment*" (10 C.F.R. § 51.45(b)(1) (emphasis added)) -- requires the ER to discuss the impacts of sea level rise on the safe operation of the plant. Accordingly, to the extent Contention NEPA 7 alleges an operational safety matter has not been adequately analyzed in the ER, it fails to demonstrate the issue is material to the findings the NRC Staff must make to support its environmental review, contrary to 10 C.F.R. § 2.309(f)(1)(iv). See FPL Answer to Joint Pet. at 131-32; NRC Staff Answer to Joint Pet. at 97.⁷⁴

We note, moreover, that Joint Petitioners ignore the extensive safety analysis in FPL's FSAR regarding protection against maximum flooding events. Guided by NRC Regulatory Guide 1.59, FPL analyzed the Probable Maximum Storm Surge (PMSS) by, first, using the 10 percent exceedance high spring tide, 2.6 feet NAVD 88, as the antecedent water level. See FSAR at 2.4.5-5.⁷⁵ FPL adjusted the antecedent water level to account for expected sea level rise over the design life of the plant, taking the long-term trend in sea level rise in the Miami area, 0.78 foot per century, and conservatively rounding that value up to 1 foot per century. See

⁷⁴ To the extent Joint Petitioners meant to suggest that the environmental impacts of a potential sea level rise would be impacted, or exacerbated, by construction and operation of Units 6 and 7, they fail to provide supporting information, contrary to 10 C.F.R. § 2.309(f)(1)(vi). Joint Petitioners' reliance on the South Florida Water Management District (SFWMD) First Completeness Review (see Joint Pet. at 53) is unavailing, because they fail to explain how the comments posed by SFWMD with respect to its review of FPL's Site Certification Application support a conclusion that construction of Units 6 and 7 would impact a potential sea level rise or otherwise relate to information that would be required in FPL's ER. See FPL Answer to Joint Pet. at 133; NRC Staff Answer to Joint Pet. at 100-01.

⁷⁵ The 10 percent exceedance high spring tide is the high tide level that is equaled or exceeded by 10 percent of the maximum monthly tides over a continuous 21-year period. See FSAR at 2.4.5-5.

FSAR at 2.4.5-5 to 2.4.5-6.⁷⁶ FPL added this 1-foot sea level rise factor to the 2.6 feet NAVD 88 10 percent exceedance high spring tide, generating a 3.6 feet NAVD 88 sea level rise antecedent water level, which FPL used as the initial water level condition in its model to calculate the PMSS height of 21.1 feet NAVD 88. See FSAR at 2.4.5-6, 2.4.5-10.⁷⁷ Combining the PMSS with the 3.7 feet maximum wave run-up that would be caused by the maximum hurricane wind speed, FPL concluded the maximum water level due to a probable maximum hurricane, adjusted to account for sea level rise, would be 24.8 feet NAVD 88. See FSAR at 2.4.5-11 to 2.4.5-12. The power plant design for Units 6 and 7 incorporated this analysis, providing that the elevations of floor entrances and openings for all safety-related structures are 26 feet NAVD 88. See FSAR at 2.4.10-1. Because FPL's FSAR provides an analysis supporting the protection of its proposed facility from sea level rise, a NEPA analysis of the effects of sea level rise on the facility cannot be material to the NRC Staff's environmental licensing decision, rendering Contention NEPA 7 inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(iv). Additionally, because Joint Petitioners neither acknowledge nor challenge FPL's sea level rise analysis, Contention NEPA 7 is also inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failing to raise a genuine dispute of material fact. See FPL Answer to Joint Pet. at 130-31; NRC Staff Answer to Joint Pet. at 99-100.⁷⁸

⁷⁶ FPL represents that it extrapolated data from the National Oceanic and Atmospheric Administration (NOAA) to account for future sea level rise. See FPL Answer to Joint Pet. at 130 n.50.

⁷⁷ FPL determined the PMSS using NOAA's SLOSH ("Sea, Lake, and Overland Surges from Hurricanes") model, which is used to forecast hurricane storm surges. See FSAR at 2.4.5-6.

⁷⁸ It is, of course, well established that an ER need only discuss reasonably foreseeable environmental impacts of a proposed action. See, e.g., Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-02, 71 NRC __, __ (slip op. at 24) (Jan. 7, 2010). Hence, Contention NEPA 7 might have been admissible if Joint Petitioners had provided

8. Contention NEPA 8 Is Not Admissible Contention NEPA 8 alleges that “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.” Joint Pet. at 53. In support of Contention NEPA 8, Joint Petitioners advance two underlying contentions, which they label as Contention NEPA 8.1 and Contention NEPA 8.2. We address these two contentions in turn, concluding that neither is admissible and, accordingly, that Contention NEPA 8 is not admissible.

Preliminarily, we provide the analytic framework for NEPA “need for power” determinations. NEPA “itself does not mandate a cost-benefit analysis,” but the statute “is

support for a conclusion that FPL’s design basis elevation in the FSAR was flawed and that, as a result, a maximum flooding event could inundate Units 6 and 7 and thereby cause an environmental impact. Joint Petitioners fell far short of making such a showing. Further, we agree with FPL that Joint Petitioners, for the first time in their Reply, raised new challenges to the ER’s cumulative impacts analysis of sea level rise, and we decline to consider those arguments. See Joint Petitioners Reply at 84-85; FPL Motion to Strike Portions of Joint Petitioners’ Reply at 10-12.

We note that the NRC Staff, incident to its preparation of the Safety Evaluation Report, has an obligation to ensure FPL’s design basis for Units 6 and 7 will protect public health and safety (see 10 C.F.R. § 52.97(a)(1)(v)), and the Staff accomplishes this objective by, inter alia, verifying that the design basis will withstand maximum flooding events. See id. Part 50, app. A, Section I, Criterion 2 (“Structures, systems, and components important to safety shall be designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, hurricanes, floods, tsunamis, and seiches without loss of capability to perform their safety functions.”). Moreover, FPL has a continuing obligation to ensure its design basis will withstand such events. Cf. Supplemental Staff Guidance to NUREG 1555, “Environmental Standard Review Plan,” for Consideration of the Effects of Greenhouse Gases and of Climate Change at 11 (Apr. 8, 2010) (“If it becomes evident that long-term climate changes influence the most severe of natural phenomena reported in the site vicinity, then a license holder may need to take action to ensure the licensing basis is preserved.”). Finally, to the extent future climate-related evidence might indicate the design basis of a nuclear power plant will not withstand a maximum flooding event, Commission regulations provide a remedial mechanism for members of the public whereby “[a]ny person may file a request to institute a proceeding . . . to modify, suspend or revoke a license” 10 C.F.R. § 2.206(a).

generally regarded as calling for some sort of a weighing of the environmental costs against the economic, technical, or other public benefits of a proposal.” Louisiana Energy Serv., L.P. (Claiborne Enrichment Center), CLI-98-03, 47 NRC 77, 88 (1998) (citations omitted). “‘Need for power’ is a shorthand expression for the ‘benefit’ side of the cost-benefit balance which NEPA mandates for a proceeding considering the licensing of a nuclear power plant.” Seabrook, ALAB-422, 6 NRC at 90.

The Commission has explained that preparing a “need for power” discussion should not be an onerous task:

[W]hile a discussion of need for power is required, the Commission is not looking for burdensome attempts by the applicant to precisely identify future market conditions and energy demand, or to develop detailed analyses of system generating assets, costs of production, capital replacement ratios, and the like in order to establish with certainty that the construction and operation of a nuclear power plant is the most economical alternative for generation of power.

Nuclear Energy Institute; Denial of Petition for Rulemaking, 68 Fed. Reg. 55,905, 55,910 (Sept. 29, 2003); see also South Carolina Elec. & Gas Co. & South Carolina Pub. Serv. Auth. (Also Referred to as Santee Cooper) (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-01, 71 NRC __, __ (slip op. at 21) (Jan. 7, 2010). Moreover, a state public service commission’s determination of need for power may be relied on by the NRC in its own analysis, as long as that determination “is neither shown nor appears on its face to be seriously defective.” Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), ALAB-490, 8 NRC 234, 241 (1978). The NRC Staff has issued guidance for how it evaluates the adequacy of a state determination of need for power; namely, the state’s process must be “(1) systematic, (2) comprehensive, (3) subject to confirmation, and (4) responsive to forecasting uncertainty.” U.S. Nuclear Regulatory Commission, Environmental Standard Review Plan, Standard Review Plans for Environmental Reviews for Nuclear Power Plants, NUREG-1555 at 8.1-2 (Oct. 1999) [hereinafter NUREG-1555].

With this analytic framework in mind, we examine Contentions NEPA 8.1 and NEPA 8.2.

a. Contention NEPA 8.1 Is Not Admissible Contention NEPA 8.1 asserts 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.” Joint Pet. at 54. Joint Petitioners claim that electricity demand has “dramatically” dropped in South Florida due to the ongoing recession. Id. Joint Petitioners observe that the ER estimated energy demand in 2009 to have a 121,852 GWh net energy load, but the actual energy demand that year was 111,304 GWh. See id. at 55 (citing ER at 8.2-11; Joint Pet., Exh. 29, FPL Ten Year Site Plan 2010-2019 at 44 (Apr. 2010)). Joint Petitioners fault the ER for “fail[ing] to identify any elements that have contributed to diminished growth, such as population, number of households, per capita income, trends in size of households, or per household energy use trends.” Id. at 56. Joint Petitioners also criticize FPL for having a weak Demand Side Management (DSM) program that allegedly is inadequate under the Florida Public Service Commission’s (PSC’s) goals for investor-owned utilities (such as FPL), and for “provid[ing] no discussion, let alone an adequate analysis, on the new efficiency goals set by the [Florida] PSC.” Id. at 57. Finally, Joint Petitioners claim the ER improperly fails to account for proposed federal legislation passed by the U.S. House of Representatives imposing stricter requirements on utilities to generate renewable energy or, in the alternative, energy efficiency. See id.⁷⁹

FPL and the NRC Staff argue that Contention NEPA 8.1 is not admissible. See FPL Answer to Joint Pet. at 134-146; NRC Staff Answer to Joint Pet. at 104-113. We agree.

⁷⁹ To the extent Joint Petitioners argue in Contention NEPA 8.1 that Florida’s procedure underlying its “need for power” determination is inherently inadequate (Joint Pet. at 57-58), we address those arguments infra in our examination of Contention NEPA 8.2.

The Florida PSC determined that “FPL has a need for 8,350 MW of additional capacity beginning in the 2011 through 2020 period” and “a reliability need for either the 1,100 MW or 1,520 MW units (referring to the AP1000 or ESBWR designs respectively considered [by FPL]) in 2018 and 2020.” ER at 8.1-4 to 8.1-5. Although Joint Petitioners argue this determination fails to take into account recent drops in demand, they do not show these drops will remain in effect when FPL’s proposed reactors are expected to begin operation. Equally important, they do not demonstrate a flaw in FPL’s “need for power” predictions based on any alleged facts or expert opinions. “[I]nherent in any forecast of future electric power demands is a substantial margin of uncertainty.” Niagara Mohawk Power Corp. (Nine Mile Point Nuclear Power Station, Unit 2), ALAB-264, 1 NRC 347, 365 (1975). Contrary to Joint Petitioners’ apparent understanding, the fact that FPL’s *recent* need for power prediction was about 10% high (see Joint Pet. at 55-56) is not, standing alone, sufficient to render deficient the ER’s need for power discussion given (1) the margin of uncertainty inherent in these predictions, and (2) the latitude afforded by the Commission to these kinds of discussions in the ER.⁸⁰

⁸⁰ We reject Joint Petitioners’ argument that FPL conceded a “lack of need for power” in its cost recovery proceeding for Turkey Point Units 6 and 7 regarding the uncertainties of completion of construction. See Joint Pet. at 58 (citing Joint Pet., Exh. 31, [FPL’s] Petition for Approval of Nuclear Power Plant Cost Recovery Amount for the Period January – December 2011 at 8 (May 3, 2010) [hereinafter Joint Pet., Exh. 31]). FPL simply advised it had pushed back its expected date for commencement of construction (Joint Pet., Exh. 31 at 8); it did not suggest that its need for power prediction was deficient or that it intends to abandon the project. Cf. Nine Mile Point, ALAB-264, 1 NRC at 365-66 (holding an applicant’s expected delay of operations by at least two years is reasonably within the margin of uncertainty for predicting need for power).

In Joint Petitioners’ Reply, they argue that the delayed start-up date for FPL’s new reactors means FPL will be able -- without Units 6 and 7 -- to meet demand for power by energy efficiency, renewable energy technologies, and construction of natural gas plants. See Joint Petitioners Reply at 97-98 (citing Joint Pet., Exh. 30, Declaration of Dr. Mark A. Cooper, para. 7 (Aug. 17, 2010) & Attach. 1 at 38). We agree with FPL that this argument was not fairly discernable in Joint Petitioners’ Petition and that Joint Petitioners’ Reply did not endeavor to justify this belated argument under 10 C.F.R. § 2.309(c)(1). See Joint Petitioners Reply at 97-

Significantly, Joint Petitioners overlook that the Florida PSC process explicitly considered the effects of drop-offs in demand and substantial increases in DSM, concluding that if these drop-offs significantly reduced FPL's load forecast, FPL would likely cancel "gas-fired combined cycle plants that have not yet been certified" rather than cancel construction of new nuclear plants. See ER at 8.1-4 to 8.1-5. Nor do Joint Petitioners address the Florida PSC finding that Units 6 and 7 will be used to satisfy baseload demand -- i.e., demand for power that is not directly dependent on the magnitude of the system's peak demand. See ER at 8.1-5. Moreover, the Florida PSC considered a projected drop in peak summer demand of approximately 1,900 MW by 2020 due to DSM and other conservation measures, but it still found that this drop in peak power was not enough to "mitigate FPL's need for Turkey Point [Units] 6 and 7." ER at 8.1-5 to 8.1-6. Joint Petitioners do not challenge these determinations and thus raise no genuine dispute of material fact with the ER's "need for power" discussion pursuant to 10 C.F.R. § 2.309(f)(1)(vi). Likewise, regarding the change in demand, Joint Petitioners have not demonstrated under 10 C.F.R. § 2.309(f)(1)(iv) that their contention is material to the NRC's licensing decision in this proceeding, because they have not demonstrated how any of their assertions would change the determination of whether there is, on balance, a need for power. See FPL Answer to Joint Pet. at 140-41.

Finally, Joint Petitioners' claim that FPL ignores *proposed* federal legislation and energy efficiency goals (see Joint Pet. at 57) is, at best, premature. The proposed legislation does not, until enacted, impose any enforceable obligations on FPL to adopt renewable energy or energy efficiency standards. This claim by Joint Petitioners is therefore inadmissible pursuant to 10

98. We therefore decline to consider this argument. See FPL Motion to Strike Portions of Joint Petitioners' Reply at 13-14; cf. Pub. Serv. Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-89-03, 29 NRC 234, 241 (1989) ("The Commission expects parties to bear their burden and to clearly identify the matters on which they intend to rely with reference to a specific point.").

C.F.R. § 2.309(f)(1)(v), because it is speculative and not grounded on any alleged facts or expert opinions.

We therefore conclude Contention NEPA 8.1 is not admissible.

b. Contention NEPA 8.2 Is Not Admissible Contention NEPA 8.2 attacks the Florida PSC's "need for power" analysis, claiming that the "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." Joint Pet. at 58.⁸¹ In particular, Joint Petitioners allege the PSC's *process* is deficient because, inter alia, the PSC's "need for power" determination is "wholly in the hands of the utility" and cannot be challenged (Joint Pet. at 59-60), the PSC has no authority to rescind or change "need for power" determinations after review of a ten-year site plan, which is a "document based on limited information and no stakeholder input through evidentiary hearings" (id. at 59), and the PSC's determination regarding need for power is highly speculative. Id. at 60-61.

FPL and the NRC Staff argue that Contention NEPA 8.2 is not admissible. See FPL Answer to Joint Pet. at 146-57; NRC Staff Answer to Joint Pet. at 115-22. We agree.

Section 8.3 of the ER describes in detail the comprehensiveness and systemic nature of Florida's regulatory process for analyzing the need for power. The process considers the need for power in a state, its region, and the country as a whole. See ER Section 8.3.1. The need for power must be reflected in an annually updated ten-year site plan submitted by the utility to the Florida PSC, which evaluates the plan based on the need for electrical power, the plan's effect

⁸¹ Although NUREGs are not legally binding, they are guidance documents (Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-01-22, 54 NRC 255, 264 (2001)), and an applicant's failure to comply with such documents can potentially give rise to an admissible contention.

on fuel diversity in Florida, environmental impact of the proposed site, possible alternatives to the proposed plan, and consistency with the state comprehensive plan. See ER at 8.1-2.

Proposed units are also subjected to a specific determination of need that, in this case, entailed the submission by FPL of a Need Study for Electrical Power and the testimony of 15 witnesses.

See ER at 8.1-3 to 8.1-4. Further, several parties intervened in the proceeding, including the Florida Office of Public Counsel, which advocates on behalf of utility customers. See ER at 8.1-1, 8.1-4. And a hearing was held to enable members of the public to provide testimony. See ER at 8.1-4.⁸² Notably, the ER describes how the Florida process is responsive to forecasting uncertainty, explaining that FPL “uses statistical modeling to quantify and qualify data inputs, such as economic projections and population trends in terms of their impact on the future demand for electricity.” ER at 8.3-3. Ultimately, the Florida PSC reviewed and independently analyzed the information and testimony provided by all the participants, and it issued an order granting the determination of need. See ER at 8.1-4.⁸³

Joint Petitioners’ effort to raise an admissible challenge to the above process is unavailing. As demonstrated by the discussion in the preceding paragraph, Joint Petitioners err in suggesting (Joint Pet. at 59-61) that the Florida PSC “need for power” determination lacks any supporting data, stakeholder input, or a public hearing. See FPL Answer to Joint Pet. at

⁸² FPL’s “need for power” determination, as submitted to the Florida PSC Staff, is thus arguably subject to confirmation, as it is reviewed by independent parties, including the Florida Office of Public Counsel, stakeholders, and the Florida PSC itself. See ER at 8.1-4, 8.3-2. Meanwhile, the determination of need plausibly yields “publicly reviewable data and forecasts,” and FPL’s forecasts can be compared to those of the Florida Reliability Coordinating Council (FRCC) composite forecasts and to overall regional information. See ER at 8.3-2.

⁸³ In the Florida PSC “need for power” determination process, the FRCC compiles data from utilities’ ten-year plans and annually produces a Load and Resource Plan, which addresses, among other things, regional firm peak demand, available capacity, and reserve margin. See ER at 8.1-7.

149-53; NRC Staff Answer to Joint Pet. at 118-19. Nor do Joint Petitioners allege facts or expert opinions to support their assertion that the Florida PSC determination is not entitled to deference. They do not explain, for example, why the inability of the state process to rescind a determination of need for power necessarily renders that determination deficient. Nor do they explain why the fact that the PSC is the only process by which a need determination is made renders that determination deficient. Likewise, given the degree of uncertainty in need for power forecasting (Nine Mile Point, ALAB-264, 1 NRC at 365-66), Joint Petitioners do not explain why the forecast made in this case -- which is made more than ten years prior to construction of the proposed Units -- is deficient.⁸⁴ Finally, although Florida's "need for power" determination process *might* diverge from future DSM goals, Joint Petitioners have not shown how this assertion, which is premised on speculation, renders the need for power determination deficient.⁸⁵

⁸⁴ The Commission has long acknowledged the uncertainty inherent in long-range demand forecasts:

[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.

Carolina Power & Light Co. (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), CLI-79-05, 9 NRC 607, 609-10 (1979).

⁸⁵ In their Reply, Joint Petitioners attempt to fault the PSC process on the ground that "FPL fought an increase in DSM because it would harm its resource need for nuclear plants." Joint Petitioners Reply at 100 (citations omitted). FPL asks that this argument be struck as untimely. See FPL Motion to Strike Portions of Joint Petitioners' Reply at 12-13. We dismiss FPL's request as moot, because even assuming arguendo that Joint Petitioners' argument were timely, our consideration of it would not alter our conclusion that Contention NEPA 8.2 is not admissible. The fact that FPL disagrees with DSM increases does not, in our view, create a genuine issue of material fact as to whether the PSC process itself is seriously defective.

It is true, as Joint Petitioners state (see Joint Pet. at 59), that the Florida PSC is not able to predict the future need for power with mathematical precision or certainty. But that is beside the point. Pursuant to established precedent, the NRC Staff may rely on a state's "need for power" analysis if the process (and, hence, the ultimate determination) "is neither shown nor appears on its face to be seriously defective." Shearon Harris, ALAB-490, 8 NRC at 241. Here, Joint Petitioners fail to allege facts or expert opinion showing that the "need for power" process used by the Florida PSC is "seriously defective," contrary to 10 C.F.R. § 2.309(f)(1)(v), nor do they raise a genuine dispute of material fact or law with regard to adequacy of the Florida PSC process or FPL's application, contrary to 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to Joint Pet. at 146-57; NRC Staff Answer to Joint Pet. at 115-22.⁸⁶

We therefore conclude Contention NEPA 8.2 is not admissible.

9. Contention NEPA 9 Is Not Admissible Contention NEPA 9 asserts that "FPL failed to adequately address in its ER all reasonable [demand-side management (DSM)] and renewable energy alternatives to the construction and operation of Units 6 [and] 7." Joint Pet. at 61. Joint Petitioners claim that, despite FPL's determination that DSM would not be a replacement for the proposed reactors, "the ER must still consider how DSM could be used to mitigate impacts of the proposed action." Id. at 62. Joint Petitioners assert the ER must include more information regarding the energy savings achieved by FPL's DSM goals or explore how the DSM plans could be improved. See id. Joint Petitioners rely on various studies for the proposition that energy efficiency is indeed a viable alternative to FPL's proposed reactors, arguing that energy efficiency could reduce energy consumption between 8 and 30 percent.

⁸⁶ Restated, Joint Petitioners fail to carry their burden of providing sufficient information to raise a genuine dispute of material law or fact as to whether the Florida PSC process for determining need for power is (1) systematic, (2) comprehensive, (3) subject to confirmation, and (4) responsive to forecasting uncertainty.

See id. at 63 (citations omitted). Finally, like Contention NEPA 8.1, Contention NEPA 9 faults FPL for ignoring *proposed* federal legislation and *potential* regulatory energy efficiency requirements, which Joint Petitioners contend could push back the date when there is a need for FPL's proposed reactors. See id. 63-65 (citations omitted).

FPL and the NRC Staff argue that Contention NEPA 9 is not admissible. See FPL Answer to Joint Pet. at 158-65; NRC Staff Answer to Joint Pet. at 123-28. We agree.

FPL is a state-regulated utility, which places it "in a position to implement and promote programs such as energy conservation, efficiency and load management such that the need for additional generation capacity may be reduced." Summer, CLI-10-01, 71 NRC at ___ (slip op. at 26); see ER at 8.1-1 ("FPL is a regulated Florida electric utility . . ."). Therefore, "NEPA's 'rule of reason' would not exclude consideration of demand-side management as part of an alternatives analysis per se." Summer, CLI-10-01, 71 NRC at ___ (slip op. at 26). Consistent with the Commission's decision in Summer, FPL's ER purports to consider DSM as part of an alternatives analysis.

In the ER, FPL considers DSM programs it already has implemented for both residential and business applications. See ER at 9.2-5 to 9.2-6. FPL stresses, however, that

[w]hile 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.

ER at 9.2-6.

FPL thus concludes that DSM programs are not a reasonable alternative for baseload electrical power, and Joint Petitioners fail in Contention NEPA 9 to provide alleged facts or expert opinions undermining that conclusion. Although Joint Petitioners correctly state an applicant may not disregard an alternative merely because it does not offer a complete solution

to the problem (Joint Pet. at 62), they ignore that an alternative that fails to meet the purpose of the project does not need to be further examined in the ER. See Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 806-08 (2005). Because FPL determined that DSM would not fulfill the needs of the proposed action, Contention NEPA 9 is not admissible pursuant to 10 C.F.R. § 2.309(f)(1)(iv) for failing to show that the issue raised is material to the findings the NRC must make, and pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failing to show that a genuine dispute exists on a material issue of law or fact. Joint Petitioners also fail to specify why FPL's current DSM program, as discussed in the ER, is deficient. They thus fail to raise a genuine dispute with this aspect of FPL's analysis of DSM as an alternative for providing baseload power.

Although Joint Petitioners assert that "FPL's references to its ten year site plan for past DSM achievements do not relieve its duty . . . to fully analyze the DSM alternative" (Joint Pet. at 62), the ER, in fact, discusses DSM as an alternative for providing baseload power (ER at 9.2-5 to 9.2-6), describes specific measures in FPL's existing DSM program, and explicitly states the energy savings already achieved by that program:

FPL's demand side management efforts through 2008 have resulted in a cumulative summer peak reduction of approximately 4109 MW at the generator and an estimated cumulative energy saving of approximately 46,646 gigawatt hour at the generator. Accounting for reserve margin requirements, FPL's demand side management efforts through 2008 have eliminated the need to construct the approximate equivalent of 12 new 400 MW generating units

ER at 9.2-6. Further, contrary to Joint Petitioners' intimations (see Joint Pet. at 63), the ER discusses the amount of energy savings it expects to be realized from 2007 to 2020 as a result of DSM programs, with both summer and winter forecasts. See ER at tbl. 8.2-2.

In sum, many of the so-called deficiencies alleged in Contention NEPA 9 to exist in the ER's discussion of FPL's DSM program do not, in fact, exist. Moreover, Contention NEPA 9 fails to specify how other efficiency programs actually controvert the ER's projections, or why

implementation of such programs would represent a viable alternative to the proposed action of producing additional baseload generation. We thus conclude that Joint Petitioners fail to raise a genuine dispute of material fact or law with this portion of FPL's ER, contrary of 10 C.F.R. § 2.309(f)(1)(vi).⁸⁷

Regarding FPL's alleged failure to address *proposed* federal legislative and *proposed* regulatory requirements, we reiterate our conclusion (supra Part III.B.8.a) that proposed legislation does not, until enacted, impose enforceable obligations. The same applies to regulations that have not been finalized and issued. Because the significance of proposed legislation and regulations is a matter of conjecture, they and their possible impact need not be addressed in the ER, because any effect they might have is not "reasonably foreseeable" until they are either enacted or promulgated. Accordingly, to the extent Contention NEPA 9 relies on proposed legislation and regulations, it is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(iv), because it is speculative and not grounded on any alleged facts or expert opinions.

Contention NEPA 9 is therefore not admissible.

Summary Of Rulings On Joint Petitioners' Intervention Petition: In fine, we conclude Joint Petitioners have demonstrated standing (supra Part III.A), and one of their contentions -- Contention NEPA 2.1, as revised (supra Part III.B.2.a) -- is admissible.

⁸⁷ Joint Petitioners assert for the first time in their Reply (see Joint Petitioners Reply at 104-06) that DSM, when combined with other sources of electricity, can displace the need for baseload power. We decline to consider this assertion because it is late-filed without any explanation under section 2.309(c)(1). See FPL Motion to Strike Portions of Joint Petitioners' Reply at 12-13.

IV. CASE ESTABLISHES STANDING, AND IT PROFFERS TWO CONTENTIONS, CONTENTIONS 6 AND 7, THAT ARE ADMISSIBLE IN PART

A. CASE ESTABLISHES REPRESENTATIONAL STANDING

CASE -- a Florida non-profit corporation with about 125 members (CASE Rev. Pet. at 3) -- seeks to establish representational standing.⁸⁸ To that end, CASE states it was created “to oppose the licensure and construction of two Westinghouse AP1000 nuclear reactors at Turkey Point, Florida and to advocate for the safe and sustainable use of renewable energy, distributed production of energy as well as energy conservation at the point of use and energy efficiency at the point of production” (CASE Reply to FPL Answer at 2), thus satisfying the requirement that the interests it seeks to protect in this proceeding are germane to its organizational purposes. CASE also provides names of members who (1) establish standing to intervene in their own right by showing they live within 50 miles of the Turkey Point site, thus satisfying the proximity presumption rule, and (2) authorize CASE to represent their interests in this proceeding, thus absolving them from participating as individuals. See CASE Rev. Pet. at 3.⁸⁹ We conclude CASE has demonstrated representational standing. Neither FPL nor the NRC Staff argues to the contrary. See FPL Answer to CASE Rev. Pet.; NRC Staff Answer to CASE Rev. Pet. at 10-11.

B. CASE PROFFERS TWO CONTENTIONS, CONTENTIONS 6 AND 7, THAT ARE ADMISSIBLE IN PART

1. Contention 1 Is Not Admissible CASE proffers the following contention alleging that FPL’s COLA does not contain an adequate safety plan: “The emergency plan on file with

⁸⁸ The legal standards governing representational standing are discussed supra Part II.A.2.

⁸⁹ Although CASE seeks to establish representational standing on behalf of twenty-five of its members (CASE Rev. Pet. at 3), only seventeen members filed declarations containing their addresses and attesting they live within 50 miles of the Turkey Point site. See NRC Staff Answer to CASE Rev. Pet. at 10-11 & nn.4-5 (citing relevant declarations).

Miami-Dade County does [not] adequately protect public health of people in the Turkey Point Plume Exposure Zone following an accidental radiation release from FPL's nuclear reactor facilities at Turkey Point." CASE Rev. Pet. at 11. This contention appears to be grounded on the following four arguments (id. at 11-12): (1) FPL's evacuation plan will not be carried out in a timely manner for all those who could be affected by a radiation release; (2) FPL's plans for evacuation screening and shelter contain inadequate capacity for those living in the evacuation zone; (3) potassium iodide (KI) cannot be delivered to all those affected in a timely manner; and (4) because the design for Units 6 and 7 at Turkey Point increases the risk of radiation release, the importance of evacuation and KI distribution is enhanced.

FPL and the NRC Staff argue that Contention 1 is not admissible. See FPL Answer to CASE Rev. Pet. at 14-26; NRC Staff Answer to CASE Rev. Pet. at 14-22. We agree.

Before issuing a COL under Part 52, the NRC must conclude "there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency." 10 C.F.R. § 50.47(a)(1)(ii). The NRC is to "base its finding on a review of the Federal Emergency Management Agency (FEMA) findings," and "[i]n any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on questions of adequacy and implementation capability." Id. § 50.47(a)(2). In this case, FEMA sent a letter to the NRC indicating that, based on its "thorough review," FPL's emergency evacuation "plans [for Turkey Point Units 6 and 7] are adequate, and there is Reasonable Assurance that the plans can be implemented with no corrections needed."⁹⁰ As we now show, CASE's Contention 1, as grounded on the four arguments advanced by CASE, does not raise a specific challenge to any

⁹⁰ FPL Answer to CASE Rev. Pet., Exh. 2, Letter from Vanessa E. Quinn, Chief, Radiological Emergency Preparedness Branch, FEMA, to Kevin Williams, Chief, Licensing and Inspection Branch, Division of Preparedness and Response, Nuclear Security and Incident Response, U.S. Nuclear Regulatory Commission (Dec. 23, 2009).

any particular portion of FPL's COLA, thus failing to rebut FEMA's finding or the information underlying that finding, and thereby rendering Contention 1 inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi) for failing to raise a genuine dispute of material fact with FPL's COLA.⁹¹

With respect to the first argument underlying Contention 1 -- which asserts that FPL's evacuation plan will not be carried out in a timely manner -- CASE provides only general statements regarding, inter alia, evacuation routes, evacuation times, radiation plume dispersal due to wind, and the possible effects of parents driving into the evacuation zone to pick up their children. See CASE Rev. Pet. at 13. CASE fails, however, to explain how these statements controvert the emergency plan in FPL's COLA, nor does CASE otherwise raise a genuine dispute of material fact with the plan regarding evacuation, which is fatal to the admissibility of CASE's contention pursuant to section 2.309(f)(1)(vi). See FPL Answer to CASE Rev. Pet. at 18-20; NRC Staff Answer to CASE Rev. Pet. at 16.

⁹¹ CASE's attempt to challenge FPL's current emergency plan "on file with Miami-Dade County" (CASE Rev. Pet. at 11, 14) fails to raise a genuine dispute of material fact under section 2.309(f)(1)(vi) with FPL's COLA, because there is no indication the extant plan on file with Miami-Dade County is encompassed in FPL's COLA.

In the context of raising general issues with FPL's current emergency plan, CASE quotes a September 2008 letter purporting to be from the Commander of the Seventh Coast Guard District to FPL explaining why the "Coast Guard is unable to act as the primary responder for nuclear power plant disasters." CASE Rev. Pet. at 15. CASE fails, however, to connect the relevance of this letter to any specific complaint CASE has with FPL's proposed emergency plan. The letter thus fails to provide supporting facts adequate to demonstrate a genuine issue of material fact regarding a particularized provision of the emergency plan. As the Commission stated in USEC, CLI-06-10, 63 NRC at 457:

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

Contention 1's admissibility fares no better under CASE's second argument, which alleges that FPL's plans for evacuation screening and sheltering contain inadequate capacity for those living in the evacuation zone. Focusing on a single shelter, the Tamiami Park Emergency Reception Center, CASE asserts this facility has a "host capacity for 1000 evacuees and a reported usage capacity of 2450," and CASE then concludes that FPL's "plans to evacuate people in the radiation plume could not accommodate 98% of residents in the 10-mile EPZ." CASE Rev. Pet. at 13-14. But contrary to section 2.309(f)(1)(vi), CASE fails to demonstrate a genuine dispute with FPL's emergency plan on a material issue of fact, because it fails to explain why it focuses on the Tamiami Park facility to the exclusion of over 50 other shelters in Miami-Dade County, and it also fails to explain why its singular concern with the Tamiami Park facility counters any assumption, analysis, or conclusion in the COLA. See FPL Answer to CASE Rev. Pet. at 21-22; NRC Staff Answer to CASE Rev. Pet. at 17-18.

Contention 1 is likewise inadmissible under CASE's third argument, which alleges that KI cannot be delivered in a timely manner to all those affected by an emergency radiation release. This aspect of Contention 1 is inadmissible pursuant to section 2.309(f)(1)(vi) for failing to establish a genuine dispute of material law or fact, because it (1) fails to explain why evacuation times "would be too great to prevent initial exposure to inhaled radioiodines" (CASE Rev. Pet. at 14), and (2) fails to reference the COLA to identify a faulty analysis or conclusion. See FPL Answer to CASE Rev. Pet. at 22-23; NRC Staff Answer to CASE Rev. Pet. at 18-19.

Finally, CASE asserts that FPL's emergency plan is inadequate because the AP1000 design for the proposed Turkey Point Units increases the risk of radiation release. See CASE Rev. Pet. at 14. Even assuming the correctness of CASE's premise regarding the increased risk of radiation release, CASE fails to explain why that fact undermines any assumption, analysis, or conclusion in the emergency plan. Nor does CASE reference any portion of FPL's

COLA with which it disagrees. Although it asserts that the “needs for more effective plans for evacuation and KI distribution are more compelling for [Turkey Point Units] 6 & 7 than for [older] reactors” (id.), CASE fails to explain how the alleged design issue would alter any emergency planning provisions for the proposed units, or in what way the emergency plan is deficient, thus rendering Contention 1 inadmissible pursuant to section 2.309(f)(1)(vi). See FPL Answer to CASE Rev. Pet. at 24-25; NRC Staff Answer to CASE Rev. Pet. at 19-21.⁹²

For the foregoing reasons, we conclude Contention 1 is not admissible.⁹³

2. Contention 2 Is Not Admissible Contention 2 raises the following challenge to FPL’s evacuation plan:

The evacuation plan does not meet the criteria of protect(ing) the health and safety of the public prescribed by the Atomic Energy Act of 1954, and as exemplified by 10 C.F.R. § 50.47. In addition, the increase in population, and findings of studies of actual population and institutional response to actual emergencies are not adequately reflected in the FPL emergency response plan. The plan, particularly with respect to evacuation/population response is therefore incomplete and also does not follow NUREG 0654 guidelines.

CASE Rev. Pet. at 16. CASE thus uses Contention 2 as a vehicle to continue its assault on FPL’s evacuation plan, advancing the following three arguments: (1) the plan “does not reflect

⁹² To the extent CASE intends Contention 1 to encompass a challenge to the adequacy of the AP1000 design, it is outside the scope of this proceeding and thus inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(iii). See NRC Staff Answer to CASE Rev. Pet. at 20-21 n.15.

⁹³ As indicated supra note 10, FPL filed a motion to strike portions of CASE’s Reply. As relevant to Contention 1, FPL argues that CASE’s Reply exceeds the scope of Contention 1 as framed in CASE’s Revised Petition, which focuses solely on an “emergency plan on file with Miami-Dade County,” whereas the Reply raises challenges to, inter alia, FPL’s evacuation time estimates (ETEs). See CASE Reply to FPL Answer at 7-11; FPL Motion to Strike Portions of CASE Reply at 10-11. We agree. Governing case law requires a petitioner’s reply to “be ‘narrowly focused on the legal or logical arguments presented in the [applicant] or NRC staff answer.’” Louisiana Energy Serv., L.P. (National Enrichment Facility), CLI-04-25, 60 NRC 223, 225 (2004) (citations omitted). To the extent CASE’s Reply raises disputes with FPL’s ETEs, it exceeds -- without justification -- the scope of the original contention. Accordingly, in our consideration of Contention 1, we do not consider the challenges to FPL’s ETEs raised for the first time in CASE’s Reply.

the LARGE expansion in permanent population that has occurred between 1970 and now” (id.) (emphasis in original); (2) the plan improperly accepts sheltering over evacuation as an option in an emergency, thus rendering the plan inadequate under NUREG-0654 (id. at 16, 19); and (3) the plan disregards the results of studies dealing with responses to actual emergencies (id. at 22-25).⁹⁴

FPL and the NRC Staff argue that Contention 2 is not admissible. See FPL Answer to CASE Rev. Pet. at 27-32; NRC Staff Answer to CASE Rev. Pet. at 25-33. We agree.

Regarding the first argument, CASE is simply wrong in asserting the “plan does not reflect the LARGE expansion in permanent population that has occurred between 1970 and now.” CASE Rev. Pet. at 16 (emphasis in original). In fact, the COLA provides population estimates as of 2009. Specifically, FPL’s emergency plan states that the “Permanent Resident Population Basis” was based on the “2000 Census, extrapolated to 2009.” See Emergency Plan, Part 5, Supplement 1, Turkey Point Nuclear Power Plant Development of Evacuation Time Estimates, Rev. 0 (Mar. 2009), tbl. 1-1, at 1-9 [hereinafter Evacuation Time Estimates]. Thus, to the extent the first argument of Contention 2 is premised on the incorrect notion that FPL’s emergency plan ignored the present population, it may be summarily rejected. To the extent CASE is asserting that FPL’s proposed evacuation plan is deficient because it contains only “minor” modifications from its existing plan despite the significant expansion of population near Turkey Point (CASE Rev. Pet. at 18), CASE fails to identify the “minor” modifications it finds objectionable, much less explain why they are deficient. We therefore conclude this aspect of

⁹⁴ To the extent Contention 2 repeats generalized challenges that were included in Contention 1, we reject them for the reasons discussed infra Part IV.B.1. See CASE Rev. Pet. at 16 (broadly alleging, without referencing a disputed portion of the evacuation plan, that evacuation times are too long to protect public health and safety); id. (challenging FPL’s alleged “use of the existing . . . evacuation plan” rather than referencing FPL’s proposed evacuation plan).

Contention 2 is inadmissible for failing to show a genuine dispute of fact on a material issue that includes references to specific portions of the application in dispute, contrary to 10 C.F.R.

§ 2.309(f)(1)(vi).⁹⁵

CASE also objects to FPL's evacuation plan on the ground that "NUREG-0654 advocates evacuation over sheltering yet the FPL COL[A] indicates that sheltering is an acceptable alternative for some part of the population." See CASE Rev. Pet. at 16. This objection is insubstantial. NUREG-0654, which discusses evacuation or sheltering in the context of a general emergency, states in relevant part:

The general emergency class involves actual or imminent substantial core degradation or melting with the potential for loss of containment. The preferred initial protective action for this class is to evacuate immediately about 2 miles in all directions from the plant and about 5 miles downwind, unless other conditions make evacuation dangerous.

Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, NUREG-0654, Rev. 1, Supplement 3 app. 2 at 1-3 (July 1996).

Contrary to CASE's assertion (CASE Rev. Pet. at 16), FPL's emergency plan embodies this NUREG guidance, stating that "[a]t a General Emergency classification, Turkey Point will provide the state and counties with [Protective Action Recommendations (PARs)] for the public. For incidents involving actual, potential, or imminent releases of radioactive material to the atmosphere, EPA 400-R-92-001 and NUREG-0654, Supplement 3, are used as the basis for the general PARs." Turkey Point Plant COL Application, Part 5, Radiological Emergency Plan,

⁹⁵ CASE incorrectly asserts (CASE Rev. Pet. at 17) that the census figures cited in FPL's COLA "do not include seasonal visitors, migrant workers, or people attending sports events and visiting parks and tourist attractions." FPL's Evacuation Time Estimate study specifically includes a section on "transient populations." See Evacuation Time Estimates at 3-3 to 3-10. CASE's erroneous assertion does not raise a genuine dispute of material fact under section 2.309(f)(1)(vi).

Rev. 0 at J-7 [hereinafter Emergency Plan]. The emergency plan also provides a flow chart indicating that, in the event of a general emergency where there is actual or projected severe core damage or loss of physical control of the plant, evacuation will commence at 0-2 miles in all directions from the plant, and 2-5 miles downwind; beyond those distances, sheltering is recommended. Id. at J-10. Because CASE fails to explain why FPL's plan contravenes NUREG-0654 or is otherwise deficient, Contention 2, as supported by its second argument, is inadmissible for failing to raise a genuine issue of material fact, contrary to 10 C.F.R.

§ 2.309(f)(1)(vi).⁹⁶

Finally, the third argument on which CASE attempts to ground Contention 2 is that FPL's evacuation plan is inadequate because it disregards the results of studies dealing with responses to actual emergencies. See CASE Rev. Pet. at 22-25. CASE essentially argues that panic, fear, and self-interest will prevail during a reactor-related emergency, rendering an orderly evacuation impossible. Id. at 22. But CASE provides no facts or expert opinions that connect this argument to an alleged deficiency in FPL's emergency plan. Nor does CASE explain how its arguments contradict a particular provision of that plan. To the extent it roots its argument on quoted excerpts from a "study into the human response in the aftermath of [Three Mile Island]" (id. at 23-25), CASE fails to explain why those excerpts give rise to a specific, litigable disagreement with an assumption, analysis, or conclusion in FPL's emergency plan. Rather, CASE's argument appears to amount to little more than a conclusory assertion that any proposed evacuation plan formulated by FPL would, in light of human nature, be "impossible"

⁹⁶ Governing regulations (10 C.F.R. § 50.47(b)(10)) require that sheltering be considered in developing the recommended range of protective actions in the emergency plan. FPL's COLA includes such a discussion (Emergency Plan, Section J), and CASE neither addresses why that discussion is deficient, nor does it provide supporting facts or expert opinions to raise a genuine dispute regarding the adequacy of that discussion.

and “[un]realistic.” See id. at 22, 25. Such a generalized contention is inadmissible for failing to raise a genuine dispute of material fact with a particular portion of the COLA. See 10 C.F.R. § 2.309(f)(1)(vi).

For the foregoing reasons, we conclude Contention 2 is inadmissible.⁹⁷

3. Contention 3 Is Not Admissible CASE’s third contention asserts that operation of the proposed new units will, in violation of the AEA, impair public health and safety by annually releasing aerosol into the atmosphere that contains 471.6 tons of particulates. See CASE Rev. Pet. at 26-27. Specifically, the contention states (id. at 26):

The six cooling towers for the two proposed AP1000 nuclear reactors at Turkey Point will release tons of particulates annually from treated waste water or sea water (plus added chemicals for functional purposes) into the atmosphere per day threatening the health and safety of Turkey Point employees and the surrounding population and visitors and could contaminate all land and water surfaces in the area including 65,000 acres of agricultural land.

Although CASE concedes the aerosol from the proposed units “will meet state air quality standards” and, indeed, “the particulate concentration will be . . . far below the State permitted limit” (id. at 28), CASE nevertheless asserts the impact of this aerosol will “violate the criteria of protect(ing) the health and safety of the public prescribed by the Atomic Energy Act of 1954.” Id. at 27.

FPL and the NRC Staff argue that Contention 3 is not admissible. See FPL Answer to CASE Rev. Pet. at 33-42; NRC Staff Answer to CASE Rev. Pet. at 35-38. We agree.

⁹⁷ FPL has moved to strike portions of CASE’s Reply that allegedly exceed the original scope of Contention 2 including, for example, allegations by CASE concerning “wind speed impacts on the spread of the radioactive plume and evacuation effectiveness.” FPL Motion to Strike Portions of CASE Reply at 11. CASE responds that the mention in its Reply of wind speed was utilized only to demonstrate its “initial statement that ‘[e]ven a moderate wind from the south would overtake people fleeing the evacuation area.’” CASE Answer to FPL Motion to Strike Portions of CASE Reply at 5-6. CASE’s allegation of wind speed appears in Contention 1. See CASE Rev. Pet. at 13. We decline to consider a second time CASE’s reiteration of points raised in Contention 1. FPL’s motion to strike that portion of CASE’s Reply is thus moot.

The AEA provisions relied on by CASE regarding public health and safety (CASE Rev. Pet. at 27), as well as the associated NRC regulation cited by CASE (id. at 28), relate to *radiological* health and safety. See Silkwood v. Kerr-McGee Corp., 464 U.S. 238, 249 (1984) (the AEA is designed to “regulate the radiological safety aspects involved . . . in the construction and operation of a nuclear plant”). However, the only portion of the COLA cited by CASE in support of its contention is an excerpt from FPL’s FSAR regarding water chemistry. See CASE Rev. Pet. at 30-31. CASE neglects to discuss how any of the substances or particulate releases described in the contention present genuine issues of *radiological* health and safety or safe operation of the proposed Units, nor does CASE specify what statutory or regulatory provision either prohibits FPL making such releases or requires FPL to discuss further the release or the effects of such chemicals or particulates. CASE thus fails to explain what law or regulation makes this contention material to the findings the NRC must make in its safety review, rendering Contention 3 inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(iv). See FPL Answer to CASE Rev. Pet. at 34-35; NRC Staff Answer to CASE Rev. Pet. at 35.

CASE nevertheless attempts to show that Contention 3 raises a material safety and health issue by relying on a diagram from an August 2010 FPL presentation that, according to CASE, shows wind conditions on many days would cause the aerosol particulates to be dispersed principally “over the employees at Turkey Point and the 187,000 people within ten miles of Turkey Point and over 65,000 acres in agriculture in south Miami-Dade County.” CASE Rev. Pet. at 27. But CASE provides no alleged facts or expert opinions to support a conclusion that such dispersion would be inimical to public health and safety. Indeed, the admissibility of Contention 3 appears to be fatally undermined by CASE’s own factual assertions that the

aerosol “will meet state air quality standards” and the “particulate concentration will be . . . far below the State permitted limit.” See CASE Rev. Pet at 28.⁹⁸

CASE’s failure to provide supporting alleged facts or expert opinion renders Contention 3 inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(v), and also is fatal to CASE’s ability to show a genuine dispute of material fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to CASE Rev. Pet. at 38-42; NRC Staff Answer to CASE Rev. Pet. at 36.⁹⁹

4. Contention 4 Is Not Admissible CASE characterizes Contention 4 as a contention of omission (Tr. at 130), asserting the ER improperly “fails to completely address the radiation exposure that would be caused by a radiological accident. Specifically, there is no radiation dosage given for persons (a) fishing and/or (b) consuming marine-based food.” CASE Rev. Pet. at 32. In support of this contention, CASE states the ER shows that FPL uses the MACCS2 computer code to evaluate radiation doses, and the MACCS2 code “only calculates the dose from drinking the water. Surface water exposure pathways involving swimming, fishing, boating, and performing activities near the shoreline are not modeled by MACCS2.” Id. at 33 (quoting ER at 7.2-5). CASE argues that FPL’s “use of an inappropriate or inadequate

⁹⁸ CASE fails to mention that the same presentation on which it relies also stated that the “aerosol drift outside FPL property is lower than natural background deposition that occurs in south Florida.” See CASE Rev. Pet., Turkey Point Units 6 & 7 Nuclear Project, Presentation by Steve Scroggs, FPL Senior Director, and Ken Kosky, Golder Associates at 8 (Aug. 13, 2010); NRC Staff Answer to CASE Rev. Pet. at 36.

⁹⁹ CASE’s Reply references medical studies that show a higher incidence of cancer near nuclear power plants and power lines, as well as unsupported claims that the MDWASD will lack the requisite funds to construct a facility to provide cooling water for the new Units. See CASE Reply to FPL Answer at 25-28. FPL has moved to strike these statements (and supporting attachments) as untimely and beyond the scope of the arguments in CASE’s Revised Petition. See FPL Motion to Strike Portions of CASE Reply at 12. We need not grant FPL’s Motion, because even assuming arguendo that CASE’s assertions were timely and within the scope of their original argument, we are not persuaded the assertions provide the requisite support for Contention 3 because they do not show any deficiencies in FPL’s COLA.

computer code to evaluate radiological hazards cannot be used as an excuse to avoid calculating the dosage to large at-risk population[s] through one of the most likely and concentrated exposure pathways.” Id.

FPL and the NRC Staff argue that Contention 4 is not admissible. See FPL Answer to CASE Rev. Pet. at 43-48; NRC Staff Answer to CASE Rev. Pet. at 39-41. We agree.

A contention of omission may be summarily rejected as inadmissible if (1) there is no requirement to address the topic allegedly omitted from the application, or (2) the topic that allegedly is omitted is, in fact, included in the application. See USEC, CLI-06-10, 63 NRC at 456. Here, contrary to CASE’s assertion, the allegedly omitted discussion of radiological exposure is, in fact, included in the COLA. As FPL correctly states (FPL Answer to CASE Rev. Pet. at 44), the ER includes the radiation exposure attributable to fishing and other surface water activities at page 7.2-5 via its reference to the dosage listed for recreation activities in the GEIS for License Renewals. Contention 4 is therefore inadmissible for failing to raise a genuine dispute of material fact under 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to CASE Rev. Pet. at 47-48; NRC Staff Answer to CASE Rev. Pet. at 40.¹⁰⁰

5. Contention 5 Is Not Admissible Contention 5 arises from concerns expressed by Dr. Harold R. Wanless regarding the impact of sea level rise on the proposed Turkey Point

¹⁰⁰ CASE’s Reply raises a challenge to FPL’s reliance on the NRC’s GEIS for License Renewals. See CASE Reply to FPL Answer at 30-31. FPL has moved to strike this portion of CASE’s Reply on the ground that it raises -- without justification or explanation -- new arguments that are beyond the scope of CASE’s Revised Petition. See FPL Motion to Strike Portions of CASE Reply at 12-13. We agree that CASE, having failed in its Revised Petition to challenge FPL’s reliance on the GEIS, cannot raise that challenge for the first time in its Reply. See Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-09-07, 69 NRC 235, 261 (2009) (citations omitted).

Units.¹⁰¹ Specifically, Contention 5 asserts the COLA is deficient because, in derogation of 10 C.F.R. § 52.79, it fails to consider “any scientifically valid projection for sea level rise through this century and beyond.” CASE Rev. Pet. at 33. Dr. Wanless cites predictions that sea levels in South Florida will rise at least 1.5 feet in the next fifty years and at least 3-5 feet by the end of century. Id. at 34. The sea level rise, asserts Dr. Wanless, will affect the proposed Turkey Point Units in the following ways (id. at 35): (1) a diminished population in south Florida will impact future power needs; (2) the proposed units will become increasingly isolated from the mainland; (3) the safety of the proposed units will be threatened during major storms and terrorist threats; (4) the ability of the cooling complex to function and to remain isolated from the adjacent marine environment will be threatened; and (5) making structural adjustments in the proposed facility to accommodate sea level rise will change the ability of the facility to contain nuclear accidents. According to Contention 5, the alleged failure of FPL’s COLA to focus on these issues renders the Application deficient. Id. at 33-35.

FPL and the NRC Staff argue that Contention 5 is not admissible. See FPL Answer to CASE Rev. Pet. at 48-59; NRC Staff Answer to CASE Rev. Pet. at 42-47. We agree.¹⁰²

¹⁰¹ Although Dr. Wanless asserts he is proffering Contention 5 on behalf of CASE (CASE Rev. Pet. at 33), we assume -- consistent with CASE’s standing argument -- that CASE is the proponent of Contention 5 and that CASE is using Dr. Wanless’s views in an effort to provide supporting facts or expert opinion. Dr. Wanless states he is (1) a Professor and Chair of the Department of Geological Sciences at the University of Miami, and (2) Chair of the Science Committee of the Miami-Dade County Climate Change Advisory Task Force. See CASE Rev. Pet. at 33, 36.

¹⁰² Relying on a 2009 circular from the U.S. Army Corps of Engineers (USACE) that requires consideration of impacts due to sea level rise in all USACE projects, CASE argues that “a major addition to a nuclear power plant facility” such as the proposed Turkey Point facility must do the same. See CASE Rev. Pet. at 34. CASE’s demand for compliance with USACE requirements is not within the scope of this proceeding, because it is not the province of the NRC (and thus this Board) to enforce another agency’s regulations. See Hydro Res., Inc. (292 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 120-22 & n.3 (1998).

Although 10 C.F.R. § 52.79 does not expressly require the COLA to consider sea level rise, we assume for present purposes that the issue of sea level rise is a matter that must be considered in the COLA and, thus, is within the scope of this proceeding. See supra note 78.¹⁰³ We conclude, however, that Contention 5 is inadmissible because its underlying factual predicate is error. CASE asserts (CASE Rev. Pet. at 33) that FPL's COLA contains no sea level rise analysis. Contrary to CASE's assertion, FPL's COLA does, in fact, take into account sea level rise.

As FPL explains (FPL Answer to CASE Rev. Pet. at 53), "COL applicants must demonstrate that [proposed] reactors would be protected against hurricanes, earthquakes, tornadoes, extreme temperature, and other environmental conditions," and "these analyses require the applicant to determine the design basis flood elevation." The COLA therefore accounts for predicted sea level rise, and the "detailed consideration of sea level rise in the plant design led directly to the plant's choice of elevation for its structures." Id. at 50. Section 2.4 of the FSAR addresses the "probable maximum flooding as a result of hurricanes, tsunamis, seiches, and other flooding events." Id. at 53. As discussed supra Part III.B.7, FPL represents that, consistent with NRC guidance documents, based on an initial sea level rise of 3.6 feet, it

¹⁰³ FPL argues that Contention 5 should be rejected in its entirety because CASE fails to point to the specific regulatory provision that requires the COLA to contain a sea level rise analysis. See FPL Answer to CASE Rev. Pet. at 50-51. Because it is undisputed that the COLA must include a sea water rise analysis, we decline to reject Contention 5 on the ground urged by FPL.

As discussed infra, FPL's sea level rise analysis is located in the FSAR. FPL argues that a NEPA-driven review of sea level rise impacts is unnecessary in light of (1) relevant NRC guidance documents that address COLA contents, (2) the sea level rise analysis in the FSAR, and (3) the NRC's ongoing oversight authority under the AEA. See FPL Answer to CASE Rev. Pet. at 57-58. We need not, and do not, conclude that a NEPA-driven review of sea level rise is never required for a COLA; rather, we conclude that, in the present circumstance, CASE has not demonstrated that FPL's unchallenged sea level rise analysis in the FSAR must be supplemented with an analysis in the ER. See supra note 78.

determined a Probable Maximum Storm Surge (PMSS) still water level of 21.1 feet, which FPL combined with a 3.7 feet maximum wave run-up, concluding that the maximum water level due to a probable maximum hurricane, including coincidental wind-wave run-up, would be 24.8 feet NAVD 88. See FSAR at 2.4.5-12. FPL designed the proposed plant area elevation based on this analysis and, accordingly, the elevations of floor entrances and openings for all safety-related facilities would be at 26 feet NAVD 88. See FSAR at 2.4.5-12, 2.4.10-1.¹⁰⁴

Because Contention 5 erroneously asserts that FPL's COLA does not address sea level rise, and because it fails directly to controvert FPL's sea level rise analysis, we conclude Contention 5 is inadmissible for failing to raise a genuine dispute of material fact, contrary to 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to CASE Rev. Pet. at 53-55; NRC Staff Answer to CASE Rev. Pet. at 46-47. Moreover, even assuming the accuracy of Dr. Wanless's predictions regarding sea level rise, CASE fails to articulate why such a rise would make a difference to any specific aspect of FPL's evaluation of population trends, future power needs, nuclear safety, nuclear cooling systems, and nuclear accidents. CASE thus fails to demonstrate why its broad and unsupported assertions regarding the implications of sea level rise (CASE Rev. Pet. at 35) would be material to the NRC's analysis of the COLA, contrary to 10 C.F.R. § 2.309(f)(1)(iv). See FPL Answer to CASE Rev. Pet. at 51-52, 55, 58-59; NRC Staff Answer to CASE Rev. Pet. at 43-46.

Contention 5 is therefore inadmissible.¹⁰⁵

¹⁰⁴ As explained in the FSAR at 2.4.5-5 to 2.4.5-6, and as previously discussed supra Part III.B.7, the initial starting point for the PMSS calculation was 3.6 feet, which was determined by using the 10 percent exceedance high spring tide (2.6 feet NAVD 88), to which FPL states it added a conservative value (1 foot) for sea level rise over the design life of the plant.

¹⁰⁵ In its Reply Brief, CASE attacks for the first time FPL's sea level rise analysis and its decision to raise the elevation of the proposed facility to protect against flooding, arguing that

6. Contention 6 Is Admissible In Part Contention 6 alleges (CASE Rev. Pet. at 39):

The [COLA] is inadequate because the Environmental Report (Chapter 3 section 3.5.3) assumes that the classes B and C so-called “low-level” radioactive waste (LLRW) generated by proposed Turkey Point Units 1 and 2 [sic] will be promptly (e.g., in approximately two years) shipped offsite and fails to address the environmental impacts in the event that PEF [sic]¹⁰⁶ will need to manage such LL[R]W on the Turkey Point site for a more extended period of time. In addition it is assumed that extended storage and forms of so-called “low-level” waste management on the site that might be triggered by or associated with extended storage, such as processing, treatment or possible burial or incineration will have no environmental impact -- and FPL omits any reference to these in Chapter 5 of the ER, Environmental Impacts.

As CASE explains (id. at 38), at the root of Contention 6 is the fact that “Florida is in the Southeast Compact which does not have a disposal site to which it can send Class B and C, or Greater than C [LLRW].” Accordingly, it may reasonably be concluded that FPL will be required to provide long-term onsite storage for the LLRW it generates at proposed Units 6 and 7.

Contention 6 thus challenges, on several grounds, the adequacy of the ER’s consideration of the impact of long-term onsite storage of LLRW at the proposed facility. CASE relies on the declaration of Diane D’Arrigo, who claims to be “an expert on the policy aspects and general technical characteristics of so-called [LLRW]” (CASE Rev. Pet., Declaration of Diane D’Arrigo in Support of [CASE] at para. 2 (Aug. 17, 2010) [hereinafter D’Arrigo Decl.]), and who advances the following three arguments in support of Contention 6. First, CASE attacks FPL’s failure to consider the potential consequences of projected sea level rise, storm surge,

FPL’s elevation of the proposed facility would not make the project any more viable. See CASE Reply to FPL Answer at 32. But NRC regulations “do not allow . . . using reply briefs to provide, for the first time, the necessary threshold support for contentions.” Louisiana Energy Serv., L.P. (National Enrichment Facility), CLI-04-35, 60 NRC 619, 623 (2004). We agree with FPL (FPL Motion to Strike Portions of CASE Reply at 13) that the new arguments in CASE’s Reply exceed the scope of Contention 5 as it was originally proffered, and we decline to consider them.

¹⁰⁶ We assume that CASE, in Contention 6, meant to refer to Turkey Point Units 6 and 7 rather than to Units 1 and 2, and meant to refer to FPL rather than to PEF, which is likely an abbreviation for Progress Energy Florida, Inc.

and site inundations that could result in the dispersal of LLRW off the Turkey Point site in violation of “52.79(iii)” (see CASE Rev. Pet. at 40-41), especially if the LLRW were stored outdoors on a concrete pad. Id. Second, CASE attacks FPL’s failure to consider “processes that FPL may use to concentrate or otherwise alter this waste stream. Of particular concern is any plan to bury onsite or incinerate this material.” Id. at 39. Third, CASE alleges the ER is deficient because it fails to consider “[s]ynergistic health and physical chemical impacts” (D’Arrigo Decl. at para. 32), the “special location of the site on water” (id. at para. 34), or the existence of another reactor in the same watershed. Id.

FPL argues that Contention 6 is inadmissible. See FPL Answer to CASE Rev. Pet. at 60-65. The NRC Staff, however, views Contention 6 as being admissible in part. See NRC Staff Answer to CASE Rev. Pet. at 49-57. We agree with the NRC Staff that Contention 6 is admissible in part.

Before embarking on our analysis of Contention 6, we note that the Commission and several licensing boards have authorized the admission of contentions challenging the ability of COL applicants to handle onsite storage of Classes B and C LLRW, as well as the attendant potential environmental impacts of such storage in the wake of the closure of the Barnwell facility in South Carolina to states outside of the Atlantic Compact (which is comprised of New Jersey, Connecticut, and South Carolina). See, e.g., Levy County, CLI-10-02, 71 NRC at ___ (slip op. at 24-25); Calvert Cliffs 3 Nuclear Project, LLC, & Unistar Nuclear Operating Serv., LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), LBP-09-04, 69 NRC 170, 219-20, 224, aff’d, CLI-09-20, 70 NRC 911, 921-24 (2009). In Levy County, a proceeding that involved a COL application referencing the same AP1000 design referenced in FPL’s COLA, the Commission affirmed the admission of a contention similar to CASE’s Contention 6 involving the environmental consequences of long-term onsite storage of LLRW. Notably, the Commission in Levy County

stated that, “[a]bsent a licensed LLRW disposal facility that will accept waste from the Levy County facility, it is reasonably foreseeable that LLRW generated by normal operations will be stored at the site for a longer term than is currently envisioned in [the applicant’s] COL application.” Levy County, CLI-10-02, 71 NRC at ___ (slip op. at 24).

Against this background, we now identify those aspects of Contention 6 that are not admissible, and we then specify the aspect of Contention 6 that is admissible. First, regarding Contention 6’s concern with FPL’s failure to consider the impact of projected sea level rise, storm surge, and site inundations that could result in the dispersal of LLRW off the Turkey Point site (CASE Rev. Pet. at 40-41), we conclude CASE fails to explain why such a scenario is plausible, much less reasonably foreseeable. See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 348-49 (2002) (ER need only consider environmental impacts that are “reasonably foreseeable”); see also FPL Answer to CASE Rev. Pet. at 63-64; NRC Staff Answer to CASE Rev. Pet. at 54-56.¹⁰⁷ Moreover, CASE’s concern appears to be premised on the notion that FPL plans to store LLRW outdoors on a concrete pad (CASE Rev. Pet. at 40), but CASE concedes (id.) it found nothing in FPL’s COLA indicating a plan to store LLRW on a concrete pad. This aspect of the contention thus appears § 2.309(f)(1)(v) for failing to provide supporting facts or expert opinion, and for failing to raise a genuine dispute of material fact or law with FPL’s COLA pursuant to 10 C.F.R. § 2.309(f)(1)(vi).¹⁰⁸

¹⁰⁷ Ms. D’Arrigo’s generalized references to “environmental, security and safety related problems” (D’Arrigo Decl. at para. 29) are too vague to understand exactly *which* problems CASE would like FPL to address and *why* those problems raise a genuine dispute of material fact pursuant to 10 C.F.R. § 2.309(f)(1)(vi) with FPL’s COLA.

¹⁰⁸ CASE’s assertion (CASE Rev. Pet. at 40) that FPL’s COLA violates section “52.79(iii)” insofar as the ER fails to analyze the environmental impact of the dispersal of LLRW caused by storm surges is puzzling, because Commission regulations do not include a section

Second, regarding Contention 6's concern with FPL's failure to consider the impacts from processes to concentrate or otherwise alter its LLRW stream, including onsite burial or incineration of LLRW (CASE Rev. Pet. at 39-40), CASE fails to identify any portion of FPL's COLA that suggests FPL intends to use these techniques, nor does CASE allege any facts or expert opinions that would lead us to conclude FPL intends to use them. This aspect of Contention 6 is therefore inadmissible for failure to provide alleged facts or expert opinions under 10 C.F.R. § 2.309(f)(1)(v) and for failure to raise a genuine dispute of material fact or law with FPL's COLA under 10 C.F.R. § 2.309(f)(1)(vi). See FPL Answer to CASE Rev. Pet. at 64-65; NRC Staff Answer to Rev. Pet. at 51-52.

The third argument underlying Contention 6 consists of several asserted deficiencies advanced by Ms. D'Arrigo, who claims the ER improperly fails adequately to consider long-term onsite storage of LLRW vis a vis "[s]ynergistic health and physical chemical impacts" (D'Arrigo Decl. at para. 32), the "special location of the [proposed Turkey Point] site on water" (id. at para. 34), or the existence of another reactor in the same watershed. Id. But none of these claims is adequately supported, nor does CASE explain how any of the omitted analyses would controvert any analysis or conclusion in the ER. Specifically, CASE fails to specify the types of "synergistic health and physical chemical impacts" that could be expected to occur from the storage of LLRW, or how such unspecified impacts from the storage of LLRW might have environmental significance, or why those impacts would be material to the decision on the instant Application. CASE likewise fails to explain why management of LLRW is impacted either

52.79(iii). To the extent CASE intended to cite 10 C.F.R. § 52.79(a)(3), such a cite would not salvage this aspect of Contention 6. Section 52.79(a)(3) is a safety regulation that is inapposite to FPL's fulfillment of its NEPA responsibilities and, thus, is irrelevant to Contention 6. We note, however, that CASE's Contention 7 advances a safety-related challenge to FPL's long-term storage of LLRW, and as discussed infra Part IV.B.7, we conclude Contention 7 is admissible in part.

by the fact that the proposed site is on water or the fact that another reactor is in the same watershed. Nor does CASE explain why these facts should affect the level of detail included in the ER.

In short, Ms. D'Arrigo's claims that the ER is deficient on these matters may fairly be characterized as conclusory assertions. As the Commission has ruled, a conclusory assertion, even if made by an expert, "is inadequate because it deprives the board of the ability to make the necessary, reflective assessment of the opinion." USEC, CLI-06-10, 63 NRC at 472. This aspect of Contention 6 is therefore inadmissible for failing to provide supporting information sufficient to establish a genuine dispute of material fact, contrary to 10 C.F.R.

§ 2.309(f)(1)(vi).¹⁰⁹

After carving out the above inadmissible portions of Contention 6, we are left with the following revised Contention 6:

Because there currently is no access to an offsite LLRW disposal facility for proposed Units 6 and 7, and because it is reasonably foreseeable that LLRW generated by normal operations will need to be stored at the proposed site for longer than the two-year period contemplated in FPL's ER, the analysis in the ER is inadequate because it fails to address environmental impacts in the event the applicant will need to manage Class B and Class C LLRW on the Turkey Point site for a more extended period of time.

As explained below, we believe Contention 6, as revised above, is admissible pursuant to 10 C.F.R. § 2.309(f)(1).

¹⁰⁹ Because Greater-Than-Class-C LLRW "is the responsibility of the federal government" and thus unaffected by the closure of the Barnwell facility, the Commission has held that challenges to a COL applicant's failure to provide information on long-term storage of Greater-Than-Class-C LLRW are outside the scope of a COL proceeding. See Levy County, CLI-10-02, 71 NRC at ___ (slip op. at 26-27). Therefore, we do not admit Contention 6 to the extent it involves claims regarding Greater-Than-Class-C LLRW (see D'Arrigo Decl. paras. 4, 5, 7, 8, 10, 11, 35, 38), because such claims are outside the scope of this proceeding pursuant 10 C.F.R. § 2.309(f)(1)(iii).

First, Contention 6 provides a specific statement of the issue of fact to be litigated pursuant to section 2.309(f)(1)(i): namely, whether FPL's ER adequately discusses the environmental impacts of onsite LLRW storage after two years of generating such waste.

Second, Contention 6 provides a brief explanation of its basis pursuant to section 2.309(f)(1)(ii). As CASE explains, because there currently is no access to an offsite LLRW disposal facility for proposed Units 6 and 7, it is reasonably foreseeable that LLRW generated by normal operations will need to be stored at the proposed site for longer than the two-year period contemplated in FPL's ER. FPL implicitly challenges this basis, pointing to its letter of intent with Studsvik, Inc. and asserting it will be able to ship LLRW waste offsite. See FPL Answer to CASE Rev. Pet. at 70-72. At this juncture of the proceeding, however, we are not able to conclude, based on the present record, that FPL will in fact be able to do so.

At oral argument, FPL's counsel conceded that FPL only referenced a letter of intent with Studsvik to receive its LLRW because "[w]e actually today can't predict what the contingencies will be for this plant decades from now." Tr. at 108. FPL's counsel also represented that the Commission in Calvert Cliffs said that a long-term LLRW plan to transfer title to waste shipped off-site would resolve this issue. Id. at 111. Counsel is only partially correct. The Commission provided that "an adequate plan to transfer [LLRW] to a particular treatment facility would resolve the issue," but held that even if an applicant had such a plan, the determination of the plan's adequacy is a merits determination that cannot be resolved at the contention admissibility stage of the proceeding. Calvert Cliffs 3 Nuclear Project, LLC, & Unistar Nuclear Operating Serv., LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), CLI-09-20, 70 NRC 911, 924 (2009). Therefore, CASE has sufficiently specified the basis of Contention 6.

Third, Contention 6 is within the scope of this proceeding pursuant to section 2.309(f)(1)(iii). The Notice of Hearing in this proceeding specified that the subject of the

proceeding is FPL's COLA (Notice of Hearing, 75 Fed. Reg. at 34,778), and Contention 6 raises a dispute with a particularized portion of FPL's COLA -- its ER.

Fourth, the analysis CASE claims is missing from the ER is material to the NRC's licensing decision under section 2.309(f)(1)(iv). Applicants are obligated under 10 C.F.R. § 51.45(b) to prepare Environmental Reports that discuss, inter alia, "[t]he impact of the proposed action on the environment" and "[a]ny adverse environmental effects which cannot be avoided should the proposal be implemented." 10 C.F.R. § 51.45(b)(1)-(2). Moreover, the Commission has upheld the admission of contentions similar to Contention 6 that challenged COL applicants' analyses (or lack thereof) of the environmental impacts of long-term onsite storage of LLRW. See Levy County, CLI-10-02, 71 NRC at ___ (slip op. at 24); Calvert Cliffs, CLI-09-20, 70 NRC at 924. In our judgment, a full discussion of this issue in FPL's ER is required to assist the NRC Staff in its preparation of its EIS. See 10 C.F.R. § 51.45(c) ("The environmental report should contain sufficient data to aid the Commission in its development of an independent analysis."). Because of Contention 6's focus on the environmental impacts of long-term onsite LLRW storage and Commission precedent supporting admission of such contentions, we find the environmental aspects of Contention 6, as revised, material to the NRC's licensing decision in this proceeding.

Fifth, CASE has submitted alleged facts or expert opinions to support Contention 6 in satisfaction of section 2.309(f)(1)(v). Specifically, CASE points out that the AP1000 DCD cited in FPL's COLA provides for only two years of onsite storage. See D'Arrigo Decl. at para. 27. CASE has adequately alleged facts showing that -- notwithstanding FPL's letter of intent with Studsvik -- FPL will likely need to store LLRW onsite for more than two years. And CASE has correctly alleged that, if LLRW were to be stored onsite for more than two years, the impacts of

such storage should be discussed in the ER. The ER, however, contains no such discussion. See CASE Rev. Pet. at 39-40; D'Arrigo Decl. at paras. 9, 10, 22, 28.

Finally, we conclude Contention 6, as a contention of omission, raises a genuine dispute of material fact with FPL's COLA under section 2.309(f)(1)(vi). It claims that a specific portion of FPL's ER, specifically Section 3.5.3, assumes that Class B and Class C LLRW generated by proposed Turkey Point Units 6 and 7 will be shipped offsite within two years, and that the ER fails to address the environmental impacts in the event FPL will need to manage such LLRW on the Turkey Point site for a more extended period of time. See CASE Rev. Pet. at 39. FPL asserts its letter of intent to ship LLRW to Studsvik obviates the need to analyze environmental impacts of long-term onsite LLRW storage. See Tr. at 104, 111. But the mere existence of the letter of intent to ship LLRW to Studsvik does not, at this juncture, answer such questions as (1) whether such a plan will ultimately result in a transfer of LLRW title and permanent offsite disposition of the LLRW, and (2) whether non-transfer of title will result in environmental impacts. These are genuine issues of material fact that cannot be resolved on the present record. See Calvert Cliffs, CLI-09-20, 70 NRC at 924. And until these factual disputes are resolved, whether FPL's plan as a whole has adequately considered the environmental consequences of what it intends to do with its LLRW under NRC regulations is a litigable issue of law. Therefore, we conclude CASE has proffered a material issue of law and fact with FPL's ER under section 2.309(f)(1)(vi).

We therefore admit Contention 6 in part, as revised supra p. 104.

7. Contention 7 Is Admissible In Part Whereas Contention 6 raises a challenge based on *environmental* concerns relating to the long-term, onsite storage of LLRW, Contention 7 raises a challenge based on *safety* concerns arising from such storage. In Contention 7, CASE attacks FPL's FSAR as follows (CASE Rev. Pet. at 41):

FPL's application (FSAR Chapter 11, section 4.6) is inadequate because the Safety Analysis Report assumes that the Class B and C so-called "low-level" radioactive waste generated by the proposed Turkey Point Units 6 & 7 will be promptly (e.g. in approximately 2 years per the AP1000 DCD: page 11.4-6) shipped offsite despite lack [of] access for disposal. The FSAR fails to address compliance with Part 20 and Part 50 Appendix I (ALARA) in the event that PEF¹¹⁰ will need to manage such waste on the Turkey Point Site for a more extended period of time, possibly its entire licensed operating period or longer.

The invocation of a letter with a third party for off-site management of waste generated by Turkey Point 6 and 7 does not validate that an actual transfer of title and physical transfer of the waste will occur; return of such waste to the Turkey Point site is required in the absence of disposal site access. The waste could come back from 3rd party processors since they are only licensed to store for 365 days and have limited storage capacity.

In order to meet the requirements of 52.79, NRC staff must be able to assess "a level of information sufficient to enable the Commission to reach a final conclusion on all safety matters that must be resolved by the Commission before issuance of a combined license," 10 CFR 52.79(a)(3) specifies that the FSAR must include: "The kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in part 20 of this chapter."

CASE states that the Westinghouse AP1000 DCD upon which FPL's COLA relies for its LLRW estimates provides for approximately two years of onsite storage, but during that two-year period and afterward, FPL has no offsite disposal option for the LLRW it generates. "[T]wo years," states CASE, "is not a credible time span to generate a new off-site disposal option." Id. at 42-43. CASE insists that FPL's COLA violates 10 C.F.R. § 52.79(a)(3) for failure "to offer any details whatsoever about waste management and storage beyond two years," because the NRC has no "basis for evaluating the adequacy of the COLA with respect to long-term radioactive waste storage." Id. at 43. Finally, CASE argues that FPL's expected use of offsite storage through reliance on its contract with Studsvik in Tennessee will in all likelihood not come to

¹¹⁰ We assume CASE mistakenly referred to PEF, and that it intended to refer to FPL. See supra note 106.

fruition because Studsvik would only accept up to one year worth of LLRW and it does not have access to offsite permanent disposal options. Id. at 44-45.¹¹¹

FPL argues that Contention 7 is inadmissible. See FPL Answer to CASE Rev. Pet. at 66-74. The NRC Staff views Contention 7 as being admissible in part. See NRC Staff Answer to CASE Rev. Pet. at 59-72. We agree with the NRC Staff that Contention 7 is admissible in part.

First, CASE's specific statement of the issue to be raised satisfies section 2.309(f)(1)(i). In this regard, CASE states that FPL's FSAR is inadequate because it does not account for the possibility of long-term onsite storage of LLRW due to the closure of Barnwell and thus the FSAR does not explain how FPL will comply with Part 20 and Part 50, Appendix I (ALARA). See CASE Rev. Pet. at 41.

Second, in compliance with section 2.309(f)(1)(ii), CASE has provided a brief explanation of Contention 7's basis. Specifically, CASE claims FPL has no guaranteed offsite disposal option, including Studsvik, to handle the Class B and Class C LLRW generated at Turkey Point after two years of generation. CASE claims FPL's failure to address that potentiality in the COLA violates 10 C.F.R. § 52.79(a)(3) and that regulation's references to Parts 20 and 50 Appendix I. See CASE Rev. Pet. at 43-45.

¹¹¹ In support of Contention 7, CASE relies on Ms. D'Arrigo's Declaration. See CASE Rev. Pet. at 41, 43, 44-45. We do not read CASE's Revised Petition as advancing arguments beyond those discussed above in text. To the extent CASE intended this Board to conduct an independent search of Ms. D'Arrigo's Declaration for the purpose of finding other arguments, we decline to do so. It is not the function of a licensing board to comb through the record searching for arguments in support of a proffered contention. See, e.g., SmithKline Beecham Corp. v. Apotex Corp., 439 F.3d 1312, 1320 (Fed. Cir. 2006) ("Judges are not like pigs, hunting for truffles buried in briefs.") (quoting United States v. Dunkel, 927 F.2d 955, 956 (7th Cir. 1991)).

Third, we conclude that CASE's safety challenge to FPL's FSAR, which is part of FPL's COLA, is within the scope of this proceeding pursuant to section 2.309(f)(1)(iii).

See Notice of Hearing, 75 Fed. Reg. at 34,778.

Fourth, in accordance with section 2.309(f)(1)(iv), CASE has raised an issue that is material to the findings the NRC must make to grant the COL Application. NRC regulations require that a COLA contain an FSAR that includes

information sufficient to enable the Commission to reach a final conclusion on all safety matters that must be resolved by the Commission before issuance of a combined license . . . [regarding t]he kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in part 20 of this chapter

10 C.F.R. § 52.79(a)(3). NRC regulations also require a COLA to "identify . . . the means to be employed, for keeping levels of radioactive material in effluents to unrestricted areas as low as is reasonably achievable [or ALARA]." Id. § 50.34a(a). Contention 7 asserts that, at this juncture and on this record, FPL's COLA fails to provide information sufficient to enable the NRC to reach a final conclusion on safety matters regarding the means for controlling and limiting radioactive material and effluents and radiation exposures within the limits set forth in Part 20 and ALARA in the event FPL needs to manage waste for an extended period. See CASE Rev. Pet. at 41. We agree, and we conclude this satisfies the materiality requirement in section 2.309(f)(1)(iv).¹¹²

¹¹² To be clear, there is an aspect of Contention 7 we conclude does not satisfy the materiality requirement of section 2.309(f)(1)(iv). FPL already has described "the kinds and quantities of radioactive materials expected to be produced in the operation" to the extent its COLA references a standardized design. Cf. Progress Energy Florida, Inc. (Combined License Application for Levy County Nuclear Power Plant, Units 1 and 2), LBP-10-20, 72 NRC ___, ___ (slip op. at 21) (Nov. 18, 2010). Because FPL has referenced the AP1000 standardized design and CASE's challenge to the "kinds and quantities" expected to be produced by FPL at proposed Units 6 and 7 contains no challenge to the LLRW produced in the AP1000

Fifth, we find that through the D'Arrigo Declaration, Contention 7 provides the requisite alleged facts or expert opinions regarding the safety consequences of long-term onsite LLRW storage under section 2.309(f)(1)(v). CASE has alleged that the closure of the Barnwell facility eliminates the prospect for long-term, offsite LLRW storage, that the Studsvik site in Tennessee can only accommodate up to one year of waste, and that the Waste Control Specialists (WCS) site in Texas, to where processed LLRW would ultimately be sent, is not licensed to handle waste from a facility such as Turkey Point Units 6 and 7. See CASE Rev. Pet. at 41-45; D'Arrigo Decl. at paras. 11-26. Further, the D'Arrigo Declaration mentions the safety implications that arise with the presence of onsite LLRW and explains why FPL's COLA is deficient under NRC regulations. See D'Arrigo Decl. at paras. 9-10, 28-30. Therefore, Contention 7 satisfies section 2.309(f)(1)(v), containing alleged facts or expert opinions to support CASE's position on this issue.

Finally, Contention 7 raises a genuine dispute on a material issue of fact and law with FPL's COLA under section 2.309(f)(1)(vi). CASE challenges FPL's FSAR, Chapter 11, pages 11.4-2 and 11.4-3 (Section 11.4.6), which relies on FPL's letter of intent with Studsvik to transfer and dispose of FPL's LLRW generated at Turkey Point Units 6 and 7. See CASE Rev. Pet. at 41-42, 44-45. As a factual matter, CASE argues that FPL's AP1000 design will not be able to handle more than two years of LLRW generated onsite and that Studsvik will not be able to accommodate more than one year worth of LLRW generated at Turkey Point Units 6 and 7, thus inevitably leading to long-term storage of LLRW at Turkey Point. See id. FPL responds that the existence of its letter of intent with Studsvik demonstrates it will be able to transfer LLRW offsite and to WCS if necessary. See FPL Answer to CASE Rev. Pet. at 70-72. But whether FPL's

standardized design that would otherwise be admissible, CASE has not raised any material challenges to that aspect of FPL's COLA.

plans adequately establish where LLRW generated at its facility will be disposed of while maintaining compliance with Part 20 and ALARA is a genuine dispute of material fact that cannot be resolved at this juncture on this record. And the sufficiency under 10 C.F.R. § 52.79(a)(3) of FPL's plan to send its LLRW to Studsvik and, if necessary, conduct more safety analyses and/or apply for a license amendment raises a genuine dispute.

We thus conclude that Contention 7 is admissible, in part, as follows:

FPL's COLA fails to provide information sufficient to enable the NRC to reach a final conclusion on safety matters regarding the means for controlling and limiting radioactive material and effluents and radiation exposures within the limits set forth in Part 20 and ALARA in the event FPL needs to manage Class B and Class C LLRW for an extended period.

8. Contention 8 Is Not Admissible CASE's Revised Petition (see supra note 3) contains Contention 8, which was *not* included in CASE's original petition. CASE states that Contention 8 "adds to our petition a request that NRC deny the request from FPL to begin construction of the non-nuclear portions of this project (limited work authorization, LWA)," because authorizing FPL to begin such work "would negatively impact wetlands, coastal estuary and other sensitive areas." CASE Rev. Pet. at 45-46.

We summarily reject Contention 8 as nontimely pursuant to 10 C.F.R. § 2.309(c)(1), which states that a late-filed contention shall not be considered by a licensing board unless the petitioner demonstrates that a multi-factor balancing test weighs in favor of consideration.¹¹³

¹¹³ Section 2.309(c)(1) requires balancing the following factors to the extent they apply to the particular filing: (1) the existence vel non of good cause; (2) the nature of the petitioner's right to be a party to the proceeding; (3) the nature and extent of the petitioner's interest in the proceeding; (4) the possible effect of the proceeding's outcome on the petitioner's interest; (5) the availability of other means to protect the petitioner's interest; (6) the extent the petitioner's interest will be represented by existing parties; (7) the extent the petitioner's participation will broaden the issues or delay the proceeding; and (8) the extent the petitioner's participation might assist in developing a sound record. The Commission has instructed that "good cause" is the most important factor. See Oyster Creek, CLI-09-07, 69 NRC at 261.

CASE made no attempt in its Revised Petition to explain its belated filing of Contention 8. In response to FPL's Motion to Strike Contention 8 (see supra note 3), CASE asserted it had "good cause" for submitting Contention 8 after the filing deadline of August 17, 2010 due to difficulties it encountered with NRC's e-filing system. See [CASE] Response to [FPL's] Motion to Strike Proposed Contention 8 in CASE's [Rev. Pet.] to Intervene in Turkey Point Units 6 and 7 Combined Construction and Operating License Application (Sept. 20, 2010) at 4. Although CASE might have experienced initial difficulties with the e-filing system when filing its original petition, we do not accept CASE's belated explanation that those difficulties were the cause of its failure to include Contention 8 in its initial filing, which failed even to allude to Contention 8. Rather, we attribute this omission to CASE's careless "inadverten[ce]" (Tr. at 75), a conclusion that is strengthened when we consider the unfinished condition of CASE's originally filed petition. See supra note 3. We therefore conclude Contention 8 is untimely both for lack of a good cause showing under 10 C.F.R. § 2.309(c)(1)(i) and because CASE failed to address the other factors of 10 C.F.R. § 2.309(c)(1)(ii)-(viii). See Florida Power & Light Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-06-21, 64 NRC 30, 34 (2006).

Even if we assumed arguendo that Contention 8 were timely, we would reject it as inadmissible. In Contention 8, CASE seeks to have the NRC deny FPL's LWA request. But FPL's COLA no longer contains an LWA request, because FPL withdrew it on November 10, 2009. See FPL Answer to CASE Rev. Pet. at 75-76 (citing Letter from William Maher, Senior Licensing Director – New Nuclear Projects, FPL, to U.S. Nuclear Regulatory Commission (Nov. 10, 2009)). Because Contention 8 contains no challenge to the currently pending COLA, it is

inadmissible for failing to raise a genuine dispute of material fact or law with FPL's COLA under 10 C.F.R. § 2.309(f)(1)(vi).¹¹⁴

Because we reject Contention 8 on the alternative grounds that it is nontimely and inadmissible, we dismiss as moot FPL's Motion to Strike Proposed Contention 8. See supra note 3.

Summary Of Rulings On CASE's Intervention Petition: In fine, we conclude CASE has demonstrated standing (supra Part IV.A), and two of its contentions -- Contentions 6 and 7, as revised (supra Parts IV.B.6 and IV.B.7) -- are admissible.

V. PINECREST ESTABLISHES STANDING, BUT FAILS TO PROFFER AN ADMISSIBLE CONTENTION; IT IS NEVERTHELESS ELIGIBLE TO PARTICIPATE AS AN INTERESTED LOCAL GOVERNMENTAL BODY

A. PINECREST ESTABLISHES STANDING

As discussed supra Part II.A.3, a municipality can establish standing in a reactor licensing proceeding by showing either that its residents live within 50 miles of the facility, or that its boundaries extend to within 50 miles of the facility. Here, Pinecrest makes the undisputed representation that it is a Florida municipal corporation populated by about 20,000 residents and situated in its entirety within twenty miles of the Turkey Point site. See Pinecrest Pet. at 3. Based on that representation, we conclude Pinecrest has standing to intervene in this proceeding. Neither FPL nor the NRC Staff argues to the contrary. See FPL Answer to Pinecrest Pet. at 4; NRC Staff Answer to Pinecrest Pet. at 9.

¹¹⁴ Although we express no view on the matter, we note that FPL represented at oral argument that if it were to submit a new LWA request, a person whose interest was affected by the request "could file contentions just based on that." Tr. at 126.

B. PINECREST FAILS TO PROFFER AN ADMISSIBLE CONTENTION

1. Contention 1 Is Not Admissible Contention 1 asserts that “FPL’s [ER] fails to sufficiently describe the impact of construction and operation of the proposed nuclear generating units on local surface waters and groundwater so that the Commission can prepare an adequate [EIS] and propose adequate mitigation alternatives in its Environmental Protection Plan required under NEPA.” Pinecrest Pet. at 7. Pinecrest concedes FPL has concluded that the “relative impacts would be SMALL” (id.), but Pinecrest nevertheless asserts that “state agencies continue in their attempts to ascertain all of the necessary information to complete Florida’s Power Plant Siting Act process.” Id. Pinecrest then proceeds to list several examples of alleged concerns held by state agencies, although it fails to cite to any particular document or any specific factual source. Id. at 7-8.

FPL and the NRC Staff argue that Contention 1 is inadmissible. See FPL Answer to Pinecrest Pet. at 13-20; NRC Staff Answer to Pinecrest Pet. at 10-12. We agree.

Although Pinecrest summarizes several types of information that state agencies allegedly are seeking to obtain relating to FPL’s proposed Units 6 and 7 (Pinecrest Pet. at 7-8), it neither cites any documents generated by these agencies nor specifies any factual allegations or conclusions attributable to these agencies, thereby failing to provide alleged facts or expert opinions to support Contention 1, contrary to 10 C.F.R. § 2.309(f)(1)(v).¹¹⁵ Contention 1 also

¹¹⁵ Although citations to factually supported concerns raised by a state agency reviewing a proposed project are not necessarily insufficient to satisfy section 2.309(f)(1)(v), a petitioner may not rely on a document generated by a state agency if that document contains nothing more than a request for information. See, e.g., Crow Butte, CLI-09-12, 69 NRC at 550-52. To satisfy section 2.309(f)(1)(v), Pinecrest was required to provide some explanation as to how a Florida agency’s inquiry into whether FPL complies with Florida’s Power Plant Siting Act is relevant to findings the NRC must make. This Pinecrest failed to do. Cf. PPL Susquehanna LLC (Susquehanna Steam Electric Station, Units 1 and 2), CLI-07-25, 66 NRC 101, 105 (2007) (“NRC’s adjudicatory process [i]s not the proper forum for investigating alleged violations that are primarily the responsibility of other Federal, state, or local agencies.”).

fails to satisfy section 2.309(f)(1)(vi), because Pinecrest fails to identify any portion of FPL's COLA that it disputes, and it thereby fails to show a genuine dispute with FPL on a material issue of fact or law. Contention 1 is thus not admissible.

2. Contention 2 Is Not Admissible Contention 2 asserts that "FPL's ER fails to adequately address the potential safety impacts certain of its proposed transmission facilities might have on Village emergency operations by failing to specifically address how or to what extent they might interfere with law enforcement and emergency response communications occurring within proposed transmission corridors." Pinecrest Pet. at 8. In particular, although Pinecrest concedes that FPL's "ER addressed [FPL's] compliance with Florida laws concerning magnetic field exposure" (id.), it faults the ER for "fail[ing] to address the impact a 230kV transmission facility across the street from the Police Department will have on emergency communications." Id.

FPL and the NRC Staff argue that Contention 2 is not admissible. See FPL Answer to Pinecrest Pet. at 20-23; NRC Staff Answer to Pinecrest Pet. at 12-14. We agree.

First, contrary to 10 C.F.R. § 2.309(f)(1)(vi), Pinecrest fails to identify any law or regulation explicitly requiring the ER to analyze electromagnetic interference with emergency communications. Additionally, and also contrary to section 2.309(f)(1)(vi), Pinecrest neglects to specify any portion of FPL's COLA that Pinecrest disputes or that allegedly omits information that should have been included.

Moreover, even if we were to assume arguendo that electromagnetic interference on emergency communications caused by Turkey Point's proposed offsite transmission lines could be considered a significant environmental impact under 10 C.F.R. § 51.45(b) sufficient to render the analysis of such interference within the scope of and material to the NRC's licensing

decision in this proceeding,¹¹⁶ we would find Contention 2 inadmissible pursuant to section 2.309(f)(1)(v), because Pinecrest fails to allege any facts or expert opinions showing the possibility of an impact on emergency communications. Rather, Contention 2 contains the bare assertion that an impact analysis “should” be performed due to “the intensity of urban development in [FPL’s transmission line] corridor.” Pinecrest Pet. at 8. This unsupported assertion is insufficient to satisfy the Commission’s stringent admissibility standards. As the Commission has admonished, “[a] petitioner’s issue will be ruled inadmissible if the petitioner ‘has offered no tangible information, no experts, no substantive affidavits,’ but instead only ‘bare assertions and speculation.’” Fansteel, Inc. (Muskogee, Oklahoma, Site), CLI-03-13, 58 NRC 195, 203 (2003) (quoting GPU Nuclear, Inc. Jersey Central Power & Light Co. & Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-00-06, 51 NRC 193, 208 (2000)).

3. Contention 3 Is Not Admissible Contention 3 asserts that “FPL’s proposed East Corridor for associated 230kV transmission facilities has an economic impact on [Pinecrest] which is out of proportion with any benefit the proposed Turkey Point Units 6 [and] 7 and any associated facilities might have for [Pinecrest] and its residents.” Pinecrest Pet. at 8. In support of Contention 3, Pinecrest states the proposed transmission line will run along the commercial zone in Pinecrest’s northern border, which “*may* prove inconsistent with [possible] redevelopment efforts” consisting of “*proposed* upgrades in the busway and extension of rail transit.” Id. at 9 (emphasis added).

¹¹⁶ Cf. Seabrook, ALAB-422, 6 NRC at 83 (“NRC authority to review . . . offsite impacts [of transmission lines] goes beyond merely factoring them into a final cost-benefit balance . . . and includes as well the authority ‘where necessary [to] impose license conditions to minimize those impacts.’”).

FPL and the NRC Staff argue that Contention 3 is not admissible. See FPL Answer to Pinecrest Pet. at 24-27; NRC Staff Answer to Pinecrest Pet. at 15-16. We agree.

Contention 3 is not admissible for three independent reasons. First, although Pinecrest asserts that FPL's proposed transmission corridor will run adjacent to a commercial zone that Pinecrest hopes to develop, it fails to explain in what way any potential inconsistencies between the transmission corridor and its development plans are material to the findings the NRC must make with regard to FPL's COLA, as required by section 2.309(f)(1)(iv). Second, Pinecrest fails to provide any alleged facts or expert opinions, as required by section 2.309(f)(1)(v), in support of its claim that the proposed transmission facility would result in an adverse impact on Pinecrest's existing or planned commerce or transportation. Rather, Contention 3 is grounded on Pinecrest's speculation that FPL's proposed transmission facility "may" prove inconsistent with "proposed" development efforts that Pinecrest hopes to implement. See Pinecrest Pet. at 9. Such unsupported conjecture falls far short of satisfying section 2.309(f)(1)(v). Finally, Contention 3 is inadmissible pursuant to section 2.309(f)(1)(vi), because Pinecrest fails to identify any portion of FPL's COLA that Pinecrest claims is deficient.

Because none of Pinecrest's three contentions is admissible, we deny Pinecrest's request to intervene as a party under 10 C.F.R. § 2.309(a). As we explain below, however, Pinecrest may participate in this proceeding as an interested local governmental body.

C. PINECREST SATISFIES THE REQUIREMENTS FOR PARTICIPATING AS AN INTERESTED LOCAL GOVERNMENTAL BODY

Pinecrest requests that, if it is not admitted as a party, it be allowed to participate as an interested local governmental body pursuant to 10 C.F.R. § 2.315(c). See Pinecrest Pet. at 9. As discussed supra note 4, if at least one petitioner demonstrates standing and proffers an admissible contention so that its petition to intervene is granted, section 2.315(c) allows an interested local governmental body that has not been admitted as a party to participate in a

hearing as an interested non-party. A local governmental body that is participating as an interested non-party may designate a single representative “to introduce evidence, [to] interrogate witnesses” (if the admitted parties are permitted cross-examination), to “advise the Commission without requiring the [local governmental body’s] representative to take a position with respect to the issue, [to] file proposed findings in those proceedings where findings are permitted, and [to] petition for review by the Commission under [10 C.F.R.] § 2.341 with respect to the admitted contentions.” 10 C.F.R. § 2.315(c).

We previously determined, supra Part V.A, that Pinecrest demonstrated an interest sufficient to satisfy Commission standing requirements. We therefore conclude that Pinecrest is eligible to participate in this proceeding as an interested local governmental body, and we grant its request to do so. Pursuant to section 2.315(c), and within two weeks of the issuance of this decision, Pinecrest shall notify this Board, Joint Petitioners, and CASE of the contentions on which it will participate.

VI. CONCLUSION

For the foregoing reasons, we (1) grant Joint Petitioners’ Petition to Intervene, admitting Contention 2.1 as revised (supra Part III), (2) grant CASE’s Petition to Intervene, admitting Contention 6 as revised and Contention 7 as revised (supra Part IV), and (3) deny Pinecrest’s Petition to Intervene, but grant its request to participate as an interested local governmental body pursuant to 10 C.F.R. § 2.315(c), directing it to notify the Board, Joint Petitioners, and CASE within two weeks of the contentions on which it plans to participate (supra Part V).

Regarding pending motions, we (1) deny as moot FPL’s Motion to Strike Proposed Contention 8 (Sept. 13, 2010) (supra Part IV.B.8), (2) grant in part and deny in part FPL’s Motion to Strike Portions of Joint Petitioners’ Reply (supra notes 39, 40, 49, 60, 72, 78, 80, 85,

87), and (3) grant in part and deny in part FPL's Motion to Strike Portions of CASE's Reply (supra notes 93, 97, 99, 100, 105).

Absent contrary direction from this Licensing Board, the hearing shall be conducted in accordance with the informal adjudicatory procedures described in Subpart L of 10 C.F.R. Part 2.¹¹⁷

This Memorandum and Order is subject to appeal and interlocutory review in accordance with the provisions in 10 C.F.R. §§ 2.311 and 2.341(f)(2). Appeals that meet the requirements of section 2.311 must be filed within ten days of service of this Memorandum and

¹¹⁷ Section 2.310(a) provides that the hearing procedures in Subpart L of 10 C.F.R. Part 2 will ordinarily be used in proceedings for the "grant, renewal, licensee-initiated amendment, or termination of licenses or permits." See 10 C.F.R. § 2.310(a). Section 2.310(d) describes an exception to this rule in cases where the presiding officer determines by order that a contested matter necessitates resolution of a material issue of fact relating to a past activity "where the credibility of an eyewitness may reasonably be expected to be at issue, and/or issues of motive or intent of the party or eyewitness material to the resolution of the contested matter" (id. § 2.310(d)), in which case the hearing for resolution of the contested matter will be conducted under Subpart G of 10 C.F.R. Part 2. See id. Section 2.309(g) permits a petitioner to "address the selection of hearing procedures, taking into account the provisions of [10 C.F.R.] § 2.310," but no party has yet intimated a reason for not applying the Subpart L hearing procedures.

Order, and petitions for review that meet the requirements of section 2.341(f)(2) must be filed within fifteen days of service of this Memorandum and Order.

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD

/RA/

E. Roy Hawkens, Chairman
ADMINISTRATIVE JUDGE

/RA/

Dr. Michael F. Kennedy
ADMINISTRATIVE JUDGE

/RA/

Dr. William C. Burnett
ADMINISTRATIVE JUDGE

Rockville, Maryland
February 28, 2011¹¹⁸

¹¹⁸ Copies of this Memorandum and Order were sent this date by the agency's e-filing system to: (1) counsel for Joint Petitioners; (2) counsel for Pinecrest; (3) the representative for CASE; (4) counsel for FPL; and (5) counsel for the NRC Staff.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
)
Florida Power & Light Company) Docket Nos. 52-040 and 52-041-COL
(Juno Beach, Florida))
)
(Turkey Point, Units 6 & 7))

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing MEMORANDUM AND ORDER (Ruling on Petitions to Intervene) (LBP-11-06) have been served upon the following persons by Electronic Information Exchange.

U.S. Nuclear Regulatory Commission
Office of Commission Appellate
Adjudication
Mail Stop: O-16C1
Washington, DC 20555-0001
E-mail: ocaamail@nrc.gov

U.S. Nuclear Regulatory Commission
Office of the General Counsel
Mail Stop - O-15 D21
Washington, DC 20555-0001
Marian Zabler, Esq.
Sara Kirkwood, Esq.
Patrick Moulding, Esq.
Sara Price, Esq.
Joseph Gillman, Paralegal
E-mail: marian.zabler@nrc.gov;
sara.kirkwood@nrc.gov; Patrick.moulding@nrc.gov
sara.price@nrc.gov ; joseph.gilman@nrc.gov

OGC Mail Center: Members of this office have received a copy of this filing by EIE service.

U.S. Nuclear Regulatory Commission
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Florida Power & Light Company
700 Universe Blvd.
Juno Beach, Florida 33408
Mitchell S. Ross
Vice President & General Counsel – Nuclear
E-mail: mitch.ross@fpl.com

E. Roy Hawkens
Administrative Judge, Chair
E-mail: Roy.Hawkens@nrc.gov

Dr. Michael F. Kennedy
Administrative Judge
E-mail: michael.kennedy@nrc.gov

Dr. William C. Burnett
Administrative Judge
E-mail: william.burnett2@nrc.gov

Florida Power & Light Company
801 Pennsylvania Ave. NW Suite 220
Washington, DC 20004
Steven C. Hamrick, Esq.
Mitchell S. Ross
Antonio Fernandez, Esq.
E-mail: steven.hamrick@fpl.com;
antonio.fernandez@fpl.com

Joshua Kirstein, Law Clerk, ASLBP
E-mail: josh.kirstein@nrc.gov

DOCKET NO. 52-040 and 52-041-COL
MEMORANDUM AND ORDER (Ruling on Petitions to Intervene) (LBP-11-06)

Counsel for the Applicant
Pillsbury, Winthrop, Shaw, Pittman, LLP
2300 N Street, N.W.
Washington, DC 20037-1122
Alison M. Crane, Esq.
John H. O'Neill, Esq.
Matias F. Travieso-Diaz, Esq.
Maria Webb, Paralegal
E-mail: alison.crane@pillsburylaw.com
John.ONeill@pillsburylaw.com
matias.travieso-diaz@pillsburylaw.com
maria.webb@pillsburylaw.com

Counsel for Mark Oncavage, Dan Kipnis,
Southern Alliance for Clean Energy (SACE)
and National Parks Conservation Association
Turner Environmental Law Clinic
Emory University School of Law
1301 Clifton Rd. SE
Atlanta, GA 30322
Lawrence D. Sanders, Esq.
Mindy Goldstein, Esq.
E-mail: lsande3@emory.edu
E-mail: magolds@emory.edu

Counsel for Mark Oncavage, Dan Kipnis,
Southern Alliance for Clean Energy (SACE)
and National Parks Conservation Association
Everglades Law Center, Inc.
3305 College Avenue
Ft. Lauderdale, Florida 33314
Richard Grosso, Esq.
E-Mail: Richard@evergladeslaw.org

Counsel for the Village of Pinecrest
Nabors, Giblin & Nickerson, P.A.
1500 Mahan Drive, Suite 200
Tallahassee, FL 32308
William C. Garner, Esq.
Gregory T. Stewart, Esq.
E-mail: bgarner@ngnlaw.com
E-mail: gstewart@ngnlaw.com

(CASE) Citizens Allied for Safe Energy, Inc.
10001 SW 129 Terrace
Miami, FL 33176
Barry J. White
E-mail: bwtamia@bellsouth.net

U.S. Nuclear Regulatory Commission
Office of the Secretary of the Commission
Mail Stop: O-16C1
Washington, DC 20555-0001
E-mail: hearingdocket@nrc.gov

[Original signed by Christine M. Pierpoint]
Office of the Secretary of the Commission

Dated at Rockville, Maryland
this 28th day of February 2011.