

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

Before the Atomic Safety and Licensing Board

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

Florida Power & Light Company's Answer Opposing Citizens Allied for Safe Energy, Inc.'s Revised Petition to Intervene and Request for Hearing In Turkey Point Units 6 and 7 Combined Construction and Operating License Application

September 13, 2010

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I. INTRODUCTION

Florida Power & Light Company (“FPL” or “Applicant”) hereby submits this answer (“Answer”) opposing the Petition to Intervene and Request for Hearing by Citizens Allied for Safe Energy, Inc. (“CASE”) in this proceeding, filed first at various times on August 18, 2010 (“Original Petition”) and again, in revised form, on August 20, 2010 (“Revised Petition”).¹ CASE seeks to intervene in this proceeding and requests that

¹ Both certificates of service filed by CASE indicate that it served copies of the Original Petition and the Revised Petition on Counsel for FPL and the NRC Staff on August 17, 2010, the due date for petitions for leave to intervene in this proceeding. These representations are inaccurate with respect to FPL. CASE did not serve the first version of its Petition on counsel for FPL until August 18, 2010, and then only because counsel requested copies of it. The Original Petition and all its exhibits were filed electronically at various times on August 18, with the last installment being filed at 8:45 PM. The Revised Petition was served in the afternoon of August 20, 2010. All parties appearing in NRC proceedings, including *pro se* participants, have an affirmative obligation to avoid any false coloring of the facts. *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant), ALAB-837, 23 NRC 525, 531 n.6 (1986).

As discussed below, FPL is moving to strike the portion of the Revised Petition which improperly seeks to add a non-timely new contention. Although the entire Revised Petition is subject to being stricken as nontimely, in this Answer FPL will cite and respond to the Revised Petition since it corrects many of the numerous errors in the Original Petition, and is easier to follow and more readable.

the Nuclear Regulatory Commission (“Commission” or “NRC”) conduct a hearing regarding FPL’s application for a combined construction permit and operating license (“COL” or “combined license”) for new Units 6 and 7 at the Turkey Point site in Miami-Dade County, Florida (“Turkey Point Units 6 & 7”). The Revised Petition should be denied because CASE has failed to propose an admissible contention.

The Commission’s regulations and case law clearly set forth the requirements that a petitioner must satisfy in order to propose an admissible contention. As described more fully below, the Commission’s current pleading standards were designed to raise the threshold for the admission of contentions. The purpose of these intentionally strict admissibility requirements is to ensure that hearings, if required, will focus on concrete issues that are relevant to the proceeding and that are supported by some factual and legal foundation. Each of CASE’s contentions fails to reach the required threshold, falling short of any number of the applicable pleading standards. Accordingly, the Board should reject all of CASE’s contentions and deny its request for hearing.

II. BACKGROUND

FPL submitted an application to the NRC for a COL for Turkey Point Units 6 & 7 (“Application”) on June 30, 2009.² The Application and this proceeding are governed by 10 C.F.R. Part 52. In particular, Subpart C of the Part 52 rules sets out the procedures and requirements applicable to the issuance of combined licenses.

² Application for Combined License for Turkey Point Units 6 and 7 (Rev. 0, June 30, 2009), transmittal letter available at ADAMS Accession No. ML091830589. The entire Application is available at <http://www.nrc.gov/reactors/new-reactors/col/turkey-point.html>. *See also* Florida Power & Light Company; Notice of Receipt and Availability of Application for a Combined License, 74 Fed. Reg. 38,477 (August 3, 2009).

The NRC promulgated its Part 52 regulations in 1989,³ and amended them in 2007,⁴ with the aim of enhancing the safety and reliability of nuclear power plants through standardization and early resolution of safety and environmental issues in licensing proceedings. *See* 53 Fed. Reg. 32,060, 32,061 (Aug. 23, 1988); 54 Fed. Reg. at 15,372, 15,373; 72 Fed. Reg. at 49,352. The Part 52 rules accomplish this aim through three principal regulatory processes: Early Site Permits (governed by Subpart A of Part 52); Design Certifications (governed by Subpart B); and Combined Licenses (governed by Subpart C). As the Commission explained:

Part 52 is intended to improve the licensing of nuclear power plants by the use of these procedural innovations. . . . Subpart A of Part 52 formalizes the early site approval process, allowing a prospective applicant to obtain a permit for one or more pre-approved sites on which future nuclear power stations can be located. Subpart B carries forward the standard design approval process . . . in much the same way, allowing a prospective applicant, vendor, or other interested party to obtain Commission approval of a design of a complete nuclear power plant or a major portion of such a plant. Subpart C establishes procedures for the issuance of a combined construction permit and conditional operating license. . . This structure reveals the overall purpose of Part 52: to improve reactor safety and streamline the licensing process by encouraging standard designs and by permitting early resolution of environmental and safety issues related to the reactor site and design.

53 Fed. Reg. at 32,062.

The Application references a certified design, Appendix D to 10 C.F.R. Part 52 (Final Rule, “AP1000 Design Certification,” 71 Fed. Reg. 4,464 (Jan. 27, 2006) (“AP1000 DC Rule”)). Those aspects of the Turkey Point Units 6 & 7 design that are

³ Final Rule, “Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Reactors,” 54 Fed. Reg. 15,372 (Apr. 18, 1989).

⁴ Final Rule, “Licenses, Certifications, and Approvals for Nuclear Power Plants,” 72 Fed. Reg. 49,352 (Aug. 28, 2007).

included in the AP1000 DC Rule have already been approved by the Commission and cannot be challenged in this COL proceeding. 10 C.F.R. § 52.63(a). The Application also references Westinghouse's application to amend the AP1000 DC Rule (through AP1000 DCD Revision 16 ("Revision 16") as updated by AP1000 DCD Revision 17 ("Revision 17")). Again, those aspects of a certified design under consideration for a potential rule change are not litigable in a facility COL proceeding.⁵

The NRC Staff conducted a sufficiency review and, finding the Application acceptable for docketing, docketed the Application on September 4, 2009. Florida Power & Light Company, Acceptance for Docketing of an Application for Combined License for Turkey Point Units 6 & 7 Nuclear Power Plants. 74 Fed. Reg. 51,621 (Oct. 7, 2009). On June 18, 2010, the NRC published a "Notice of Hearing and Opportunity to Petition for Leave to Intervene and Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information for Contention Preparation on a Combined License for Turkey Point Units 6 & 7," in the Federal Register. 75 Fed. Reg. 34,777 ("Hearing Notice"). The Hearing Notice stated that petitions to intervene were to be filed by August 17, 2010. The Revised Petition was filed on August 20, 2010, three days late.

⁵ The AP1000 Design Control Document Revs. 16 and 17 are available at <http://www.nrc.gov/reactors/new-reactors/design-cert/amended-ap1000.html> and at ADAMS Accession Nos. ML071580939 and ML083230868, respectively. The Commission has not yet issued an amendment to the AP1000 DC Rule to incorporate either Revision 16 or Revision 17. However, it is Commission Policy "that a contention that raises an issue on a design matter addressed in the design certification application should be resolved in the design certification rulemaking proceeding, and not the COL proceeding." Statement of Policy on Conduct of New Reactor Licensing Proceedings, 73 Fed. Reg. 20,963, 20,972 (Apr. 17, 2008) ("New Reactor Proceedings Policy Statement"). If the issue is addressed in the portion of the AP1000 rule that is not being revised, it is not challengeable at all in a COL proceeding. *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-10-09, 71 NRC ____ (March 11, 2010), slip op. at 13-14.

To be admitted as a party to this proceeding, CASE must demonstrate standing and must submit at least one admissible contention. 10 C.F.R. § 2.309(a). As demonstrated below, CASE has failed to submit an admissible contention, hence its Revised Petition must be denied.

III. CASE HAS NOT SUBMITTED ANY ADMISSIBLE CONTENTIONS

A petitioner must plead at least one admissible contention to be admitted as a party in a Commission proceeding. 10 C.F.R. § 2.309(a). As set forth below, CASE has proffered no admissible contentions and therefore the Revised Petition should be denied.

A. Legal Standards for Contention Admissibility

The Commission's contention admissibility rules are "strict by design". *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001) (citing *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999)). While "federal courts permit considerably less-detailed 'notice pleading,' the Commission requires far more to plead a contention." *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-39, 54 NRC 497, 505 (2001); *see also Fansteel, Inc.* (Muskogee, Oklahoma Site) CLI-03-13, 58 NRC 195, 203 (2003). 10 C.F.R. § 2.714 (now § 2.309) was amended in 1989 "to raise the threshold for the admission of contentions." Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168 (Aug. 11, 1989) ("Final Rule"). These rules were "toughened . . . because in prior years 'licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation.'" *Millstone*, CLI-01-24, 54 NRC at 358. Under the NRC's Rules of Practice, "a protestant

does not become entitled to an evidentiary hearing merely on request, or on a bald or conclusory allegation that such a dispute exists. The protestant must make a minimal showing that material facts are in dispute, thereby demonstrating that an ‘inquiry in depth’ is appropriate.” Final Rule, 54 Fed. Reg. at 33,171 (quoting *Conn. Bankers Ass’n v. Bd. of Governors*, 627 F.2d 245, 251 (D.C. Cir. 1980)).

Accordingly, a petition “must set forth with particularity the contentions sought be raised.” 10 C.F.R. § 2.309(f)(1). Petitioners must provide “a clear statement as to the basis for the contentions and [submit] supporting information and references to specific documents and sources that establish the validity of the contention.” *USEC, Inc.* (American Centrifuge Plant), CLI-06-9, 63 NRC 433, 437 (2006) (citing *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991)). Specifically, “for each contention,” the petition must:

- (i) Provide a specific statement of the issue of law or fact to be raised or controverted;
- (ii) Provide a brief explanation of the basis for the contention;
- (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
- (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
- (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor’s/petitioner’s position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; and
- (vi) [P]rovide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.

10 C.F.R. § 2.309(f)(1). Contentions that do not satisfy each of these six requirements must be rejected. *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-09-8, 69 NRC 317, 324 (2009).

The petitioner bears the burden of proffering contentions that meet the NRC's pleading requirements. *See Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-14, 48 NRC 39, 41 (1998). Licensing boards are not to overlook deficiencies in contentions or to assume the existence of missing information. *Palo Verde*, CLI-91-12, 34 NRC at 155. In other words, "[a] contention's proponent, not the licensing board, is responsible for formulating the contention and providing the necessary information to satisfy the basis requirement for the admission of contentions." Statement of Policy on Conduct of Adjudicatory Proceedings, CLI-98-12, 48 NRC 18, 22 (1998) ("1998 Policy Statement"). The requirements are discussed in detail below.

1. Petitioner Must Specifically State the Issue of Law or Fact to Be Raised

Each contention must provide "a specific statement of the issue of law or fact to be raised or controverted." 10 C.F.R. § 2.309(f)(1)(i). To be admissible, a "contention must explain, with specificity, particular safety or legal reasons requiring rejection of the contested [application]." *Millstone*, CLI-01-24, 54 NRC at 359-60. Moreover, the Commission has explained that Petitioners "must articulate at the outset the specific issues they wish to litigate as a prerequisite to gaining formal admission as parties." *Oconee*, CLI-99-11, 49 NRC at 338.

2. Petitioner Must Explain the Basis for the Contention

In addition, petitioners must provide “a brief explanation of the basis for the contention.” 10 C.F.R. § 2.309(f)(1)(ii). A petitioner must provide the licensing board with “sufficient foundation” to “warrant further exploration.” *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-942, 32 NRC 395, 428 (1990) (footnote omitted). In other words, a petitioner must “provide some sort of minimal basis indicating the potential validity of the contention.” 54 Fed. Reg. at 33,170. While licensing boards generally admit “contentions” for litigation rather than “bases,” the Commission has recognized that “[t]he reach of a contention necessarily hinges upon its terms coupled with its stated bases.” *LES* (National Enrichment Facility), LBP-04-14, 60 NRC 40, 57 (2004) (citing *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988), *aff’d sub nom. Mass. v. NRC*, 924 F.2d 311 (D.C. Cir.), *cert. denied*, 502 U.S. 899 (1991)). Therefore, the lack of an adequate basis is sufficient grounds for rejecting a proposed contention.

3. Contentions Must Be Within the Scope of the Proceeding

Petitioners must also demonstrate “that the issue raised in the contention is within the scope of the proceeding.” 10 C.F.R. § 2.309(f)(1)(iii). The scope of this proceeding for which this licensing board has been delegated jurisdiction was set forth in the Commission’s Hearing Notice. *See Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790-91 (1985). The Hearing Notice explained that the Licensing Board would consider FPL’s Application under Part 52 for a COL for Turkey Point Units 6 & 7. 75 Fed. Reg. at 34,778. Licensing boards “are delegates of the Commission” and so may “exercise only those powers which the Commission has given

[them].” *Public Service Co. of Indiana, Inc.* (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 NRC 167, 170 (1976) (footnote omitted); *accord Portland General Electric Co.* (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289-90 n.6 (1979). Any contention that falls outside the specified scope of this proceeding is inadmissible.

Any contention that challenges an NRC rule is outside the scope of the proceeding because “no rule or regulation of the Commission . . . is subject to attack . . . in any adjudicatory proceeding.” See 10 C.F.R. § 2.335(a); see also *Entergy Nuclear Vermont Yankee, LLC & Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station); *Entergy Nuclear Generation Company & Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13, 18 n.15 (2007). Petitioners “may not demand an adjudicatory hearing to attack generic NRC requirements or regulations, or to express generalized grievances about NRC policies.” *Oconee*, CLI-99-11, 49 NRC at 334. Contentions seeking to impose requirements in addition to those contained in Commission regulations impermissibly challenge those regulations. *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), CLI-87-12, 26 NRC 383, 394-95 (1987); see also *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit No. 1), LBP-83-76, 18 NRC 1266, 1273 (1983) (explaining that when a Commission regulation permits the use of a particular analysis or technique, a contention asserting that a different analysis or technique should be used is an impermissible challenge to the regulation).

4. Contentions Must Raise a Material Issue

Petitioners must further demonstrate “that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the

proceeding.”⁶ 10 C.F.R. § 2.309(f)(1)(iv). Admissible contentions “must explain, with specificity, particular safety or legal reasons requiring rejection of the contested [application].” *Millstone*, CLI-01-24, 54 NRC at 359-60. The Commission has defined a “material” issue as one where “resolution of the dispute *would make a difference in the outcome* of the licensing proceeding.” Final Rule, 54 Fed. Reg. at 33,172 (emphasis added).

5. Contentions Must Be Supported by Adequate Factual Information or Expert Opinion

Each contention must also “[p]rovide a concise statement of the alleged facts or expert opinions which support [the petitioner’s] position on the issue and on which [the petitioner] intends to rely at hearing, together with references to the specific sources and documents on which [the petitioner] intends to rely to support its position in the issue.” 10 C.F.R. § 2.309(f)(1)(v). The petitioner bears the burden of coming forward with a sufficient factual basis “indicating that a further inquiry is appropriate.” *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 249 (1996) (citing Final Rule, 54 Fed. Reg. at 33,171 (requiring “some factual basis” for the contention)).

Under this standard, a petitioner is obligated “to provide the [technical] analyses and expert opinion” or other information “showing why its bases support its contention.” *Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff’d in part*, CLI-95-12, 42 NRC 111 (1995). Where a petitioner

⁶ The standards defining the findings that the NRC must make to support issuance of a COL in this proceeding are set forth in 10 C.F.R. § 52.97.

has failed to do so, “the [Licensing] Board may not make factual inferences on [the] petitioner’s behalf.” *Id.* (citing *Palo Verde*, CLI-91-12, 34 NRC at 149). *See also Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180 (1998) (a “bald assertion that a matter ought to be considered or that a factual dispute exists . . . is not sufficient;” rather, “a petitioner must provide documents or other factual information or expert opinion” to support a contention’s “proffered bases”) (citations omitted). A mere reference to documents does not provide an adequate basis for a contention. *Baltimore Gas & Electric Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 348 (1998). A petitioner’s failure to present the factual information or expert opinions necessary to support its contention adequately requires that the contention be rejected. *Yankee*, CLI-96-7, 43 NRC at 262-63; *Palo Verde*, CLI-91-12, 34 NRC at 155-56.

The Commission has made clear that conclusory statements, even when provided by an expert, are insufficient to demonstrate that further inquiry is appropriate. *USEC* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006) (“[A]n expert opinion that merely states a conclusion (e.g., the application is ‘deficient,’ ‘inadequate,’ or ‘wrong’) without providing a reasoned basis or explanation for that conclusion is inadequate because it deprives the Board of the ability to make the necessary, reflective assessment of the opinion . . .” (footnote omitted)).

This requirement must be met at the outset. A contention is not to be admitted “where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts.” Final Rule, 54 Fed. Reg. at 33,171. The Rules of

Practice bar contentions where petitioners have what amounts only to generalized suspicions, hoping to substantiate them later, or simply a desire for more time and more information in order to identify a genuine material dispute for litigation. *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-03-17, 58 NRC 419, 424 (2003).

6. Contentions Must Raise a Genuine Dispute of Material Law or Fact

Finally, each contention must “provide sufficient information to show that a genuine dispute exists with the applicant . . . on a material issue of law or fact.” 10 C.F.R. § 2.309(f)(1)(vi). The NRC’s pleading standards require a petitioner to read the pertinent portions of the combined license application and supporting documents, including the Final Safety Analysis Report (“FSAR”) and Environmental Report (“ER”), state the applicant’s position and the petitioner’s opposing view, and explain why it has a disagreement with the applicant. Final Rule, 54 Fed. Reg. at 33,171; *Millstone*, CLI-01-24, 54 NRC at 358. Contentions must be based on documents or other information available at the time the petition is filed. 10 C.F.R. § 2.309(f)(2). Indeed, a petitioner

has an ironclad obligation to examine the publicly available documentary material pertaining to the facility in question with sufficient care to enable the petitioner to uncover any information that could serve as the foundation for a specific contention. Neither Section 189a of the Atomic Energy Act nor [the corresponding Commission regulation] permits the filing of a vague, unparticularized contention, followed by an endeavor to flesh it out through discovery against the applicant or Staff.

54 Fed. Reg. at 33,170 (quoting *Duke Power Co.* (Catawba Nuclear Station, Units 1 & 2), ALAB-687, 16 NRC 460, 468 (1982), *vacated in part on other grounds*, CLI-83-19, 17 NRC 1041 (1983)). The obligation to make specific reference to relevant facility documentation applies with special force to an applicant's FSAR and ER, and a contention should be rejected if it inaccurately describes an applicant's proposed actions or ignores or misstates the content of the licensing documents. *See, e.g., Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Units 1 and 2), LBP-82-119A, 16 NRC 2069, 2076 (1982); *Duke Power Co.* (Catawba Nuclear Station, Units 1 and 2), LBP-82-107A, 16 NRC 1791, 1804 (1982); *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), LBP-82-43A, 15 NRC 1423, 1504-05 (1982).

If the petitioner does not believe that a licensing request and supporting documentation address a relevant issue, the petitioner is "to explain why the application is deficient." Final Rule, 54 Fed. Reg. at 33,170; *Palo Verde*, CLI-91-12, 34 NRC at 156. A contention that does not directly controvert a position taken by the applicant in the license application is subject to dismissal. *See Texas Utilities Electric Co.* (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992). An allegation that some aspect of a license application is inadequate does not give rise to a genuine dispute unless it is supported by facts and a reasoned statement of why the application is unacceptable in some material respect. *Florida Power and Light Co.* (Turkey Point Nuclear Generating Plant, Unit Nos. 3 and 4), LBP-90-16, 31 NRC 509, 521 & n.12 (1990).

B. None of the Contentions Submitted by CASE is Admissible

1. Contention 1 – Inadequate Public Safety Plan

CASE Contention 1 reads:

The emergency plan on file with Miami-Dade County does 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.

Revised Petition at 11. Contention 1 is said to be supported by four allegations:

1. Evacuation plans are not adequate for timely evacuation of all the people who could be affected in an accidental radiation release.
2. Evacuation screening and shelter provisions lack capacity for the number of people living in the evacuation zone.
3. Potassium iodide (KI) cannot be delivered in a timely manner to provide best protection from thyroid cancer.
4. Reactor design proposed for TPN 6 & 7 elevates risk of radiation release and makes effective evacuation and KI plans more critical.

Id. at 11-12.

a. FPL Response to Contention 1: Overview

At the outset, it is important to point out that Contention 1 does not challenge any aspect of the Turkey Point Plant Radiological Emergency Plan For Turkey Point Units 6 & 7, included in Part 5 of the Application, nor does it challenge the State of Florida Radiological Emergency Management Plan nor its Annex A, Appendix II, Turkey Point Nuclear Power Plant Site Plan. The latter two documents are identified in Part 9 of the Application as being “withheld [from public access] under 10 C.F.R. § 2.390 as “Sensitive-Federal, State, Foreign Government and International Agency Controlled” documents. FPL is not aware that CASE has sought to obtain (or has obtained) access to

those documents. By the same token, CASE Contention 1 does not even mention, let alone challenge, the Evacuation Time Estimates (“ETE”) Report prepared in support of the Application. The ETE Report is a public document, which CASE has reviewed and addressed in its Contention 2. *See* Revised Petition at 16.

Contention 1 is directed instead at an unspecified “emergency plan on file with Miami-Dade County” (Revised Petition at 11), which CASE claims contains certain deficiencies. In failing to identify the document whose shortcomings CASE challenges, Contention 1 is inadmissible as in violation 10 C.F.R. § 2.309(f)(1)(vi). This deficiency is particularly grave because most of the alleged deficiencies in the unspecified plan cannot be correlated with an official document. The Miami-Dade County Radiological Emergency Preparedness Plan (“Miami-Dade EP”), presumably the document at which Contention 1 is directed, provides no support for CASE’s claims and in fact contradicts them.⁷

Contention 1 is deficient also in several other ways. It seeks to raise issues outside the scope of this proceeding; it challenges Commission regulations; it is unsupported by facts or expert opinion or its assertions are contradicted by the very documents it cites; and it fails to take issue with documents, such as the analyses and evacuation time estimates for Turkey Point contained in the ETE Report, that provide the predicate for the acceptability of the offsite emergency plans that support the Application.

⁷ The Miami-Dade EP is a public document. We are enclosing as Exhibit 1 the pages from the plan that contain information relevant to CASE’s claims.

b. CASE Fails to Address the FEMA Finding of Offsite Plan Adequacy

To the extent that CASE Contention 1 challenges the Miami-Dade EP, such a challenge is inconsistent with the NRC regulations. 10 C.F.R. § 50.47(a)(1) states that in order for the NRC to approve a license application for a new reactor, the NRC must make a finding that there is “reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.” With respect to offsite emergency plans, 10 C.F.R. § 50.47(a)(2) states that such a finding will be based on a review of the Federal Emergency Management Agency (“FEMA”) findings and determinations as to whether State and local emergency plans are adequate and whether there is reasonable assurance that they can be implemented. Here, FEMA has made the determination that the offsite emergency plans for Turkey Point 6 & 7 “are adequate, and there is Reasonable Assurance that the plans can be implemented with no corrections needed.” Letter from FEMA to NRC dated December 23, 2009, Exhibit 2 hereto.

According to the NRC regulations, “[i]n any NRC licensing proceeding, a FEMA finding will constitute a rebuttable presumption on questions of adequacy and implementation capability.” 10 C.F.R. § 50.47(a)(2). CASE Contention 1 does not seek to rebut, or even refer to, the FEMA finding that the offsite emergency plans for Turkey Point 6 & 7 are adequate and can be implemented. Under the Commission’s regulations, the FEMA finding is presumed correct unless rebutted by evidence proffered by the Petitioner. *See Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-90-10, 32 NRC 218, 222 (1990) (“FEMA’s views carry great weight and are rebuttably presumed correct in our emergency planning proceedings”); *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-90-03, 31 NRC 219, 249

n.47 (1990) (“FEMA’s conclusions are presumed to be correct unless rebutted”). Interested persons are given the opportunity to rebut FEMA’s views, but they must put forth a contention which satisfies the Commission’s contention admissibility requirements by raising a genuine dispute with FEMA’s views. *See Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), ALAB-845, 24 NRC 220, 239 (1986) (holding that although FEMA findings are only rebuttable presumptions, a party must proffer a contention meeting the admissibility requirements before it can exercise its right to challenge a FEMA finding at a hearing). In practice, “this [rebuttable presumption status] has been construed to mean that in the absence of contrary evidence, the FEMA finding carries the day.” *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), LPB-88-32, 28 NRC 667, 714 (1988) *aff’d in part and rev’d in part on other grounds*, ALAB-924, 30 NRC 331 (1989) (citations omitted). Here, because the Contention offers no evidence to rebut the FEMA finding, that finding is presumed to be correct and to “carry the day.” Therefore, the Contention is inadmissible for it does not raise a dispute of law or fact with the Application.

c. Contention 1 is not Supported by Facts or Expert Opinion

CASE asserts four separate sets of alleged “facts” in support of Contention 1. Each set is addressed separately below. None satisfies the requirements of 10 C.F.R. § 2.309(f)(1)(v).⁸

⁸ One of the exhibits filed by CASE with its Revised Petition is an “Expert Declaration by Dr. Philip K. Stoddard in Support of Petitioner’s Standing to Intervene in this Proceeding,” which contains many of the same assertions made in Contention 1. The Revised Petition does not mention Dr. Stoddard’s Declaration as providing support for the claims made in Contention 1 and the Declaration itself contains no

Footnote continued on next page

(i) The challenge to the adequacy of the Miami-Dade County evacuation plans is lacking in factual support and improperly challenges the NRC regulations

The first set of allegations asserted by CASE to support its claim that the Miami-Dade County EP is inadequate is that at-risk individuals in the event of a radiological emergency could not be evacuated in a timely manner. CASE alleges that “[b]ecause the radiation plume may extend 50 miles (Ingestion Exposure Pathway EPZ) or more, people in the Florida Keys and throughout South Dade would further congest the evacuation routes.” Revised Petition at 13. Such an allegation must be rejected as a challenge to the NRC regulations, which require only planning for the potential evacuation of individuals within the ten-mile Plume Exposure Pathway Emergency Planning Zone (“EPZ”). 10 C.F.R. §§ 50.47(b)(10) and (c)(2); Appendix E to 10 C.F.R. Part 50.⁹ By implying that evacuation planning is required beyond the Plume Exposure Pathway EPZ, Petitioner is improperly attempting to collaterally attack the Commission’s regulations. *See Shoreham*, CLI-87-12, 26 NRC at 394-95 (1987) (10 C.F.R. § 50.47(c)(2) precludes adjustments on safety grounds to the size of an EPZ that is “about 10 miles in radius”); *Citizens Task Force of Chapel Hill*, DPRM-90-1, 32 NRC 281, 290-92 (1990) (rejecting petition to expand EPZ from 10 to 20 miles in radius).

Next, CASE cites (Revised Petition at 13) a Florida Department of Community Affairs document, “Integrating Hazard Mitigation into Comprehensive Planning—

references to the sources, if any, for the factual assertions and opinions contained therein. In any event, there is nothing in the Declaration of Dr. Stoddard (who is the Mayor of South Miami) to show that he has any expertise on emergency planning matters.

⁹ CASE also claims that “[e]ven a moderate wind from the south would overtake people fleeing the evacuation area.” This is a mere opinion without any supporting evidence.

Miami-Dade County Profile,” available at

http://www.dca.state.fl.us/fdcp/dcp/hazardmitigation/MapsProfiles/MiamiDade/Miami-DadeProfile_final.pdf, which states that up to 17 hours would be required to evacuate coastal areas of Miami-Dade County. However, the figure in the cited document applies to the evacuation of a population at risk of 1.1 million people in the event of a Category 3 or higher hurricane. *See id.* at 3 and Tables 2.1 and 2.2. The *maximum* population theoretically requiring evacuation, as CASE itself recognizes, is only 187,000 people. Revised Petition at 16.¹⁰ It is unclear why CASE chose to cite the 17 hours presented in this document, since in Contention 2 it quotes without disagreement the ETE Report as predicting that it will take “from 6 to 11.4 hours to evacuate 100% of the population.” Revised Petition at 16. In any event, CASE provides no facts supporting its claim that it would take 17 hours to implement the evacuation of the affected population within the Plume Exposure Pathway EPZ.

CASE also claims in Contention 1 that evacuation would be impeded because “parents working outside the evacuation zone would have to drive back into the zone to retrieve their children, adding to traffic congestion and further delaying evacuation.” Revised Petition at 13. However, the Miami-Dade EP does not call for parents to pick up their children in the event an evacuation is ordered. Instead, it states: “The public school enrollment within the 10-mile EPZ is approximately 48,000. If an evacuation is ordered

¹⁰ In reality, only a fraction of the population within the Plume Exposure Pathway EPZ, i.e., those persons located downwind of the radioactive plume, would need to be evacuated. As indicated in the Miami-Dade EP: “The 10-mile plume exposure pathway is sub-divided into 10 geographically identifiable areas. ... Protective actions for the plume exposure pathway are designed to avoid or reduce the dose from potential exposure of radioactive materials and may include sheltering, evacuation, and the use of potassium iodide where appropriate. Factors such as wind speed, direction, and projected doses shall determine the area(s) that could require protective actions.” Miami-Dade EP at 3.

during school hours the Miami-Dade County Public Schools shall dispatch school buses to pick up students and transport them to host schools outside the 10-mile EPZ. Families have been advised and press releases shall be issued to remind them not to pick up children from their school, but to reunite at host schools.” Miami-Dade EP at 19. With respect to private schools, “Miami-Dade Corrections and Miami-Dade Transit may provide evacuation assistance for those facilities in affected areas that require it. Children evacuated from private schools and day cares shall be taken to the emergency reception center. It shall be the school administrator's responsibility to implement reunification measures for the children and their families.” *Id.*¹¹ *See also*, http://www.miamidade.gov/oem/turkeypoint_schools.asp, which lists the “host schools” outside the 10-mile EPZ to which children will be evacuated and states that, upon school evacuation, “parents will be instructed to pick up their children at the host school.”

Thus, CASE provides no factual support for its claim that evacuation of affected individuals could not be achieved in a timely manner in the event of a radiological emergency at Turkey Point Units 6 & 7.

¹¹ The document cited by CASE (*see* Revised Petition at 13), a Preparedness Planning Sheet issued by the Miami-Dade Office of Emergency Management, does not indicate that parents would need to drive back into the evacuated zone to pick up their children. The document says “[A]ctivation of your plan should begin as early as possible because of the time it takes for parents or guardians to respond to your facility to pick up their children.” The “facility” referred to here are not the children’s schools, but the host schools outside the evacuation zone where parents would be reunited with their evacuated children. *See* http://www.miamidade.gov/oem/library/preparedness_planning_sheet.pdf at 1.

(ii) There is no factual support for the challenge to the adequacy of the sheltering capacity

As the second set of allegations in support of Contention 1, CASE asserts that “[t]he Tamiami Park Emergency Reception Center (ERC) intended to hold evacuees in Miami-Dade County has a host capacity for 1000 evacuees and a reported usage capacity of 2450. . . . Thus, plans to evacuate people in the radiation plume could not accommodate 98% of residents in the 10-mile EPZ, approximately 126,000 people according to the year 2000 U.S. Census for the communities of Cutler Bay, Florida City, Goulds, Lakes by the Bay, Leisure City, Naranja, Princeton, South Miami Heights.” Revised Petition at 13-14. CASE’s claim is based on the demonstrably erroneous assumption that evacuees who are taken to the Tamiami Park ERC are intended to stay there. In reality, “[e]vacuees will be encouraged to go to the Tamiami Park ERC for monitoring and decontamination.” Miami-Dade EP at 13. From there, “[e]vacuees shall be directed to temporary evacuation centers staffed by the American Red Cross (ARC) after receiving an initial screening and other necessary emergency services at the Emergency Reception Center. If it becomes necessary to provide shelter for an extended period of time, FPL, the Greater Miami Tourism and Visitors Bureau and the ARC shall determine the feasibility of relocating evacuees to area hotels and motels.” *Id.* at 18.¹²

¹² CASE cites <http://www.floridadisaster.org/Response/engineers/documents/2008SESP/2008SESP-AppxA/2008SESP-AppxA-Miami-Dade.pdf> as the source of the capacity of the Tamiami Park ERC. That document, in addition to giving the total capacity of the facility as 2,450 people, indicates that the planned usage of the facility is for 2,450 people. It does not support CASE’s claim that there is a plan to shelter all evacuees at the ERC.

One of the documents cited by CASE shows that there is excess shelter capacity in Miami-Dade County to accommodate evacuations from radiological emergencies: “Currently, the State Shelter Plan reports that there is space for 90,958 people in the County’s shelters. The County currently has a surplus capacity of 30,958 spaces. It is projected that by 2009, shelter demand will increase as the population increases, but the County will still have a surplus of 36,182 spaces if shelter capacity is maintained.” http://www.dca.state.fl.us/fdcp/dcp/hazardmitigation/MapsProfiles/MiamiDade/Miami-DadeProfile_final.pdf at 4-5. Thus, CASE’s allegation that the sheltering capacity will be inadequate to accommodate those needing to be evacuated in a radiological emergency at Turkey Point has no factual basis.

(iii) The allegation that KI distribution will not be timely to provide best protection against thyroid cancer is based on an erroneous premise and has no factual support

CASE claims that (1) in the event of an emergency radiation release, the time required to evacuate the 10-mile EPZ to the Tamiami Park ERC (up to 17 hours) would be too great to prevent initial exposure to inhaled radioiodines, and (2) Miami-Dade County has no effective plan to transport potassium iodide (“KI”) from the “FIU campus” to residents who shelter-in-place in their houses or businesses prior to their exposure from a moving radiation cloud. Revised Petition at 14. The first point is based on the unsupported assumption that it will take 17 hours to evacuate those within the Plume Exposure Pathway EPZ to the Tamiami Park ERC. As discussed above, the 17 hour time to evacuate is inapplicable since it is the estimated time to evacuate over one million people from all of Miami-Dade County in the event of a Category 3 or higher hurricane. The actual evacuation times will depend on the zone being evacuated, the time of day, the

day of the week, the season, and the weather conditions. FPL has developed detailed evacuation time estimates that take into account all those factors. These are presented in the ETE Report, which CASE has reviewed but does not address in Contention 1.

The second point is based on several unwarranted and unsupported assertions. CASE alleges, with no factual support: (1) that people who shelter-in-place will need to be provided with KI; (2) that the Tamiami Park ERC is the repository of all the KI that may be distributed to the public; and (3) that the Miami-Dade County has “no effective plan to transport KI” to those who shelter-in-place.

The decision whether to distribute KI is not made by the Miami-Dade County officials but by the State Health Officer and guidance for such decisions is detailed in Florida Department of Health, Bureau of Radiation Control. Miami-Dade EP at 17. NRC regulations do not require that KI be distributed in the event of a radiological accident but only that the emergency plans for the licensee and offsite organizations develop a range of protective actions for the plume exposure pathway EPZ for emergency workers and the public, including “evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), *as appropriate.*” 10 C.F.R. § 50.47(b)(10) (emphasis added). The State of Florida Emergency Plan calls for KI to be provided to evacuees outside of the emergency planning zone, but does not call for the pre-distribution of KI to those residing within the 10-mile EPZ. Pursuant to the State of Florida Emergency Plan, KI is provided at the Tamiami Park ERC as part of the evacuation process, but only when radioactive iodine levels are of concern. Miami-Dade County EP at 17. CASE cites no facts that would render this approach inadequate.

(iv) Challenges to the certified AP1000 design are outside the scope of a COL proceeding

The last set of allegations by CASE in support of Contention 1 is that “FPL proposes to build the untested Westinghouse AP1000 reactor design for TPN 6 & 7. Analysis of the AP1000 by nuclear engineer Arnie Gundersen has revealed an elevated likelihood of corrosion leakage in combination with a ‘chimney effect’ in the containment housing that would rapidly vent radiation into the atmosphere during a core meltdown. Thus, the needs for more effective plans for evacuation and KI distribution are more compelling for TPN 6 & 7 than for the existing TPN 3 & 4 reactors.” Revised Petition at 14.

A challenge to the AP1000 certified design does not present a litigable issue with respect to the adequacy of the Application, because it constitutes a direct attack on the NRC’s design certification process. Subpart C of 10 C.F.R. Part 52 sets forth the process for obtaining a COL for a nuclear power facility and allows a COL applicant to reference a standard design certification or an application for a design certification. 10 C.F.R. § 52.55(c). Consistent with that regulation, the Application references the AP1000 standard design certification rule. Issues settled by the AP1000 design certification rule are not subject to challenge in a subsequent COLA proceeding. 10 C.F.R. § 52.63(a)(1). Those issues include “the structures, systems, components, and design features of the AP1000 design,” which are “ruled to comply with the provisions of the Atomic Energy Act of 1954, as amended, and the applicable regulations identified in Section V of this appendix; and therefore, provide adequate protection to the health and safety of the public.” Appendix D to 10 C.F.R. Part 52, Section VI.A. Thus, the claims encompassed

by this aspect of Contention 1 are outside the scope of this proceeding and are not litigable. In addition, CASE is not asserting that the alleged vulnerability of the AP1000 containment to corrosion constitutes an emergency planning deficiency, but only that it “increases the need” for more effective emergency plans. Such an assertion does not raise a litigable issue.

d. Contention 1 fails to take issue with the emergency planning provisions in the Application, in Violation of 10 C.F.R. § 2.309(f)(1)(vi)

As discussed above, CASE appears to not have reviewed most, if not all, portions of the Application that deal with emergency planning issues, including Part 5 (the Turkey Point Plant Radiological Emergency Plan For Turkey Point Units 6 & 7), the State of Florida Radiological Emergency Management Plan nor its Annex A, Appendix II (the Turkey Point Nuclear Power Plant Site Plan), or even the FEMA finding that the offsite emergency plans for Turkey Point 6 & 7 are adequate and capable of being implemented. As noted earlier, a petitioner must “read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant’s position and the petitioner’s opposing view,” and “demonstrate that a dispute exists between it and the applicant on a material issue of fact or law.” Final Rule, 54 Fed. Reg. at 33,170; *see also, Millstone*, CLI-01-24, 54 NRC at 358. A contention that does not directly controvert a position taken by the applicant in the application will be dismissed. *See Comanche Peak*, LBP-92-37, 36 NRC at 384. At most, CASE has reviewed the Miami-Dade EP and has chosen to ignore its provisions. Written in ignorance (or disregard) of all these relevant portions of the Application, Contention 1 does not even begin to comply with the requirements of 10 C.F.R. § 2.309(f)(1)(vi).

For all these reasons, CASE Contention 1 is inadmissible.¹³

2. Contention 2 -- Failure to Provide for the Safe and Orderly Evacuation of the Population During or following a Nuclear Event

CASE Contention 2 alleges:

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 CFR 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.

Revised Petition at 16. In support of this contention, CASE provides the following:

According to the population statistics provided by the FPL COL there are 187,374 people in the EPZ within 10 miles of Turkey Point 9 [sic]; that number will increase to 280,000 by 2080. (ETE Table 3-2 EPZ Permanent Resident Population). The COL information ETE states that it will take from 6 to 11.4 hours to evacuate 100% of the population plus up to 6 hours for some of the population to prepare to evacuate. These evacuation and preparation times are too long to protect the health and safety of the public.

* * *

¹³ At the end of its discussion of Contention 1, CASE reproduces a communication from the U.S. Coast Guard that indicates that “any emergency assistance that the Coast Guard may provide would be limited by the fact that Coast Guard crews are not equipped or trained for radiological response, and thus, cannot be exposed to radiological contamination. Coast Guard assets will be restricted to activities and geographic locations that are air monitored for radioactive fallout and are certified to be safe without protective clothing or equipment. Consequently, the Coast Guard is unable to act as the primary responder for nuclear power plant disasters.” Revised Petition at 15. Nowhere does CASE explain what relevance if any this communication would have to CASE’s claim that the Miami-Dade County EP is inadequate or to any aspect of the claims made in Contention 1.

NUREG 0654 advocates evacuation over sheltering yet the FPL COL indicates that sheltering is an acceptable alternative for some part of the population. In addition, the use of the existing Turkey Point evacuation plan does not reflect the LARGE expansion in permanent population that has occurred between 1970 and now.

Id. at 16.

a. FPL Response to Contention 2: Overview

Contention 2 appears to be a subset of Contention 1, since it repeats the allegation made in Contention 1 that the evacuation times in the event of a radiological emergency at Turkey Point 6 & 7 are “too long to protect the health and safety of the public.” Revised Petition at 16. Nowhere in the discussion of Contention 2 does CASE provide any support for its claim that the evacuation times are “too long.” CASE also argues that sheltering in place is not an acceptable alternative (*id.*), even though the NRC regulations *require* that emergency plans provide the capability of sheltering in place portions of the population, as appropriate. For those reasons, Contention 2 fails to comply with the requirements of 10 C.F.R. §§ 2.309(f)(1)(iii), (v) and (vi).

b. The Challenge to the Evacuation Times in Contention 2 has no Factual Support and does not Raise a Litigable Issue

CASE cites the ETE Report that supports the Application as establishing a maximum time of 11.4 hours to evacuate 100% of the population. Revised Petition at 16. CASE does not identify any deficiency in the ETE Report, but merely states that the evacuation times presented there are “too long.” *Id.* However, a mere allegation that a portion of the application is inadequate does not give rise to a genuine dispute unless the allegation is supported by facts and a reasoned statement of why the application is unacceptable in some material respect. *Turkey Point*, LBP-90-16, 31 NRC at 521 & n.12

(1990). CASE provides nothing of the sort. Contention 2, therefore, must be rejected as fatally flawed. 10 C.F.R. § 2.309(f)(1)(vi); *Millstone*, CLI-01-24, 54 NRC at 358.

Much of the discussion in Contention 2 centers on a prediction that the population in the Plume Exposure Pathway EPZ will increase significantly during the term of the licenses for Turkey Point Units 6 & 7. Revised Petition at 17-18. However, CASE fails to point to any requirement for incorporating potential population increases when evaluating the ability to conduct a timely evacuation. Indeed, U.S. Census data or other reliable data should be made current by adjusting them for population growth as necessary, but NUREG-0654 only “requires adjustment of census data that is not current and accurate, and *not projected evacuation time estimates for future populations.*” *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), LBP-83-32A, 17 NRC 1170, 1179 (1983) (emphasis added). An ETE is an estimate based upon the snapshot of the population at the time the ETE study is prepared;¹⁴ there is no requirement that it incorporate a forecast of the population as of a later date, and CASE has not alleged any such requirement.

CASE also appears to challenge the ability to carry out an evacuation as planned.

CASE asserts:

The plans and procedures provided in the subject COL assume a perfect situation where everyone follows them and there is no emotional or situational anxiety present.

¹⁴ See “Development of Evacuation Time Estimate Studies for Nuclear Power Plants,” NUREG/CR-6863, Sandia National Laboratories (2005), § 3.8, available at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/contract/cr6863/>. Since an ETE is based upon a snapshot of information existing at the time it is developed, the ETE is periodically evaluated and updated, including taking into account actual changes to the population. *Id.* See also *Seabrook*, LBP-83-32A, 17 NRC at 1179.

Experience and studies have shown that in extreme evacuation situations the public will not follow an orderly procedure. Panic and fear prevail and any attempt at planned evacuation is impossible, especially in a nuclear event.

It is also the case that many trained workers on whom the authorities are planning to maintain order and carry out assigned duties do not do so and join the evacuation. If they have families, you must assume that their safety will supersede that of others.

By adding two nuclear reactors to the two already at Turkey Point, the possibility and probability of a nuclear event is increased exponentially. And an event would not have to be catastrophic; even a rumor of a significant leak of radio active gas or vapor could cause panic in the area. Also, since there are two non-nuclear power plants at Turkey Point, a nuclear event could result in shutting them down also due to lack of workers and operators who would most likely not be willing to stay or return to a radioactive site.

Revised Petition at 22-23. The above discussion consists of a series of claims offered without any factual support. The claim that an evacuation of the ten-mile area surrounding Turkey Point will be impeded or precluded by panic, or by the desertion of trained workers, has no basis in fact and does not rise above mere speculation. A contention “will be ruled inadmissible if the petitioner ‘has offered no tangible information, no experts, no substantive affidavits,’ but instead only ‘bare assertions and speculation.’” *Fansteel*, CLI-03-13, 58 NRC at 203) (quoting *GPU Nuclear, Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 208 (2000)). Since no facts are cited in support of CASE’s claims, Contention 2 must be rejected for failure to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v).

c. CASE’s Questioning of Sheltering as an Emergency Response Alternative is an Impermissible Challenge to the NRC Regulations

CASE claims that NUREG 0654 “advocates evacuation over sheltering yet the FPL COL indicates that sheltering is an acceptable alternative for some part of the population.” Revised Petition at 16; *see also id.* at 19. CASE misconstrues the guidance in NUREG 0654; moreover, CASE’s implicit position that sheltering may not be relied upon is a challenge to the NRC regulations, which require that sheltering be included as a viable option in an acceptable emergency plan.

CASE’s claim seems to be based on Supplement 3 to NUREG 0654 (July 1996), *available at* <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0654/r1/s3/>. That document has now been superseded and replaced by a Draft Revision 1 to Supplement 3 to NUREG 0654, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, NUREG-0654 FEMA-REP-1, Rev.1 Supplement 3 (February 2010), *available at* <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0654/r1/s3r1/>. The revised guidance indicates that “[s]heltering-in-place should receive more emphasis in protective action strategies because it is more protective than radial evacuation under rapidly progressing severe accidents at sites with longer evacuation times.” FEMA-REP-1, Rev.1 Supplement 3 at 2. Therefore, sheltering in place remains a viable protective strategy, and is indeed the preferred response under certain accident scenarios.¹⁵ In addition,

¹⁵ The NRC’s website provides the following guidance to the public with respect to responding to a warning of a radiological emergency: “If you get such a warning, tune your radio or television to the Emergency Alert System station for your area. The EAS station for your area is identified in the emergency

Footnote continued on next page

sheltering-in-place is one of the response options that the NRC requires be included in the emergency response plans for power reactors:

A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, *sheltering*, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

10 C.F.R. § 50.47(b)(10) (emphasis added). Therefore, in finding fault with the inclusion of sheltering in the Turkey Point emergency plans, CASE is challenging the NRC regulations. Such a challenge does not raise an admissible contention since it is outside the permissible scope of a licensing proceeding. 10 C.F.R. § 2.309(f)(1)(iii); 10 C.F.R. § 2.335(a); *see also Vermont Yankee*, CLI-07-03, 65 NRC at 18 n.15.

Contention 2 also contains a lengthy quote from an article, "Evacuation Behavior In Response To Nuclear Power Plant Accidents," by Donald Zeigler and James Johnson, Jr. which appeared in the May, 1984 issue of *The Professional Geographer*. Revised Petition at 24-25. CASE provides no information as to the credentials of the authors or whether the article has been received with approval by knowledgeable emergency response professionals. The cited excerpts consist of a series of conclusory opinions offered without any validating references. Some of the opinions challenge the NRC

preparedness information you receive annually. Follow the instructions you receive from this station. Your instructions may include directions for evacuating or for remaining in place (called sheltering) to reduce any possible exposure to radiation." <http://www.nrc.gov/about-nrc/emerg-preparedness/in-radiological-emerg.html>. Clearly, the NRC regards sheltering in place as one of the actions that may be taken in the event of a radiological emergency at a nuclear reactor.

regulations, such as contesting the validity of the 10-mile Plume Exposure Pathway EPZ. Others merely express the views of the authors (*e.g.*, “[u]ltimately, the only relevant protection, however, is prevention. If you want real civil defense, then we must shut these dangerous and aging reactors down.”) Moreover, even if the discussion in the article had been accurate as of its writing, it would not reflect the developments in emergency response that have occurred in the more than thirty years since the Three Mile Island accident, which provided the basis for the article. In short, the article excerpts quoted by CASE have no probative value and do not identify any deficiency in the emergency response arrangements for Turkey Point 6 & 7.

For these reasons, Contention 2 is inadmissible.

3. Cooling Tower Release of Particulates into the Atmosphere

CASE Contention 3 asserts:

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.

Revised Petition at 26. CASE offers the following basis for this contention:

[T]he six cooling towers for Turkey Point 6&7 will evaporate 41.5 MGD of water which will include 943 tons annually of particulates) [sic] when sea water is used and 55 tons annually of particulates when recycled [sic] water is used annually which will be suspended in aerosol dispersed [sic] over the surrounding area. An FPL model diagram (presented in a power point presentation on August 13, 2010 and not yet available on line) shows the dispersion of

that vapor in a neat pattern around the plant assuming average wind conditions. However, the average does not fully reflect the many days when the wind blows from the SE at 15 to 25 MPH for hours on end. That would carry the now condensed and concentrated residue 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. And the diagram shows that 63% will fall close to the plant, and on Biscayne National Park which abuts the FPL property to the north.

Id. at 27.

a. FPL Response to Contention 3: Overview

Contention 3 claims that FPL's Application is deficient because it fails to address the effects of particulate matter which will be deposited on areas surrounding the Turkey Point Units 6 & 7 site due to cooling tower drift.¹⁶ CASE describes such particulates as including "pesticides, human and animal growth hormones, home and industrial chemicals." Revised Petition at 28. Later on, CASE provides a long list of "contaminants" "typically" found in municipal waste water. *Id.* at 29-30. Thus, CASE uses the term "particulate matter" to refer, not to the salt that represents the main constituent of the solid releases from the cooling tower drift, but a number of other substances that are found (or may be found) in reclaimed municipal waste water.¹⁷

Contention 3 is inadmissible because CASE fails to: (1) demonstrate that the issue is within the scope of this proceeding; (2) provide facts or expert opinion to support the

¹⁶ While the cooling towers at Turkey Point 6 & 7 are part of a closed system, there are inevitable losses to the atmosphere through evaporation and drift. ER at 3.3-2 and 3.4-1.

¹⁷ The ER contains a detailed analysis of the environmental impacts of salt water drift from cooling tower operation. *See* ER Section 5.3.3.2.2. The analysis shows that the impact of salt drift on vegetation and local terrestrial ecosystems would be SMALL and would not warrant mitigation beyond potential impacts on the crocodile population, which are managed under a separate program. ER at 5.3-8 to 5.3-9. CASE does not contest, or even refer to, the effects of salt drift from cooling tower operation.

contention; and (3) demonstrate the existence of a genuine dispute with the Applicant on a material issue of law or fact. 10 C.F.R. §§ 2.309(f)(1)(iii), (v) and (vi).

b. CASE Fails to Demonstrate that Contention 3 Raises an Issue that is Within the Scope of this Proceeding, as Required by 10 C.F.R. § 2.309(f)(1)(iii)

The National Environmental Policy Act (“NEPA”) requires Federal agencies, as part of their decision-making process, to consider the environmental impacts of actions under their jurisdiction.¹⁸ The NRC has promulgated regulations to implement NEPA’s requirements – 10 C.F.R. Part 51. The NRC’s Environmental Standard Review Plan (“ESRP”) provides guidance to the NRC Staff on implementing the provisions of 10 C.F.R. Part 51.¹⁹ CASE points to no provision in NEPA, 10 C.F.R. Part 51, or the ESRP that calls for an evaluation of the potential impacts from the cooling tower “particulate matter” releases that would result from the licensing of Turkey Point Units 6 & 7.²⁰

¹⁸ 42 U.S.C. § 4332(2)(C)(i).

¹⁹ Standard Review Plans for Environmental Reviews for Nuclear Power Plants, NUREG-1555 (Oct. 1999).

²⁰ As legal support for Contention 3, CASE cites the preamble of the Atomic Energy Act: “This operation of the cooling towers will violate the criteria of protect(ing) the health and safety [sic] of the public prescribed by the Atomic Energy Act of 1954. The ATOMIC ENERGY ACT OF 1954 (Public Law 83–703 68 Stat. 919 August 30, 1954 TITLE I– ATOMIC ENERGY, CHAPTER 1– DECLARATION, FINDINGS, AND PURPOSE) states: d. The processing and utilization of source, byproduct, and special nuclear material must be regulated in the national interest and in order to provide for the common defense and security and to protect the health and safety of the public. (Empahisis [sic] added).” Revised Petition at 27-28. Such a generalized, non-specific reference to the Act provides no legal support for a contention in a Commission proceeding. See *Duke Energy Carolinas, LLC* (William States Lee III Nuclear Station, Units 1 and 2), LBP-08-17, 68 NRC 431, 451 (2008) (rejecting as inadmissible a contention offering as its basis language from the AEA stating “general policy for use of nuclear power in the United States” that did not “define or address the standards for issuance of a license for a particular nuclear power reactor”); *Duke Cogema Stone & Webster* (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 456 (2001) (rejecting as inadmissible contentions regarding the qualification of NRC Staff where petitioner referenced as legal basis for such contentions “10 C.F.R. 70, Atomic Energy Act, and all other previously cited regulations requiring NRC to protect health and safety”), *rev’d on other grounds*, CLI-02-24, 56 NRC 335 (2002) (quotation omitted).

Since there are no NRC regulations or regulatory guidance calling for the analysis of the effects of “particulate matter” emissions from a nuclear power plant’s cooling towers on the surrounding area, CASE is impermissibly challenging the Commission’s rules. *See* 10 C.F.R. § 2.335(a); *Shoreham*, CLI-87-12, 26 NRC at 394-95; *Three Mile Island*, LBP-83-76, 18 NRC at 1273; *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982) (“In the absence of a ‘regulatory gap,’ the failure to allege a violation of the regulations or an attempt to advocate stricter requirements than those imposed by the regulations will result in a rejection of the contention, the latter as an impermissible collateral attack on the Commission’s rules.”) CASE has provided no demonstration that the evaluation of the impact of “particulate matter” releases is required and thus has not shown that the issue is within the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii).

c. Contention 3 Lacks Factual or Expert Support

The use of external sources of water to provide makeup for the circulating water system and the service water system at Turkey Point Units 6 & 7 is described in Section 3.3.1 of the ER as follows:

Each unit would use closed-cycle, mechanical draft cooling towers for both circulating water system cooling and service water system cooling. Makeup water would be required to replenish circulating water system and service water system water lost to evaporation, drift, and blowdown.

For makeup to the circulating water system, reclaimed water would be supplied to the FPL reclaimed water treatment facility from the MDWASD. In accordance with FDEP regulations (Florida Administrative Code 62-610.668), MDWASD would be required to provide high-level disinfection of reclaimed water before industrial use by FPL in open cooling towers. The FPL reclaimed water

treatment facility would be designed to further treat the reclaimed water from MDWASD prior to use in the circulating water system. The FPL reclaimed water treatment facility would include pumps, trickling filters, clarifiers, deep bed filters, and solids-handling equipment to reduce the levels of iron, magnesium, oil and grease, total suspended solids, nutrients, and silica to usable levels for the circulating water system.

From the FPL reclaimed water treatment facility, the treated reclaimed water would be piped to and stored in the makeup water reservoir before being pumped to the circulating water system cooling tower basins for each unit. Additional circulating water makeup would be saltwater supplied from radial collector wells. The wells would be located on the Turkey Point peninsula, east of the existing units. These wells would provide water to the circulating water system cooling tower basins. Saltwater would be used in instances where sufficient supply and/or quality of reclaimed water from the MDWASD would be unavailable to Units 6 & 7.

ER at 3.3-1. The ER describes the measures that would be taken to treat the wastewater prior to its use:

Reclaimed water from the MDWASD would be treated at the FPL reclaimed water treatment facility and used as circulating water system cooling tower makeup. This treatment would occur before storage in the makeup water reservoir. The makeup water for the circulating water cooling towers would be treated to prevent biofouling in the raw water supply piping to the circulating water cooling towers. Reclaimed water and saltwater would have separate chemical treatments for use in the cooling towers.

Additional treatment for biofouling, scaling, and suspended matter, with biocides, antiscalants, and dispersants would be performed as needed for the circulating water system and service water system. Treatment for the circulating water system (reclaimed water and saltwater) would occur through injection of chemicals from a local chemical feed system into system piping. Treatment for the service water system would occur through injection of chemicals from the turbine island chemical feed system into system piping. Cooling water chemistry would be controlled by the

addition of chemicals and maintaining the proper cycles of concentration.

ER, Section 3.3.2.1 at 3.3-3. Sections 5.3.3.1 and 5.3.3.1.3 of the ER describe the mechanism for drift creation from the cooling towers as follows:

Cooling towers evaporate water to dissipate heat to the atmosphere. Evaporation is followed by partial recondensation, which, with the right atmospheric conditions, creates a visible mist or plume. The plume creates the potential for shadowing, fogging, icing, and localized increases in humidity. In addition, small water droplets are blown out of the tops of the cooling towers. These water droplets are referred to as drift and could be deposited, along with any dissolved salts, on vegetation and surfaces surrounding the cooling towers.

For Units 6 & 7, the EPA CALPUFF (U.S. EPA 2007a) and AERMOD (U.S. EPA 2007b) dispersion models were used to evaluate cooling tower plume behavior and to estimate the frequency of occurrence and length of visible cooling tower plumes. These models are the preferred models for calculating deposition and fogging by the Florida Department of Environmental Protection (FDEP) and were used for consistency between the FDEP review and this ER. Five years (2001 through 2005) of hourly meteorological data from the Miami International Airport (surface and upper air observations) were used.

* * *

Water droplets blown from the mechanical draft circulating water system cooling towers (known as “drift”) would have the same concentration of solids as the water in the makeup water reservoir. As the water droplets blown from the cooling towers evaporate, either in the air or on vegetation or equipment, these solids would be deposited. The dissolved and suspended solid concentrations in the makeup water reservoir would be controlled through use of the makeup and blowdown water lines. As described in Section 3.4, makeup water to the circulating water system cooling towers may be provided via the use of reclaimed water and/or saltwater from radial collector wells installed below Biscayne Bay. For conservatism, the maximum total dissolved solids value was used from the radial collector wells, which would be in the range of 30,000 parts per million (ppm) during normal operating conditions.

The estimated amount of dissolved solids that could potentially escape from all of the cooling towers as drift is 75 kg/hour during normal operation. This amount of material could be released and dispersed over the area surrounding the Turkey Point plant property once both units are operational.

Id. at 5.3-4 and 5.3-6.

CASE does not contest any of these statements in the ER. Instead, it claims that reclaimed water used as makeup in the cooling towers contains various contaminants and alleges that the use of reclaimed water would necessarily lead to an environmental and human health impact meriting analysis in the Application. CASE provides no documentation tending to show the nature or actual magnitude of the impacts of the contaminants allegedly released in the cooling tower drift. To the contrary, CASE admits that the aerosol released by the cooling towers meets Florida air quality and other State environmental protection standards. Revised Petition at 28, 30, 32.

The use of reclaimed water in industrial cooling towers is regulated under Florida Department of Environmental Protection (“FDEP”) rules 62-610, Part VII, Florida Administrative Code (“F.A.C.”) and the Turkey Point Units 6 & 7 cooling towers will comply with those rules. In accordance with FDEP regulations (F.A.C. 62-610.668), the Miami-Dade Water and Sewer Department (“MDWASD”), which would provide reclaimed water for use in the cooling towers, would be required to provide high-level disinfection of reclaimed water before industrial use by FPL in open cooling towers. ER at 3.3-1; 3.4-5. The reclaimed water treatment facility would be designed to further treat the reclaimed water from MDWASD prior to use in the circulating water system and would include pumps, trickling filters, clarifiers, deep bed filters, and solids-handling

equipment to reduce the levels of iron, magnesium, oil and grease, total suspended solids, nutrients, and silica to usable levels for the circulating water system. *Id.* None of these facts is contested by CASE.

Operation of Turkey Point Units 6 & 7 will also comply with FDEP rule 62-212 and associated permits regulating air pollutants. Under State of Florida prevention of significant deterioration review requirements, all major new or modified sources of air pollutants under the Clean Air Act must be reviewed and have a preconstruction permit issued. Florida's prevention of significant deterioration rules, promulgated from 40 C.F.R. § 51.166, are codified under F.A.C. 62-212.400. In accordance with these rules, the FDEP issued a draft permit for Turkey Point Units 6 & 7 that determined best available control technology for particulate emissions to require a maximum design droplet rate of 0.0005% of the circulating water flow rate from the cooling towers. ER, Table 3.4-2. The Turkey Point Units 6 & 7 circulating water system cooling tower design specification drift rate – conservatively assumed to be 0.0005% of cooling tower water flow – complies with this requirement. ER at 3.3-6; 3.3-8; 3.4-10. CASE does not dispute these facts either.

CASE also does not address issues such as the level of purification that can reasonably be achieved by the MDWASD, the anticipated area of deposition, or the specific levels of various substances that, if released, would be harmful to public health or the environment. Instead, the contention is rife with speculative assertions for which no factual support is offered. CASE claims that “the absolute concentrated amount of particulate falling in the area will be create [sic] health and air quality problems for those who work at the plant and at near by [sic] Biscayne National Park and for area residents

and visitors” and that “[l]ow levels of pollutants breathed in every day will present health problems for them over time.” Revised Petition at 28. And, while admitting that “the particulate concentration will be 5 mcg/cu liter, far below the State permitted [sic] limit of 150 mcg/cu liter,” CASE asserts that “the cumulative impact on local workers and residents from continued exposure to a particulate which includes residue from treated waste must be considered.” *Id.*

It is well established that an unsupported assertion that simply alleges that an issue “must be considered” does not provide the basis for an admissible contention. *Sacramento Municipal Utility District* (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 246 (1993).

CASE includes a long “list of specific compounds *typically* found in municipal waste water” (Revised Petition at 29-30) (emphasis added), together with citations to papers that allegedly substantiate the *typical* presence of these substances in municipal wastewater. CASE, however, makes no effort to show that any of these will actually be present in the reclaimed wastewater used at Turkey Point Units 6 & 7 or in the effluents from the cooling towers, nor what their effect on the health and safety of the public will be. A reference to a number of documents without elaboration and without demonstration that they support a petitioner’s position is insufficient to support a contention. *Calvert Cliffs*, CLI-98-25, 48 NRC at 348 (1998); *see also Tennessee Valley Authority* (Browns Ferry Nuclear Plant, Units 1 and 2), LBP-76-10, 3 NRC 209, 216 (1976). “Parties must clearly identify evidence on which they rely . . . with reference to a specific point. The Commission cannot be faulted for not having searched for a needle

that may be in a haystack.” *Public Service Co. of New Hampshire* (Seabrook Station, Units 1 and 2), CLI-89-03, 29 NRC 234, 241 (1989).

Contention 3 is not supported by any expert declaration or factual information, contrary to the requirements in 10 C.F.R. § 2.309 (f)(1)(v). The requirement to provide expert or factual information must be met at the outset; a contention is not to be admitted “where an intervenor has no facts to support its position.” Final Rule, 54 Fed. Reg. at 33,171. NRC’s Rules of Practice bar contentions based only on generalized suspicions. *McGuire/Catawba*, CLI-03-17, 58 NRC at 424.

d. Contention 3 fails to show that a genuine dispute exists with the Applicant on a material issue of law or fact

As noted above, CASE admits that the particulate content of the drift from the Turkey Point Units 6 & 7 cooling towers “will meet state air quality standards.” Revised Petition at 28; *see also id.* at 30. Also, CASE does not dispute any of the factual information contained in the ER or the FSAR with respect to cooling tower effluents. Nor does it dispute that “the particulate will [under] average wind conditions, stay near the plant and near Biscayne National Park next door.” *Id.* at 32.²¹ CASE alleges, however, that “[t]his *will threaten* the health of employees at both installations and of visitors to Biscayne National Park. On days when stronger than average wind conditions [sic] the particulate will be spread over 65,000 acres of agricultural [sic] land to the west

²¹ CASE cites, and includes as an exhibit, a power point presentation made by FPL at a public meeting with the NRC on August 13, 2010. CASE does not dispute any of the statements made in that presentation with regard to cooling tower drift and states that a diagram included in the presentation “shows the dispersion of that vapor in a neat pattern around the plant assuming average wind conditions.” Revised Petition at 27. Nowhere in the presentation is there a statement that the dispersion patterns shown assume “average wind conditions,” and in any event CASE provides no facts or expert opinion that indicate what the “non-average” wind conditions would need to in order to cause the particulate to spread beyond the contours shown in FPL’s diagram.

and north west where the accumulated particulate *could* threaten health by being absorbed in the fruit and vegetable growing there.” *Id.* (emphases added).

CASE provides no facts to support those speculative assertions. Mere allegations that an application is inadequate do not give rise to a genuine dispute unless the allegations are supported by facts and a reasoned statement of why the application is unacceptable. *Turkey Point*, LBP-90-16, 31 NRC at 521 & n.12.

For these reasons, CASE Contention 3 is fatally defective and should be rejected.

4. Surface Water Exposure Pathways

CASE Contention 4 reads:

The COL 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.

Revised Petition at 32. In support of its contention, CASE quotes the following statement from the ER:

People can be exposed to radiation when deposited airborne radioactivity runs off into or is deposited onto surface water. The exposure pathway can be from drinking the water, external radiation from submersion in the water, external radiation from human activities near the shoreline, or ingestion of fish or shellfish. MACCS2 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.

a. FPL Response to Contention 4: Overview

Contention 4 is inadmissible because it fails to raise a genuine dispute with the Application as to a material issue of law or fact. 10 C.F.R §§ 2.309(f)(1)(v) and (vi).

b. Petitioner’s Claims Regarding Surface Water Exposure Pathways Fail To Show That A Genuine Dispute Exists With The Application On A Material Issue Of Fact Or Law

As set forth above, Contention 4 claims that the ER “omitted the analysis” of certain surface water exposure pathways in its severe accident analysis of consequences to population groups. *See* Revised Petition at 35.²² It is therefore a contention of omission and as such must be rejected because the allegedly missing analysis is included in the ER. Accordingly, the contention fails to raise a genuine dispute with the Application.

CASE argues that the ER omits radiation doses to “persons a) fishing and/or b) consuming marine-based food” contaminated with radionuclides after a severe accident. Revised Petition at 34. CASE bases its claim entirely on the following statement in the ER: “Surface water exposure pathways involving swimming, fishing, boating, and performing activities near the shoreline are not modeled by MACCS2.” *Id.* (citing ER at 7.2.3.2). CASE apparently believes that this statement is *prima facie* evidence of an omission in the analysis, and because the MACCS2 code does not model surface water exposure pathways involving swimming, fishing, boating, and other shoreline activities,

²² “[O]mitting the analysis of these exposure pathways for shoreline activities is unacceptable and renders the application incomplete.” Revised Petition at 35.

it must follow that the Applicant omitted these exposure pathways and the resulting dosages from its analyses. CASE is wrong.

FPL performed an analysis of the exposure consequences of severe accidents to population groups through various exposure pathways, including surface water exposure pathways, and included a discussion of this analysis in the ER. *See* ER at Section 7.2.3. Because MACCS2 only calculates exposures resulting from drinking water, FPL supplemented the analysis by using NRC data from NUREG-1437, Volume 1, Generic Environmental Impact Statement for License Renewal of Nuclear Plants (“GEIS”). *See id* at 7.2-5.²³ The GEIS presents a thorough NRC staff assessment of the impacts of severe accidents. Section 5.3.3.3 of the GEIS specifically addresses the radiation hazard from the deposition of airborne radioactive fallout onto open bodies of water that may lead to internal exposure from the ingestion of contaminated water or seafood ingestion, or external exposure from submersion or other activities near the shoreline. The methodologies described in the GEIS were developed to evaluate the environmental impacts and off-site costs of severe accidents. Section 5.3.3.3 of the GEIS specifically addresses the radiation hazard from the deposition of airborne radioactive fallout onto open bodies of water that may lead to internal exposure from the ingestion of contaminated water or seafood ingestion, or external exposure from submersion or other activities near the shoreline.

²³ Several other COL applicants have relied upon the GEIS to address dose consequences from surface water exposure pathways. *See* Draft Environmental Impact Statement for Combined License for Levy Nuclear Plant Units 1 and 2, NUREG-1941, Vol. 1 at 5.115 (Aug. 2010); *see also* Virgil C. Summer Nuclear Station Units 2 and 3, Combined License Application, Rev. 2, ER at 7.2-5 *and* William States Lee III Nuclear Station Units 1 and 2, Rev. 1, ER at 7.2-5.

The methodologies described in the GEIS were developed to evaluate the environmental impacts and off-site costs of severe accidents. The methodologies and conclusions resulting from their use are broadly applicable beyond the license renewal context. The NRC has confirmed by rule that

the analyses performed for the GEIS represent adequate, plant-specific estimates of the impacts from severe accidents that would generally overpredict, rather than under-predict, environmental consequences. Therefore, the GEIS analysis of the impacts of severe accidents for license renewal is retained and is considered applicable to all plants.

61 Fed. Reg. 28467, 28480 (1996). Thus, the conclusions contained in the GEIS with regards to surface water exposure pathways provide a basis for evaluating similar impacts with respect to a severe accident at Turkey Point Units 6 & 7.

FPL based its assessment of the impacts of submersion in water, shoreline activities, and ingestion of aquatic food on the analyses presented in the GEIS for license renewals for current-generation reactors.²⁴ These analyses indicate that the aquatic-food pathway is about a factor of 20 larger than the water-ingestion pathway dose, which itself is slightly larger than the dose from shoreline activities and significantly larger than the dose from swimming. The Application, therefore, addresses ingestion of aquatic food.

²⁴ MACCS2 calculates the dose from drinking contaminated water. “The MACCS2 severe accident dose-risk to the 50-mile populations from drinking water is 0.013 person-rem per year of AP1000 operation.” ER at 7.2.3.2.

For sites near large water bodies, the NRC evaluation estimated uninterdicted²⁵ aquatic food exposure pathway dose risk which ranged from 270 person-rem per reactor year (Hope Creek on the Delaware Bay) to 5500 person-rem per reactor year (Calvert Cliffs on the Chesapeake Bay). *See* GEIS at Table 5.16. FPL conservatively assumed that the Units 6 & 7 site would more likely be similar to Calvert Cliffs on the Chesapeake Bay. Based on the NRC analysis in the GEIS, the ER concludes in Section 7.2.5 that the “risk from the surface water exposure pathway is small.” *See* ER at 7.2.5. The ER goes on to say that,

Under the severe accident scenarios, surface water is primarily contaminated by atmospheric deposition. The AP1000 atmospheric exposure pathway doses are significantly lower than those of the existing licensed power reactors. Therefore, it is reasonable to conclude that the doses from the surface water exposure pathway at the Units 6 & 7 site would be consistently lower than those for the currently licensed power reactors.

Id.

Accordingly, CASE’s assertion that the Application omits analysis of shoreline activities and seafood ingestion is simply incorrect. CASE has not met its “ironclad obligation” to examine all documentation (such as ER 7.2.3.2, 7.2.5 and the GEIS) relating to the Application. *See Duke Energy Corp.* (Maguire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 386 (2002); *Catawba*, ALAB-687, 16 NRC at 468.

²⁵ The analyses conservatively assume that consumption of contaminated aquatic food would occur, even though in the event of a severe accident the public in the 50-mile Ingestion Exposure Pathway EPZ would be advised to avoid consumption of potentially contaminated food. ER at 7.2-5. Interdiction can reduce doses by as much as a factor of 10. *See* ER at 7.2.3.2 (citing GEIS at 5.3.3.3.2).

CASE also fails to dispute the ER's analysis. Contention 4 does not explain how or why the Applicant's analysis, as set forth above, is insufficient. A petitioner is required to state the applicant's position and its opposing view, and explain why it has a disagreement with the applicant. Final Rule, 54 Fed. Reg. at 33,170; *Millstone*, CLI-01-24, 54 NRC at 358.

In addition, CASE fails to provide any "supporting reasons" showing that there is a genuine dispute as to a *material* issue of law or fact with regard to the calculated dose risk from the surface water exposure pathway. 10 C.F.R. § 2.309(f)(1)(vi).²⁶ The Petitioners' only statement of the consequence of the alleged omission in the ER analysis is that there are residents and tourists who could receive a "higher-than background dose of radiation after a radiological accident." Revised Petition at 33. However, CASE provides no facts that would show that the doses to population allegedly excluded from the analysis would be comparable to those from drinking contaminated water or through other exposure pathways. Allegations that an application is deficient do not give rise to a genuine dispute unless the allegations are supported by facts and a reasoned statement of why the application is unacceptable. *Turkey Point*, LBP-90-16, 31 NRC at 521 & n.12.

²⁶ Contention 4 presumes the materiality of its asserted omissions, but pleads no facts to establish such materiality. The Commission has defined a "material" issue as meaning one where "resolution of the dispute *would make a difference in the outcome* of the licensing proceeding." Final Rule, 54 Fed. Reg. at 33,172 (emphasis added). Contention 4 sets forth nothing to establish that the asserted deficiencies would, if corrected as claimed by the Contention, alter the result of the severe accident mitigation alternatives ("SAMA") evaluations discussed in ER Section 7.3. Ultimately, the purpose of identifying surface water exposure pathways is to support the SAMA analysis. Based, in small part, on the dose consequences obtained from the surface water exposure pathways, the Application concludes that "the maximum averted cost risk of \$64,352 for a single proposed AP1000 at Turkey Point is so low that FPL does not believe there are any design changes, over those already incorporated into the advanced reactor design, that could be determined to be cost-effective." ER at Section 7.3.3. Petitioners do not address this ultimate conclusion and Contention 4 sets forth nothing to establish that the asserted omissions would, if corrected as claimed by the Contention, alter the result of the SAMA evaluations.

Thus, this contention of omission does not establish a genuine dispute with the Application because: (1) contrary to the assertions in the contention, surface water exposure pathways are discussed in the ER; (2) Contention 4 does not address any of the surface water exposure pathway analyses in ER Section 7.2.3.2 and 7.2.5 or in the GEIS, nor does it challenge them as being incorrect or insufficient; and, (3) CASE provides no facts or “supporting reasons” establishing the existence of a dispute regarding a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi).

5. Failure to Consider Sea Level Rise

a. Introduction and Overview of FPL Response to Contention 5

CASE Contention 5 is not a proper contention in either form or content, and should be rejected *ab initio* for its failure to even address, let alone satisfy, the contention admissibility requirements established in 10 C.F.R. § 2.309(f)(1). It does not provide a particularized statement of the issue to be raised, as required by subsection (f)(1)(i). It does not provide any basis for the issue it seeks to raise, whatever that may be, thus failing to satisfy subsection (f)(1)(ii). It is not within the scope of the proceeding, as called for in subsection (f)(1)(iii). It is not material to the findings that the NRC must make, thus violating subsection (f)(1)(iv). While it is accompanied by (in fact, consists entirely of) the unsworn and unsigned statement of an alleged expert, Dr. Harold Wanless, the statements by Dr. Wanless are offered without any factual references and it is questionable whether Dr. Wanless is even an expert, so subsection (f)(1)(v) is not met. Last but not least, Contention 5 does not “show that a genuine dispute exists with the

applicant . . . on a material issue of law or fact,” as required by subsection (f)(1)(vi), because it alleges deficiencies and omissions in the Application that do not exist.

These are not mere deficiencies in form that might, to a limited extent, be attributable to the fact that CASE is a *pro se* intervenor.²⁷ As is further discussed below, Contention 5 is so flawed that it is difficult to ascertain what is being claimed and what requires a response. Neither the Applicant nor the Licensing Board should be forced to guess the claim being asserted.

In Contention 5, CASE argues (through Dr. Wanless) that FPL’s FSAR and ER fail to adequately account for increasing sea levels associated with global climate change. However, Contention 5 is really a contention of omission. Dr. Wanless argues that both

²⁷ The Commission “generally extend[s] some latitude to *pro se* litigants, but they still are expected to comply with [its] procedural rules, including contention pleading requirements.” *South Carolina Electric and Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-01, 71 NRC ___, slip op. at 5 (Jan. 7, 2010) (citing *USEC, Inc.* (America Centrifuge Plant), CLI-06-10, 63 NRC 451, 456-57 (2006); *Shieldalloy Metallurgical Corp.* (Cambridge, Ohio Facility), CLI-99-12, 49 NRC 347, 354 (1999)). As stated in *USEC*:

The Commission recently reemphasized that “no contention will be admitted for litigation in any NRC adjudicatory proceeding unless these [contention] requirements are met.” The contention standards now have been in effect for over 15 years and have proved “effective in focusing litigation” on genuine safety and environmental issues that are relevant to the licensing action. At the same time, these threshold standards have not unduly restricted public participation in our proceedings. Licensing boards continue to grant hearing requests and admit for litigation numerous contentions in a variety of adjudicatory proceedings. Indeed, in another ongoing proceeding similarly involving an application for a uranium enrichment facility, the licensing board admitted several safety and environmental contentions for hearing.

We recognize, nonetheless, that our contention rules require petitioners “to work within a limited time frame to review the license application and any available related licensing documents,” and that this “can pose a significant burden, especially for *pro se* petitioners who are likely to have less available time and resources.” But those participating in our proceeding must be prepared to expend the necessary effort. We are unwilling to convene costly and time-consuming hearings “unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing.”

USEC, CLI-06-10, 63 NRC at 456-57 (footnotes omitted).

the ER and the FSAR “must be considered invalid” because “neither considers and neither incorporates any scientifically valid projection for sea level rise through this century and beyond.” Revised Petition at 33. Dr. Wanless concludes: “Do not see [*sic*] that any of this has been addressed.” *Id.* at 35. Contrary to CASE’s claims, the Application properly accounts for 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. That CASE failed to identify this analysis indicates that it failed to fulfill its “ironclad obligation” to review the application. *See McGuire/Catawba*, CLI-02-28, 56 NRC at 386. Accordingly, Contention 5 is inadmissible.

b. Contention 5 Lacks Specificity

CASE (through Dr. Wanless) challenges both the ER and the FSAR in Contention 5, but fails to identify which of its claims address the ER and which address the FSAR, and which portions of either document are alleged to be deficient. *See* Revised Petition at 33-35. In fact, CASE does little more than exhort that sea level rise should be studied in further detail in the Application. Such non-specific exhortations for additional study do not provide a basis for a contention. An admissible contention “must explain, with specificity, particular safety or legal reasons requiring rejection of the contested [application].” *Millstone*, CLI-01-24, 54 NRC at 359-60.

In addition, CASE argues that 10 C.F.R. § 52.79 “expressly” requires consideration of sea level rise. Revised Petition at 33. But sea level rise is nowhere mentioned in 10 C.F.R. § 52.79. If CASE seeks to litigate whether NRC regulations require FPL to perform a specific sea level rise analysis, it must allege, with specificity, which regulatory provision sets forth the requirement and how it believes FPL has

violated it. Because CASE fails to point to the specific portions of the application it disputes or to the specific regulatory provision it claims to be applicable, Contention 5 is inadmissible. 10 C.F.R. § 2.309(f)(1)(i).

Dr. Wanless makes several numbered claims in his statement, each of which lacks any specificity. For instance, he claims that “[i]ncorporating future sea level changes will affect the population trends for the south Florida area and as such the future power needs.” Revised Petition at 35. It is not clear whether Dr. Wanless is arguing that increasing sea level rise will cause the population of South Florida to decrease, whether it will simply reduce the rate of growth, or whether it will redistribute population to different parts of the region. Nor does Dr. Wanless explain what the effect of such population changes will be or how they will affect the plant.

Dr. Wanless claims that “[i]ncorporating future sea level changes will change the viability of a nuclear power complex that is increasingly isolated from the mainland and sitting in the middle of a combined Biscayne/Florida Bay.” *Id.* It is not clear what Dr. Wanless means by “viability,” but the NRC only reviews issues related to public health, safety, and the common defense and security under the AEA, as well as the environmental impacts of the proposed action under NEPA. *See Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm’n*, 461 U.S. 190, 207 (1983). Project “viability” is an economic issue that the NRC leaves to state regulators.

Dr. Wanless also claims that “[i]ncorporating future sea level changes will dramatically change the ability of the associated cooling complex to function and to remain isolated from and prevent harm to the adjacent marine environment.” Revised

Petition at 35. Once again, this claim is unclear and lacks specificity. Dr. Wanless does not explain what he is referring to when he refers to the “cooling complex”. Is it the cooling canals of the industrial wastewater facility, which are associated with the existing units 1-4 at the site, or the cooling complex that is described in the COL Application for the proposed Units 6 & 7? It is impossible to tell and Dr. Wanless provides no elaboration.

c. Contention 5 Fails to Demonstrate a Genuine Dispute With the Application on a Material Issue

Dr. Wanless argues that human-induced atmospheric warming is leading to accelerating global sea level rise. *Id.* at 33. He claims that sea level in southeast Florida has risen about 9 inches since 1930, or a rate around one foot per century, and that the Science Committee of the Miami-Dade County Climate Change Advisory Task Force has stated that “many respected scientists⁴ [*sic*] now see a likely sea level rise of **at least** 1.5 feet in the coming 50 years and a total of **at least** 3-5 feet by the end of the century, possibly significantly more.” *Id.* at 34 (emphases in original). Dr. Wanless notes that the U.S. Army Corps of Engineers issued a circular directing incorporation of the effects of sea level rise in designing its projects.²⁸ *Id.* However, Dr. Wanless concludes, without any citation, that he “is not aware that sea level rise in all its ramifications has been considered and/or incorporated into” the COLA. *Id.* He argues that incorporation of sea level rise is necessary because it will “change the coastal environments, base-level elevations, storm surge patterns, and population and demographics of southeast Florida

²⁸ ACOE Circular No. 1165-2-211 was issued in July 2009, after FPL’s COLA was filed with the NRC, and, by its terms, applies only to ACOE projects, not to its permitting responsibilities.

and its population by the end of the century.” *Id.* at 35. As described below, the COL Application provides a thorough and comprehensive discussion of the potential impacts of sea level rise on the operation of Turkey Point Units 6 & 7. Because the allegedly omitted information is, in fact, included in FPL’s Application, Contention 5 is inadmissible.

Contrary to Dr. Wanless’ assertion, FPL specifically considered sea level rise in the FSAR in the context of storm protection. Petitioners cannot establish a genuine dispute with the Application by ignoring its contents. *See Shearon Harris*, LBP-82-119A, 16 NRC at 2076; *Catawba*, LBP-82-107A, 16 NRC 1791, 1804 (1982); *Philadelphia Electric Co.* (Limerick Generating Station, Units 1 and 2), LBP-82-43A, 15 NRC at 1504-05.

While no NRC regulation specifically requires applicants to address potential sea level rise, COL applicants must demonstrate that reactors would be protected against hurricanes, earthquakes, tornadoes, extreme temperature, and other environmental conditions. *See* Regulatory Guide 1.206. These analyses require the applicant to determine the design basis flood elevation. FPL conservatively included potential sea level rise in establishing the design basis flood elevation for Turkey Point Units 6 & 7. In Section 2.4 of the FSAR, FPL addressed the probable maximum flooding as a result of hurricanes, tsunamis, seiches, and other flooding events.²⁹ In order to determine the

²⁹ Regulatory Guide 1.206 (September 2006), “Combined License Applications for Nuclear Power Plants” (LWR Edition), Section C.I.2.4.5.2 Surge and Seiche Water Levels, states that COL applicants “should provide historical data related to surges and seiches and discuss considerations of hurricanes, frontal (cyclonic) type windstorms, moving squall lines, and surge mechanisms that are possible and applicable to the site.”

Probable Maximum Storm Surge (“PMSS”), the antecedent water level must be established. FSAR at 2.4.5-5. Following NRC Regulatory Guide 1.59, FPL used the 10 percent exceedance high spring tide, 2.6 feet NAVD 88, as the antecedent water level.³⁰ *Id.* at 2.4.5-5. FPL adjusted the antecedent water level to account for expected sea level rise over the design life of the plant. *Id.* at 2.4.5-5. FPL took the long-term trend in sea level rise in the Miami area, 0.78 foot per century, and conservatively rounded the value up to a full foot per century. *Id.* at 2.4.5-6. FPL added this one-foot sea level rise factor to the 2.6 feet NAVD 88 initial water level condition, generating a 3.6 feet NAVD 88 sea-level-rise adjusted water level. *Id.*

FPL used this adjusted 3.6 feet NAVD 88 water level as the initial water level condition in FPL’s simulation’s using the National Oceanic and Atmospheric Administration’s (NOAA) SLOSH model, which is used to forecast hurricane storm surges. *Id.* The SLOSH model produced a PMSS elevation of 21.1 feet NAVD 88. *Id.* at 2.4.5-10. Combining this PMSS elevation with the 3.7 feet maximum wave run-up, FPL concluded that the maximum water level due to a probable maximum hurricane (adjusted to account for sea level rise) would be 24.8 feet NAVD 88.³¹ *Id.* at 2.4.5-12. The plant area final elevation was designed based on this analysis. *Id.* at 2.4.10-1. The

³⁰ 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. FSAR at 2.45-5.

³¹ In section 2.4.5.2.1 (and Figure 2.4.5-202) FPL addressed historical hurricane events and storm surges in Florida, including a detailed discussion of 1992’s Hurricane Andrew, which made landfall at Fender Point, Florida, approximately 8 miles north of the Turkey Point site. FSAR at 2.4.5-3. The FSAR states that the combined storm surge and astronomical tide from Hurricane Andrew in northern Biscayne Bay ranged from 4 to 6 feet, with a maximum surge level of 16.9 feet near the center of Biscayne Bay. *Id.* at 2.4.5-4.

elevations of floor entrances and openings for all power block structures are at 26 feet NAVD 88. *Id.*; *see also id.* at 2.4.2-4.

Accordingly, projected sea level rise and its impact of storm surge have been *explicitly* considered in the site-specific portion of the design of Turkey Point Units 6 & 7. CASE has a duty to read the application, state its position, and indicate why the Applicant's position is incorrect. *See Millstone*, CLI-01-24, 54 NRC at 358. Contention 5 fails to directly controvert any of this discussion in the FSAR, and fails to demonstrate the existence of a genuine dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi).

Further, Dr. Wanless argues that incorporating sea level rise will affect “the future power needs.” Revised Petition at 35. But Contention 5 fails to discuss, or even reference, the Need for Power discussion in FPL's ER. *See ER*, Chapter 8, “Need for Power.” Accordingly, this claim fails to comply with the requirement of 10 C.F.R. § 2.309(f)(1)(vi) to cite the specific portions of the application in dispute. In any event, Dr. Wanless offers no reason why the NRC should disregard the Need Determination for the Turkey Point Units 6 & 7 project issued by the Florida Public Service Commission.³² The Commission has traditionally deferred to state determinations regarding need for power assessments. According to the Supreme Court, “[t]here is little doubt that under the Atomic Energy Act of 1954, state public utility commissions or similar bodies are empowered to make the initial decision regarding the need for power.” *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 550 (1978).

³² In re: Petition to determine need for Turkey Point Nuclear Units 6 and 7 Electrical Power Plant, by Florida Power & Light Company. Docket No. 070650-EI; Order No. PSC-08-0237-FOF-EI, April 11, 2008, available at <http://www.psc.state.fl.us/library/filings/08/02812-08/02812-08.pdf>.

Because Dr. Wanless references both the ER and the FSAR, it is not clear whether his claims regarding the impact of sea level rise on the reactor and associated facilities are meant to be considered safety claims or NEPA claims. *See* Revised Petition at 33-35. Regardless, these claims are not cognizable under NEPA or Part 51. Part 51 requires COL Applicants to discuss the impact of the proposed action *on the environment*. 10 C.F.R. § 51.45(b)(1). Contention 5 turns this requirement on its head by seeking to require FPL to discuss the impact of the environment on the proposed action (“the ER entirely fails to discuss and analyze the potential impacts of this 1.5 to 5 foot rise in sea level on Units 6 & 7”). Nothing explicit or suggested in NEPA, the NRC’s implementing regulations in Part 51, or NRC guidance requires FPL to analyze the impact of potential sea level rise on the proposed reactors or associated facilities. More importantly, CASE fails to point to any applicable regulation that calls for such an evaluation. Accordingly, Petitioners have provided no legal basis for contending that such an evaluation is required by NEPA.

As to NEPA and public safety matters, the NRC Staff recently published supplemental guidance addressing this very issue. Supplemental Staff Guidance to NUREG 1555, “Environmental Standard Review Plan,” (ESRP) for Consideration of the Effects of Greenhouse Gases and of Climate Change (April 8, 2010), ADAMS Accession Number ML100990185 (“Supplemental Guidance”). There, the NRC Staff explained that, though the Council on Environmental Quality recently published draft guidance stating that agencies should address public safety ramifications of climate change under NEPA, the NRC would not be following that approach. Supplemental Guidance at 8-9. While “it may be entirely appropriate” for some federal agencies to consider “public

health and safety” in their EISs, the NRC would not, because such concerns are already covered by the safety reviews performed under its organic statute. While “[p]ublic health is considered as part of the NRC’s NEPA review . . . public safety is considered in the NRC’s safety evaluation reports (SERs) developed concomitant with its EIS for the regulatory action.” *Id.* The Supplemental Guidance went on to explain:

Apart from any NRC Staff safety evaluation during initial licensing, there is a continuing obligation of a nuclear power plant license holder to ensure that its plant stays within the licensing basis. If it becomes evident that long-term climate changes influences 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. Therefore, while CEQ included the public safety aspect of climate change in its draft guidance, NRC Staff considers this aspect separately for new reactor applications.

Id. at 11.

As the Commission has stated in the context of terrorism:

In any event, a NEPA-driven review of the risks of terrorism would be largely superfluous here, given that the NRC has undertaken extensive efforts to enhance security at nuclear facilities, including (most recently) proposing a new and more stringent “design basis threat rule.” These ongoing post-9/11 enhancements provide the best vehicle for protecting the public.

AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 130 (2007) (footnotes omitted). Similarly, a NEPA-driven review of sea-level rise impacts on Turkey Point Units 6 & 7 and their associated facilities is rendered unnecessary by FPL’s FSAR analysis and the NRC’s ongoing oversight authority under the AEA. Because FPL has designed the plant to account for sea level rise and would be

required to maintain the licensing basis for Turkey Point Units 6 & 7, safety impacts of sea level need not be addressed in the ER.

d. Contention 5 Raises Issues Beyond the Scope of this Proceeding

To the extent that Contention 5 seeks to require FPL to provide a different or more detailed sea level rise analysis in its FSAR or to address it altogether in the ER, such a claim is barred by Commission rules. 10 C.F.R. § 2.335(a) precludes the admission of contentions that challenge Commission regulations. This includes contentions that advocate additional or stricter requirements than agency rules impose. *See Turkey Point*, LBP-01-6, 53 NRC at 159 (citing *Shoreham*, CLI-87-12, 26 NRC at 395). CASE's argument that the NRC should require FPL to perform a more extensive sea level rise evaluation ignores the fact that no such requirement exists. If CASE seeks to revise Commission regulations to explicitly require sea level analyses beyond those already provided in FPL's FSAR, it must file a petition for rulemaking under 10 C.F.R. § 2.802.

Dr. Wanless also raises a vague claim related to terrorism threats in the context of increasing sea level rise. Revised Petition at 35. However, acts of terrorism are beyond the scope of the environmental review of this proceeding. *Oyster Creek*, CLI-07-8, 65 NRC at 126 (holding that NRC environmental reviews need not evaluate the potential impact of terrorist acts). To the extent this assertion implies that the NRC must somehow require incorporation of sea level rise into its design basis threat, it is an impermissible challenge to the security requirements of 10 C.F.R. Part 73 and beyond the scope of this proceeding. *See* 10 C.F.R. § 2.335(a).

e. Contention 5 Lacks Factual Support

Dr. Wanless concludes his presentation by making several assertions about the effects of sea level rise on Turkey Point Units 6 & 7. These numbered claims suffer from various deficiencies, as noted above, and in addition not one of them includes any detailed explanation or citations to any authority. CASE ostensibly put forth the Wanless statement as expert support. However, even the opinion of a qualified expert will not support a contention if the opinion lacks a reasoned basis or explanation. *USEC*, CLI-06-10, 63 NRC at 472. Accordingly, each of these numbered statements fails to provide the facts or expert opinion, explanation or analyses necessary to support CASE's claims. 10 C.F.R. § 2.309(f)(1)(v).

Further, Dr. Wanless claims that “[i]ncorporating future sea level changes will change the ability of the complex to contain any nuclear accidents.” Revised Petition at 35. Dr. Wanless offers no support for this assertion other than his own speculation. *Id.* Dr. Wanless is a geologist and does not present himself as having any expertise in nuclear safety or reactor engineering. *See Wanless Curriculum Vitae*. Regardless, CASE and Dr. Wanless fail to explain the process by which sea level changes could affect the operation of the containments of Turkey Point Units 6 & 7.³³

For these reasons, CASE Contention 5 is fatally defective and should be rejected.

³³ Dr. Wanless provides a list of references at the end of his statement. *See* Revised Petition at 35-36. These general references cannot properly be considered support for the contention. *USEC*, CLI-06-10, 63 NRC at 457 (It is not the Board's responsibility to “search through pleadings or other materials to uncover arguments and support never advanced by the petitioners themselves”). A reference to a number of documents without elaboration and without demonstration of how they support a petitioner's position is insufficient to support a contention. *Calvert Cliffs*, CLI-98-25, 48 NRC at 348; *Browns Ferry*, LBP-76-10, 3 NRC at 216.

6. Environmental Impact of Extended Storage of Low-Level Radioactive Waste at Turkey Point

CASE Contention 6 reads:

The Florida Power and Light (FPL) COL application 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] will need to manage such LLW 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.

Revised Petition at 39.³⁴ CASE provides the following statement in lieu of a basis: “The information, references and bases of Contention 4-SA are incorporated here by reference.

Please see the declaration of Diane D’Arrigo in support of this contention.” *Id.*

a. FPL Response to Contention 6: Overview

CASE Contention 6 appears to be lifted from contentions raised by other intervenors in other proceedings. No “Contention 4-SA” has been raised by either CASE or any of the other parties seeking to intervene herein. As demonstrated below, in filing of a “copy cat” contention reproducing submittals in other proceedings CASE has raised

³⁴ CASE Contention 6 is prefaced by a lengthy “Introduction” (Revised Petition at 37-39), which recites a number of assertions as to the nature of LLRW, the status of its disposal at various sites in the United States, and the raising of LLRW contentions in other NRC proceedings. While not necessarily agreeing with the statements made in that Introduction, FPL will not address it in its response to Contention 6 since it does not raise any specific issues regarding the Application and is therefore irrelevant.

claims that are inapplicable to the proposed handling of low-level radioactive waste (“LLRW”) at Turkey Point Units 6 & 7, and as such do not raise a genuine dispute with FPL on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). In addition, the contention is not supported by facts or expert testimony, as required by 10 C.F.R. § 2.309(f)(1)(v), and alleges that required information is missing from the Application when in fact it is found there, again in violation of 10 C.F.R. § 2.309(f)(1)(vi).

b. The claims in Contention 6 are inapplicable to the Turkey Point Units 6 & 7 plant and are therefore irrelevant

Contention 6 raises issues that were apparently litigated elsewhere but are inapplicable to Turkey Point Units 6 & 7. These include the following:

The waste storage plan which would result if the merits of Contention 4-SA are won, should be subject to the analysis of both the FPL ER and eventually the NRC’s EIS for Turkey Point. The absence of such a plan leads to the absence of such an analysis.

Revised Petition at 39.

The import of this allegation is unclear, since it refers to the “success on the merits” of an unspecified “Contention 4-SA” in some other proceeding. Such success would obviously be irrelevant to the licensing of Turkey Point Units 6 & 7. CASE appears to assume that a long-term onsite waste storage plan for Turkey Point will have to be developed and analyzed at some time in the future, even though FPL’s plan, consistent with its current commercial agreements, is to dispose of the LLRW by delivering it to a third-party contractor, which will process, store, own, and ultimately dispose of LLRW generated as a result of Turkey Point Units 6 & 7’s operations. *See, e.g.*, ER at 3.8-3.

The sequence of events postulated by CASE is highly speculative, and its consideration is barred by NRC contention admissibility requirements. *See, e.g., Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-14, 55 NRC 278, 294 (2002) ("contentions that are based on projected changes to a license, not currently before the NRC in any proceeding or application, are not sufficient to support admission of a contention. An NRC proceeding considers the application presented to the agency for consideration and not potential future amendments that are a matter of speculation at the time of the ongoing proceeding.") *Accord, Detroit Edison Co.* (Fermi Nuclear Power Plant, Unit 3), LBP-09-16, 70 NRC 227, 254-55 (2009) (rejecting as too speculative a contention alleging that COL applicant's decommissioning estimate was inadequate because applicant may someday need to dispose of LLRW onsite, when application did not contemplate such onsite disposal).³⁵ Moreover, CASE apparently recognizes that a plan for long-term onsite storage of LLRW is not part of the Application, and implicitly concedes that this allegation does not raise genuine dispute with FPL on a material issue of law or fact.³⁶

Another CASE allegation reads:

³⁵ CASE Contention 7 (discussed below) alleges that the Application is inadequate because it does not account for the need to store LLRW onsite for an extended period of time. Revised Petition at 41. That contention is also inadmissible; however, were CASE to prevail and were FPL required to develop a plan for long-term LLRW storage at the site, *then* it might be possible to address the potential environmental impacts of providing such storage. At this time, and in the absence of such a plan, any allegation of environmental impacts associated with the long-term storage of LLRW onsite is hypothetical and does not raise an admissible contention.

³⁶ The contention also fails to address the discussion on the handling of LLRW in Section 11.4 of the AP1000 DCD and Section 11.4 of the FSAR, and the discussion of radiological impacts from normal plant operation in Section 5.5 of the ER. Once again, CASE has thus not satisfied its "ironclad obligation" to examine all relevant portions of the Application. *See McGuire/Catawba*, CLI-02-28; *Catawba*, ALAB-687, 16 NRC at 468.

Of particular importance in an analysis of environmental impacts are any treatment or other processes that FPL may use to concentrate or otherwise alter this waste stream. Of particular concern is any plan to bury on-site or incinerate this material – both of which may be disguised by other names, such as “heat treat” or “pyro process.” Such activities are not currently reflected in the FPL ER Chapter 3, section 5 nor is the impact of an accumulation of waste longer than the anticipated months or years.

Revised Petition at 39-40. Again, CASE admits that the FPL ER (Section 3.5.3 on the Solid Radioactive Waste Management System) does not propose the burial or incineration of LLRW, nor does it evaluate the environmental impact of the long-term accumulation of LLRW onsite. Accordingly, this allegation also does not raise a genuine dispute with FPL on a material issue of law or fact.

CASE goes on to claim:

[A] so-called “low-level” waste storage plan must anticipate the possible inundation of the site during a storm surge in the not-so-distant future. The lack of inclusion of this analysis violates 52.79(iii) [sic] and would jeopardize the health, safety and well being of CASE member and TP workers as well as the general public and the biome of South Florida.

* * *

The lack of inclusion of a thorough analysis of the potential for elevated storm surge, site inundation and the possible dispersal of so-called “Low-Level” waste off the TP site violates 52.79(iii) [sic] and would jeopardize the health, safety and well being of CASE member [sic] and TP workers as well as the general public and the biome of South Florida.

Revised Petition at 40. In addition to challenging a non-existent long term onsite “low-level waste storage plan” for failing to anticipate the possible inundation of the site during a storm surge, these assertions ignore the analysis described above in response to Contention 5, which determined – in accordance with NRC guidance – the probable

maximum flooding as a result of hurricanes, tsunamis, seiches, and other flooding events, and established the elevation of floor entrances and openings for all power block structures, including the radwaste building, to be two feet above the maximum flooding level. *See* ER Section 3.9 at 3.9-8 and 3.9-9 and FSAR Section 2.4.2.2. Therefore, FPL *has* anticipated the potential flooding of the site and adequately designed against it. Contention 6 ignores this information and the concern about flooding does not raise a genuine dispute with FPL on a material issue of law or fact.³⁷

Another Contention 6 assertion of environmental impacts is:

Some so-called “low-level” waste plans considered in the COL process have included storing the waste outdoors on a concrete pad. Such a plan (not mentioned by FPL) is an example of the sort of situation that could result in the unplanned, wide dispersal of radioactive materials from Turkey Point, beyond the Turkey Point site boundary.

Revised Petition at 40. Again, CASE erects a “straw man” – the storage of LLRW outdoors on a concrete pad – which it recognizes is “not mentioned by FPL.” Like the others, this claim does not raise a genuine dispute with FPL on a material issue.

c. Contention 6 is not supported by facts or expert testimony

Contention 6 postulates that certain environmental impacts will be associated with the storage of LLRW at Turkey Point Units 6 & 7. In addition to failing to create a dispute on a material issue of fact or law, these postulated impacts are not supported by any facts. CASE offers predictions that there will be impacts from “any treatment or

³⁷ CASE also vaguely refers to a potential rise in sea levels as a flooding mechanism. Revised Petition at 40-41. However, as shown in the response to Contention 5, sea level rises have been taken into account in the analysis of potential maximum flooding and are accommodated in the plant design.

other processes that FPL may use to concentrate or otherwise alter this waste stream,” and in particular “any plan to bury on-site or incinerate this material.” Revised Petition at 39. Also alleged to occur are “the possible inundation of the site during a storm surge in the not-so-distant future [which] would jeopardize the health, safety and well being of CASE member [sic] and TP workers as well as the general public and the biome of South Florida,” and the potential “unplanned, wide dispersal of radioactive materials from Turkey Point, beyond the Turkey Point site boundary.” *Id.* at 40. These are naked assertions, bereft of any supporting facts or the supporting testimony of experts.³⁸ They fail to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v) and thus render Contention 6 inadmissible.

7. Low-Level Radioactive Waste Extended Storage Plan Missing

CASE Contention 7 alleges:

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

³⁸ Referenced in CASE Contentions 6 and 7 is the August 17, 2010 Declaration of Diane D’Arrigo (“D’Arrigo Declaration”). Ms. D’Arrigo devotes almost the entirety of her Declaration to the claim that the Application is deficient because it does not address the need for long-term onsite storage of LLRW. Only in passing does she mention, in the most general terms and without any supporting evidence, “exorbitant water use,” the “potential contamination by routine releases and unintended possible radioactive and heat releases from reactor and waste processing, treatment and/or storage operations” (D’Arrigo Declaration at ¶ 34) and “[t]he risk of ever stronger hurricanes” leading to “dispersal of the large amounts of radioactivity that would accumulate as all the Class B, C and Greater than C waste is stored onsite” (*Id.* at ¶ 35). Even an expert’s opinion (assuming Ms. D’Arrigo qualifies as such) must be backed by facts in order to support a contention’s admissibility. *USEC, CLI-06-10, 63 NRC at 472.*

access for disposal. The FSAR fails to address compliance with Part 20 and Part 50 Appendix I (ALARA) in the event that PEF 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.

Revised Petition at 41. As basis for its contention, CASE offers the above mentioned Declaration of Diane D'Arrigo.

a. FPL Response to Contention 7: Overview

Contention 7 is based on the premise that FPL's FSAR fails to address compliance with 10 C.F.R. Part 20 and Part 50 Appendix I (ALARA) for long term storage of LLRW. CASE's premise is erroneous, because FPL does address storage and disposal of LLRW through a plan to store LLRW onsite for up to two years and then ship it to Studsvik Inc.'s offsite treatment facility. This plan will be implemented pursuant to the NRC's regulations to ensure public health and safety, and CASE has made no allegations to the contrary. Thus, the contention does not raise a genuine dispute with FPL on a material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi). Also, in violation of 10 C.F.R. § 2.309(f)(1)(iii), the contention seeks to raise issues outside the scope of this proceeding, including the disposal of Greater-than-Class C ("GTCC") waste, and the amounts of LLRW that will be generated and the methods that will be used to process the waste, both of which are described in the AP1000 DCD.

CASE also demands "conclusive" demonstration that FPL will be successful, more than fifteen years from now, in executing its plan for LLRW storage and disposal, and seeks "a detailed plan" for the onsite storage of the LLRW. Meeting these demands is not material to the findings the NRC must make to support the action in this

proceeding, so the claims that include these demands fail to satisfy 10 C.F.R. § 2.309(f)(1)(iv) and cannot form the basis for an admissible contention.

b. Contention 7 alleges an omission that is not “missing”

Contention 7’s title presents it as a contention of omission, alleging up front that FPL’s LLRW extended storage plan is “missing.” If a petitioner submits a contention of omission, but the allegedly missing information is indeed in the license application, then the contention does not raise a genuine issue. *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 NRC 81, 95-96, *aff’d* CLI-04-36, 60 NRC 631 (2004). This is exactly the case here, because FPL’s FSAR Section 11.4.6 does include a plan for the extended storage and disposal of LLRW. Specifically, FPL will ship the LLRW generated at Turkey Point 6 & 7 to Studsvik, Inc.’s LLRW treatment facility in Erwin, Tennessee. Studsvik will treat the waste at its facility and will thereafter take responsibility for its storage and final disposal. *See* FSAR § 11.4.6. Regardless of CASE’s opinion of this plan, it is simply incorrect to assert that FPL has no plan, and to the extent Contention 7 is a contention of omission, it is inadmissible.

Contentions similar to CASE’s Contention 7 have been filed in the majority of recent COL proceedings and in most cases, Boards have admitted those contentions. *See, e.g., Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-09-10, 70 NRC 51 (2009); *Calvert Cliffs Nuclear Project, LLC* (Calvert Cliffs, Unit 3), LBP-09-04, 69 NRC 170 (2009); *Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 3 and 4), LBP-09-3, 69 NRC 139 (2009); *Virginia Electric and Power Co.* (North Anna Power Station, Unit 3), LBP-08-15, 68 NRC 294 (2008). In each

of those situations, however, intervenors alleged that the applicant failed to provide a plan for extended storage of LLRW, and in each case the contention was admitted because the Board found that the applicant in fact had not included such a plan in its COLA. Contention 7 should be handled differently from the contentions in the other proceedings, however, because FPL's Application is different from the other COLAs – it actually includes a plan. As the Commission has noted in discussing a COLA that did not include an extended LLRW storage plan: “It may be that an adequate plan to transfer low-level radioactive waste to a particular treatment facility would resolve the issue.” *Calvert Cliffs Nuclear Project, LLC* (Combined License Application for Calvert Cliffs, Unit 3), CLI-09-20, 70 NRC ___, slip op. at 17 (Oct. 13, 2009). Such a plan for transfer of LLRW to the Studsvik treatment facility is exactly what is included in FPL's FSAR.

c. Contention 7 raises issues outside the scope of this proceeding

Certain issues raised by Contention 7 fail to satisfy 10 C.F.R. § 2.309(f)(1)(iii) because they are outside the scope of this proceeding. *First*, both the Contention itself and the declaration of Diane D'Arrigo discuss the lack of availability of a disposal site for GTCC waste. *See* Revised Petition at 42; D'Arrigo Declaration at ¶¶ 11, 12. The Commission has repeatedly held that issues relating to the storage or disposal of GTCC waste are outside the scope of COL proceedings. *See, e.g., Progress Energy Florida, Inc.* (Combined License Application, Levy County Nuclear Power Plant, Units 1 and 2), CLI-10-02, 71 NRC ___, slip op. at 27 (Jan. 7, 2010).

Second, Contention 7 asserts that FPL did not provide adequate details about its treatment and processing of LLRW. Revised Petition at 43. Ms. D'Arrigo argues that

the “applicant must provide greater detail about the amount of waste . . .” and “[w]e need to know how much waste will be processed and stored” D’Arrigo Declaration at ¶ 10. The Application incorporates by reference the information in the AP1000 Design Control Document (“DCD”), both the AP1000 DCD through Revision 15 as codified by regulation (10 C.F.R. Part 52, App. D, § III.A) and the pending amendment submitted by Westinghouse.³⁹ The details regarding the treatment, processing, and amount of waste are provided in the DCD at Section 11.4.⁴⁰ Thus, the DCD (and hence the Application) includes these details that CASE asserts it lacks. Any issues relating to these details are challenges to the DCD, which must be pursued in the design certification rulemaking; they are outside the scope of this proceeding. *Shearon Harris*, CLI-09-08, 69 NRC at 322. (“We believe that a contention that raises an issue on a design matter addressed in the design certification application should be resolved in the design certification rulemaking proceeding, and not the COL proceeding.”) (quoting Final Policy Statement on the Conduct of New Reactor Licensing Proceedings, 73 Fed. Reg. 20,963, 20792 (Apr. 17, 2008)).

d. Contention 7 fails to raise an issue material to the findings the NRC must make and to show that a genuine dispute exists on a material issue of law or fact

Although Contention 7 alleges that FPL does not provide a plan for extended storage of LLRW, it goes on to assert deficiencies in the plan that it claims does not exist. Chiefly, Contention 7 alleges that FPL’s plan fails to satisfy 10 C.F.R. § 52.79(a)(3),

³⁹ Westinghouse Electric Co., Acceptance for Docketing of a Design Certification Rule Amendment Request for the AP1000 Design, 73 Fed. Reg. 4,926 (Jan. 28, 2008).

⁴⁰ This section of the DCD is referenced in the Application at FSAR § 11.4.

which specifies that an FSAR must include, “[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^[41] of this chapter.” This allegation, however, does not raise a material issue as required by 10 C.F.R. §§ 2.309(f)(1)(iv) and (vi), because FPL’s plan does satisfy the regulation and the additional details CASE seeks are simply not required.

As discussed above, the “kinds and quantities of radioactive materials expected to be produced in the operation” are included in the AP1000 DCD, which is incorporated by reference in the Application. *See, e.g.*, AP1000 DCD at §§ 11.4-15 (Table 11.4-1 Estimated Solid Radwaste Volumes); 11.4-20 (Table 11.4-4 Expected Annual Curie Content of Shipped Primary Wastes (Sheets 1 – 2)); 11.4-22 (Table 11.4-5 Maximum Annual Curie Content of Shipped Primary Wastes (Sheets 1 – 2)); 11.4-28 (Table 11.4-8 Expected Annual Curie Content of Shipped Secondary Wastes (Sheets 1 – 2)); 11.4-30 (Table 11.4-9 Maximum Annual Curie Content of Shipped Secondary Wastes (Sheets 1 – 2)). FPL sets out the “means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in Part 20” in FSAR Section 11.4.6. Temporary onsite storage is described in the DCD and incorporated by reference in the Application. *See, e.g.*, AP1000 DCD §§ 1.2.1.6.1, 1.2.7, 11.4.1, 11.4.2.5. FPL explains that it “has signed a letter of intent with Studsvik to enter into negotiations for a contract .

⁴¹ Part 20 of 10 C.F.R. “establish[es] standards for protection against ionizing radiation resulting from activities conducted under licenses issued by the Nuclear Regulatory Commission,” in order to “control the receipt, possession, use, transfer, and disposal of licensed material by any licensee in such a manner that the total dose to an individual . . . does not exceed the standards for protection against radiation prescribed in [Part 20].” 10 C.F.R. §§ 20.1001(a) & (b).

. . . to include the shipment, processing, storage, and disposal” of LLRW, and Studsvik will “comply with applicable laws and regulations in order to ensure the public’s health and safety. In particular, [Studsvik] conducts its operations consistent with NRC regulations (e.g., 10 CFR Part 20).” FSAR § 11.4.6. CASE has presented no material safety issue, because FPL has shown that at every step of the way, regulations are in place to protect the public health and safety and both FPL and Studsvik are bound to comply with those regulations.

Acknowledging that FPL actually does have a plan to send its LLRW to Studsvik’s facility, and even quoting the section of the FSAR that describes that plan (*see* Revised Petition at 44), CASE argues that FPL’s plan is insufficient because when the LLRW is sent to Studsvik, there is no guarantee that the LLRW will not come back to Turkey Point. Revised Petition at 41. CASE states, “It is fair to say that FPL has an aspiration to hand-off the so-called ‘low-level’ waste Turkey Point 6 & 7a [sic] would generate as quickly as possible, but it has not demonstrated conclusively that this is going to be possible.” This “conclusive” demonstration is not required by any NRC regulation and is beyond the bounds of reasonableness. Turkey Point Units 6 & 7 will not even begin generating LLRW until more than a decade from now. At that time, Turkey Point has two years worth of onsite LLRW storage capacity. FPL currently has a letter of intent with Studsvik wherein FPL will ship the LLRW to Studsvik’s facility for processing, followed by disposal at an available disposal site or storage at Waste Control Specialists’ (“WCS”) site in Texas if disposal is unavailable. Studsvik will store the waste for up to one year, and if necessary, will send it to WCS who can store the waste for an additional year. Contention 7 is alleging that FPL must “demonstrate conclusively” in its COLA

that an event set to happen over fifteen years from now will occur as planned. CASE has pointed to no statute or regulation indicating a requirement to assume contracts will not be honored, and thus their allegation does not raise a material issue and fails to satisfy 10 C.F.R. §§ 2.309(f)(1)(iv) and (vi).

Furthermore, even if, more than fifteen years from now, there was a problem with FPL's plan to ship its LLRW off site, this still does not raise a safety issue because, if necessary, the NRC has a clear and predictable process in place for expanding onsite storage capacity at Turkey Point Units 6 & 7 consistent with the licensing basis and protection of public health and safety. If FPL found that it needed to store its LLRW onsite for more than two years for any reason, it could follow the process for expansion of LLRW storage. An expanded storage facility could be designed and built utilizing the design guidance provided in NUREG-0800, Standard Review Plan Chapter 11 Radioactive Waste Management Appendix 11.4-A, Design Guidance for Temporary Storage of Low-Level Radioactive Waste. FPL could utilize the existing regulatory framework as described in NRC Regulatory Issue Summary 2008-32, Interim Low-Level Radioactive Waste Storage at Reactor Sites to conduct written safety analyses under 10 C.F.R. § 50.59. These written safety analyses allow a licensee to "make changes in the facility as described in the final safety analysis report," such as expanding the capacity of the LLRW storage facility already described in the FSAR, without a license amendment if certain conditions are satisfied. 10 C.F.R. § 50.59(c)(1). If the conditions set forth in the 10 C.F.R. § 50.59 are not satisfied, FPL could add onsite storage capacity through the NRC's license amendment process. At no point in this process would the public health and safety, including the health and safety of Turkey Point workers, be jeopardized in any

way. Thus, Contention 7 has not raised a material issue required for an admissible contention.

Contention 7 also fails to raise a material issue when it seems to assert that satisfying 10 C.F.R. § 52.79(a)(3) requires FPL to provide a detailed plan for onsite storage for the life of the plant, if not longer. *See, e.g.*, Revised Petition at 41; D’Arrigo Declaration at ¶¶ 9-12. Ms. D’Arrigo’s declaration includes a litany of details that she asserts FPL “must” include and questions that “need” to be answered about an extended onsite storage facility that FPL does not plan to construct. She both insists that such a plan must be provided and then expounds upon the level of detail it must include. Ms. D’Arrigo submitted a declaration in support of the intervenors in the *Vogtle* COL proceeding that argued for the same details, but the Licensing Board in that proceeding held that the level of detail that Ms. D’Arrigo seeks is not required by the NRC’s regulations. *Southern Nuclear Operating Co. (Vogtle Electric Generating Plant, Units 3 and 4)*, LBP-10-08, 71 NRC ___, slip op. at 12-14 (May 19, 2010).

The decision in *Vogtle* is persuasive here, particularly given the similarity between amended Contention Safety-1 in *Vogtle* and CASE’s proposed Contention 7, and the identical affiant in both proceedings. The *Vogtle* Board first decided an issue that is not contested in this proceeding – whether a COLA’s LLRW storage plan is governed by 10 C.F.R. § 52.79(a)(3) or 10 C.F.R. § 52.79(a)(4). *Id.* at 12. CASE has already based Contention 7 on 10 C.F.R. § 52.79(a)(3), which is also the determination the *Vogtle* Board made. *Id.* at 13. The *Vogtle* Board then held:

[T]he requisite content of [the Applicant’s] FSAR discussion of long-term LLRW storage depends on the

application of 10 C.F.R. § 52.79(a)(3) and what is meant by its requirement to provide information on the “means for controlling and limiting radioactive effluents and radiation exposures.” We find nothing in the rule or the cited Commission statements regarding LLRW that indicate section 52.79(a)(3) requires the detailed design, location, and health impacts information outlined in amended contention SAFETY-1.

Id. Ms. D’Arrigo’s list of details that she alleges FPL was required to provide in its Application cannot form the basis for an admissible Contention for the same reason that the *Vogtle* Board dismissed contention Safety-1: the NRC regulations do not require such detail.

For the reasons above, Contention 7 fails to raise a genuine issue of material fact under 10 C.F.R. §§ 2.309(f)(1)(iv) and (vi) and raises issues outside the scope of this proceeding in contravention of 10 C.F.R. § 2.309(f)(1)(iii). Therefore, Contention 7 should be held inadmissible.

8. Limited Work Authorization

CASE alleges:

CASE 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). As was the case in the Levy County COL that Progress Energy filed in 2008, the damage that could be done to the Turkey Point site under a LWA is considerable. . . . construction in the location of the Turkey Point units 6 and 7 would negatively impact wetlands, coastal estuary and other sensitive areas.

Revised Petition at 45-46. CASE offers “a letter from the South Florida Water Management District (SWFMD exhibit) and the issues raised in it as the basis for this contention.” *Id.* at 46.

a. FPL Response to Contention 8: Overview

FPL is filing simultaneously with this Answer a motion to strike Case Contention 8 on the grounds that it was a nontimely addition to CASE's Original Petition in this proceeding. Nonetheless, out of an abundance of caution, FPL responds to Contention 8, which is inadmissible because it does not challenge any portion of the Application.

b. Contention 8 fails to show that a genuine dispute exists with the Applicant on a material issue of law or fact

The NRC regulations require that a petitioner must "provide sufficient information to show that a genuine dispute exists with the applicant . . . on a material issue of law or fact." 10 C.F.R. § 2.309 (f)(1)(vi). To meet this requirement, a petitioner must "read the pertinent portions of the license application . . . , state the applicant's position and the petitioner's opposing view," and "demonstrate that a dispute exists between it and the applicant on a material issue of fact or law." Final Rule, 54 Fed. Reg. at 33,170; *see also Millstone*, CLI-01-24, 54 NRC at 358. Moreover, the contention "must include references to specific portions of the application" (10 C.F.R. § 2.309 (f)(1)(vi) (emphasis added)) and must "explain why the application is deficient." Final Rule, 54 Fed. Reg. at 33,170; *see also Palo Verde*, CLI-91-12, 34 NRC at 156. CASE has failed to keep abreast of the Application, since the LWA portion of the Application has been withdrawn and is no longer part of it.

In Contention 8, the Revised Petition is challenging an LWA application filed in June 2009 at the time the Application was submitted.⁴² However, by letter dated

⁴² In accordance with 10 C.F.R. § 52.91(a), FPL requested issuance of an LWA under 10 CFR 50.10(d) in advance of the COL to allow the early performance of certain construction activities. The LWA

Footnote continued on next page

November 10, 2009, FPL “withdr[ew] the request for the LWA in order to provide the best opportunity to maintain our current project schedule.” Letter from FPL to Commission (November 10, 2009) at 1, ADAMS Accession No. ML093170513.

Thus, Contention 8 does not give rise to a dispute between CASE and FPL on a material issue of fact or law relating to the Application, and it must be rejected.

IV. SELECTION OF HEARING PROCEDURES

Commission rules require the Atomic Safety and Licensing Board designated to rule on a petition to intervene to “determine and identify the specific procedures to be used for the proceeding” pursuant to 10 C.F.R. §§ 2.310 (a)-(h). 10 C.F.R. § 2.310. The regulations are explicit that “proceedings for the . . . grant . . . of licenses subject to [10 C.F.R. Part 52] may be conducted under the procedures of subpart L.” 10 C.F.R. § 2.310(a). The regulations permit the presiding officer to use the procedures in 10 C.F.R. Part 2, Subpart G (“Subpart G”) in certain circumstances. 10 C.F.R. § 2.310(d). It is the proponent of the contentions, however, who has the burden of demonstrating “by reference to the contention and bases provided and the specific procedures in subpart G of this part, that resolution of the contention necessitates resolution of material issues of fact which may be best determined through the use of the identified procedures.” 10 C.F.R. § 2.309(g). CASE did not address the selection of hearing procedures in its Revised Petition and, therefore, did not satisfy its burden to demonstrate why Subpart G

application (Part 6 of the Application) described the scope of the LWA activities requested to be authorized and included a site redress plan in accordance with 10 C.F.R. § 50.10(d)(3)(iii).

procedures should be used in this proceeding. Accordingly, any hearing arising from the Revised Petition should be governed by the procedures of Subpart L.

V. **CONCLUSION**

For all of the foregoing reasons, CASE's Revised Petition should be denied.

Respectfully Submitted,

/Signed electronically by Matias F. Travieso-Diaz/

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September 13, 2010

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

Before the Atomic Safety and Licensing Board

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

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing “Florida Power & Light Company’s Answer Opposing Citizens Allied for Safe Energy, Inc.’s Revised Petition to Intervene and Request for Hearing In Turkey Point Units 6 and 7 Combined Construction and Operating License Application,” were provided to the Electronic Information Exchange for service to those individuals listed below and others on the service list in this proceeding, this 13th day of September, 2010.

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