

December 19, 2016

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 & 52-041
)
(Turkey Point Units 6 and 7))

NRC STAFF ANSWER TO “CITIZENS ALLIED FOR SAFE ENERGY
PETITION TO INTERVENE AND REQUEST FOR HEARING IN OPPOSITION TO
THE FINAL REPORT EIS GRANTING COL’S FOR TURKEY POINT UNITS 6 & 7”

INTRODUCTION

Pursuant to 10 C.F.R. §§ 2.323 and 2.309 and the Atomic Safety and Licensing Board (“Board”) Orders dated November 22, 2016,¹ and November 23, 2016,² the staff of the U.S. Nuclear Regulatory Commission (“Staff”) hereby responds to the “Citizens Allied for Safe Energy [“CASE”] Petition to Intervene and Request for Hearing in Opposition to the Final Report EIS Granting COL’s for Turkey Point Units 6 & 7” (“Petition”) dated November 28, 2016. As set forth in detail below, the Staff opposes the Petition because it fails to address the requirements of 10 C.F.R. § 2.309(c)(1) for contentions filed after the deadline set in the Notice of Hearing. Although CASE’s failure to address the § 2.309(c) requirements is dispositive and the Petition should be denied for this reason alone, each proposed contention is also inadmissible for failure to meet the requirements of 10 C.F.R § 2.309(f)(1)(iv)–(vi), as explained in more detail below.

¹ *Florida Power & Light Co.* (Turkey Point Units 6 and 7), Order (Amending Final Scheduling Order) (Nov. 22, 2016) (unpublished) (ML16327A189) (2016 Scheduling Order).

² *Florida Power & Light Co.* (Turkey Point Units 6 and 7), Order (Granting Extension to File Petition to Intervene and Request for a Hearing) (Nov. 23, 2016) (unpublished) (ML16328A340).

BACKGROUND

On June 30, 2009, the Florida Power and Light Company (“Applicant” or “FPL”), pursuant to the Atomic Energy Act of 1954, as amended (“AEA”) and the Commission’s regulations, submitted an application for combined licenses (“COL”) for two AP1000 Pressurized Water Reactors (“PWRs”) to be located adjacent to the existing Turkey Point Units 1 through 5, at the Turkey Point site near Homestead, Florida (“Application”). See Letter from M. K. Nazar, FPL, to M. Johnson, Office of New Reactors, NRC, dated June 30, 2009 (ADAMS Accession No. ML091830589). The proposed units would be known as Turkey Point Units 6 & 7.

The Application included an Environmental Report (“ER”), which addressed a wide variety of environmental matters, including the use of reclaimed wastewater for cooling the main condenser, the use of radial collector wells (“RCWs”) as an alternative source of cooling water for the main condenser, deep well injection of radioactive effluent, and alternative energy sources. Application, Rev. 0, Part 3 (ML091870926). Specifically, ER, Rev. 0, stated that “the primary source of makeup water for the circulating water cooling towers would be reclaimed water.” ER, Rev. 0, § 2.3.2.1.4.2 at 2.3-42 (ML091870907). In regard to the RCWs, ER Rev. 0 provides an extensive discussion and analysis of water use, including site-specific and regional descriptions of the hydrology, water use, and water quality conditions that could affect or be affected by the construction and operation of Units 6 & 7. ER Rev. 0, § 2.3 (ML091870907). As for deep well injection, ER, Rev. 0, states that “[t]reated liquid radioactive waste from Unit 6 & 7 operation would be discharged to the plant sump prior to ultimate release to the Boulder Zone via the deep injection wells (see Section 3.5).” ER, Rev. 0, § 5.4.1.1 at 5.4-1 (ML091870919). Finally, the ER, Rev. 0, “provides an analysis of alternative energy sources that could reasonably be expected to meet the demand from both a load and economic standpoint.” ER, Rev. 0, § 9.2.2.1 at 9.2-7 (ML091870924) (see generally ER, Rev. 0, § 9.2.2 at 9.2-7 – 9.2-36).

In response to a Notice of Hearing,³ on August 17, 2010, CASE submitted a petition through which it sought to intervene in this proceeding. See *Citizens Allied for Safe Energy, Inc. Petition to Intervene and Request for a Hearing* (Aug. 17, 2010) (ML102300287).⁴ In a decision dated February 28, 2011, the Board ruled that CASE had standing, admitted CASE Contentions 6 and 7, and admitted CASE and as a party to this proceeding. See *Florida Power & Light Co. (Turkey Point Units 6 and 7)*, LBP-11-06, 73 NRC 149, 226-27, 241-43, 244-46, 248 (2011).

On January 26, 2012, the Board granted FPL's motion to dismiss CASE Contention 6. *Florida Power & Light Co. (Turkey Point Units 6 and 7)*, Memorandum and Order (Granting FPL's Motions to Dismiss Joint Intervenors' Contention 2.1 and CASE's Contention 6 as Moot), at 3, 7 (Jan. 26, 2012) (unpublished) (ML12026A438). The Board later dismissed CASE's only remaining contention and dismissed CASE from this proceeding. *Florida Power & Light Co. (Turkey Point Units 6 and 7)*, LBP-12-04, 75 NRC 213, 217; LBP-12-07, 75 NRC 503, 520 (2012). CASE is not now a party to or participant in this proceeding.

On March 5, 2015, the NRC published a notice of availability of NUREG-2176, "Draft Environmental Impact Statement ["EIS"] for Combined Licenses (COLs) for Turkey Point Nuclear Plant, Units 6 and 7" (ML155055A103 (Vol. 1) and ML155055A109 (Vol. 2)) ("DEIS").⁵ See "Combined License Application for Turkey Point Nuclear Plant, Unit Nos. 6 and 7; Draft environmental impact statement; request for comment." 80 Fed. Reg. 12,043 (Mar. 5, 2015). The DEIS addressed a wide variety of environmental matters, including the use of reclaimed

³ See "Florida Power & Light Company, Combined License Application for the Turkey Point Units 6 & 7, Notice of Hearing, Opportunity for Leave to Petition to Intervene and Associated Order Imposing Procedures for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information for Contention Preparation," 75 Fed. Reg. 34,777 (June 18, 2010).

⁴ CASE filed a revised Petition on August 20, 2010 (ML102320411). See *Florida Power & Light Co. (Turkey Point Units 6 and 7)*, LBP-11-06, 73 NRC 149, 166 n.3 (2011).

⁵ CASE petitioned to intervene and requested a hearing in regard to the DEIS, but the Board denied the petition. *Florida Power & Light Co. (Turkey Point Units 6 and 7)*, Memorandum and Order (Denying CASE's Petition to Intervene) (June 25, 2015) (unpublished) (ML15176A662).

wastewater for cooling the main condenser (DEIS Vol. 1, §§ 1.2 and 2.3), the use of radial collector wells as an alternative source of cooling water for the main condenser (DEIS Vol. 1, §§ 2.3, 3.3, and 5.2), deep well injection of effluents (DEIS Vol. 1, §§ 3.4.2.3, 3.4.3.1, 3.4.4.2, and 5.9; DEIS Vol. 2, § G.2), and alternative energy sources (DEIS Vol. 2, § 9.2).

On October 28, 2016, the Staff issued the final EIS, NUREG-2176, “Environmental Impact Statement for Combined Licenses (COLs) for Turkey Point Nuclear Plant Units 6 and 7,” Final Report (four volumes, ADAMS Accession Numbers ML16300A104 (Vol. 1), ML16300A137 (Vol. 2), ML16301A018 (Vol. 3), and ML16300A312 (Vol. 4)) (“FEIS”). In accordance with the Board Orders of November 22 and 23, on November 28, 2016, CASE filed its Petition, in which it seeks to raise four contentions. The Staff answers the Petition below.

DISCUSSION

I. LEGAL STANDARDS

A. Standing to Intervene

In accordance with the Commission’s Rules of Practice:

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

10 C.F.R. § 2.309(a). The regulations further provide that the Licensing Board “will grant the [petition] if it determines that the [petitioner] has standing under the provisions of [10 C.F.R. § 2.309(d)] and has proposed at least one admissible contention that meets the requirements of [10 C.F.R. § 2.309(f)]. *Id.*

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

(i) The name, address and telephone number of the requestor or petitioner;

(ii) The nature of the requestor's/petitioner's right under the [AEA] to be made a party to the proceeding;

(iii) The nature and extent of the requestor's/petitioner's property, financial or other interest in the proceeding; and

(iv) The possible effect of any decision or order that may be issued in the proceeding on the requestor's/petitioner's interest.

10 C.F.R. § 2.309(d)(1). As the Commission has observed, “[a]t the heart of the standing inquiry is whether the petitioner has ‘alleged such a personal stake in the outcome of the controversy’ as to demonstrate that a concrete adverseness exists which will sharpen the presentation of issues.” *Sequoyah Fuels Corp. and Gen. Atomics (Gore, Oklahoma Site)*, CLI-94-12, 40 NRC 64, 71 (1994) (citing *Duke Power Co. v. Carolina Envtl. Study Group, Inc.*, 438 U.S. 59, 72 (1978), and quoting *Baker v. Carr*, 369 U.S. 186, 204 (1962)).

To demonstrate such a “personal stake,” the Commission applies contemporaneous judicial concepts of standing. Accordingly, petitioner must (1) allege an “injury in fact” that is (2) “fairly traceable to the challenged action” and (3) is “likely” to be “redressed by a favorable decision.” *Sequoyah Fuels*, 40 NRC at 71-72 (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992) (citations and internal quotations omitted) and citing *Cleveland Elec. Illuminating Co.* (Perry Nuclear Power Plant, Unit 1), CLI-93-21, 38 NRC 87, 92 (1993)). See also *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 323 (1999).

In reactor licensing proceedings, licensing boards have typically applied a “proximity” presumption to persons “who reside in or frequent the area within a 50-mile radius” of the proposed plant. See, e.g., *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 147-48 (2001) (collecting cases and summarizing the development of the Commission’s standing doctrine). The Commission noted this practice with approval, stating that “[w]e have held that living within a specific distance from the plant is enough to confer standing on an individual or group in proceedings for construction permits,

operating licenses, or significant amendments thereto[.]” *Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989) citing *Virginia Electric and Power Co.* (North Anna Power Station, Units 1 and 2), ALAB-522, 9 NRC 54 (1979).

The proximity presumption establishes standing without the need to establish the elements of injury, causation, or redress. *Turkey Point*, LBP-01-6, 53 NRC at 150. The Commission has affirmed that the 50-mile proximity presumption applies to applications for new nuclear power plants, including combined license applications. *Calvert Cliffs 3 Nuclear Project LLC & Unistar Nuclear Operating Services, LLC* (Combined License Application for Calvert Cliffs, Unit 3), CLI-09-20, 70 NRC 911, 915-18 (2009).

An organization may establish its standing to intervene based upon a theory of organizational standing (showing that its own organizational interests could be adversely affected by the proceeding) or representational standing (based upon the standing of its members). To demonstrate organizational standing, an organization must be able to intervene in its own right. “Organizations seeking to intervene in their own right must satisfy the same standing requirements as individuals seeking to intervene . . . because an organization, like an individual, is considered a ‘person’ as we have defined that word in 10 C.F.R. § 2.4 and as we have used it in 10 C.F.R. § 2.309 regarding standing.” *Consumers Energy Co.* (Palisades Nuclear Power Plant), CLI-07-18, 65 NRC 399, 411 (2007). Thus, to establish organizational standing, an organization “must demonstrate a palpable injury in fact to its organizational interests that is within the zone of interests protected by the AEA or NEPA.” *Quivira Mining Co.* (Ambrosia Lake Facility, Grants, New Mexico), CLI-98-11, 48 NRC 1, 6 (1998), *aff’d sub nom. Envirocare of Utah, Inc. v. NRC*, 194 F.3d 72 (D.C. Cir. 1999); *Metropolitan Edison Co.* (Three Mile Island Nuclear Station, Unit 1), CLI-85-2, 21 NRC 282, 316 (1985).

Where an organization seeks to establish representational standing, it must show that at least one of its members may be affected by the proceeding, it must identify that member by

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

A prospective petitioner also has an affirmative duty to demonstrate that he has standing in each proceeding in which he seeks to participate, since a petitioner's status can change over time and the bases for standing in an earlier proceeding may no longer apply. *PPL Bell Bend, LLC* (Bell Bend Nuclear Power Plant), CLI-10-7, 71 NRC 133, 138 (2010), citing *Texas Utilities Elec. Co.* (Comanche Peak Steam Electric Station, Unit 2), CLI-93-4, 37 NRC 156, 162-63 (1993); *Crow Butte Resources, Inc.* (In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 343 (2009) . A petitioner may seek to rely on prior demonstrations of standing if those prior demonstrations are (1) specifically identified and (2) shown to correctly reflect the current status of the petitioner's standing. *Comanche Peak*, CLI-93-4, 37 NRC at 162-3.

B. Legal Standards for Contentions Filed After the Deadline in the Notice of Hearing

To be admissible, a newly proffered contention must satisfy: (1) the timeliness standards in 10 C.F.R. § 2.309(c)(1) for new and amended contentions; and (2) the general contention admissibility standards in 10 C.F.R. § 2.309(f)(1). See *Florida Power and Light Co.* (Turkey

Point, Units 6 & 7), LBP-11-15, 73 NRC 629, 633 (2011).⁶ New or amended contentions filed after the initial filing period may be admitted only with leave of the presiding officer upon a showing that

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

10 C.F.R. § 2.309(c)(1). A petitioner's failure to address the "good cause" standards for filing after the initial intervention deadline constitutes sufficient grounds for dismissing the contention. See *Florida Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-06-21, 64 NRC 30, 33-34 (2006). If a petitioner fails even to address the criteria for filing after the initial intervention deadline, that default alone warrants rejection of the proposed contentions. See *Baltimore Gas & Elec. Co.* (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-25, 48 NRC 325, 347 (1998).⁷

In addition to satisfying the requirements in 10 C.F.R. § 2.309(c)(1) for a new or amended contention filed after the deadline, the petitioner must set forth with particularity the reasons why the proposed contention satisfies the 10 C.F.R. § 2.309(f)(1) general contention admissibility requirements, which are that the contention 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;

⁶ The Commission has consolidated its requirements for filing contentions after the deadline set in the Notice of Hearing in 10 C.F.R. § 2.309(c)(1). See "Amendments to Adjudicatory Process Rules and Related Requirements," Final Rule, 77 Fed. Reg. 46,562, 46,591 (Aug. 3, 2012).

⁷ The Statements of Consideration for the rule consolidating requirements for filing contentions after the deadline set in the Notice of Hearing states, "[t]he current NRC case law using the terms 'late-filed' or 'nontimely' continues to apply in ruling on filings after the deadline." 77 Fed. Reg. at 46,571. Accordingly, NRC case law on this topic before the effective date of the final rule retains its vitality.

- (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) . . . provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief

10 C.F.R. § 2.309(f)(1).

The 10 C.F.R. § 2.309(f)(1) requirements should “focus litigation on concrete issues and result in a clearer and more focused record for decision.” Changes to Adjudicatory Process, 69 Fed. Reg. 2,182, 2,202 (Jan. 14, 2004). The Commission has stated that it “should not have to expend resources to support the hearing process unless there is an issue that is appropriate for, and susceptible to, resolution in an NRC hearing.” *Id.* The Commission has emphasized that the rules on contention admissibility are “strict by design.” *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001), *petition for reconsideration denied*, CLI-02-01, 55 NRC 1 (2002). Failure to comply with any of these requirements is grounds for the dismissal of a contention. *Private Fuel Storage*, CLI-99-10, 49 NRC at 325. Attempting to meet these requirements by “[m]ere ‘notice pleading’ does not suffice.” *Amergen Energy Co., L.L.C.* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006).

C. Legal Standards under the National Environmental Policy Act.

Finally, the National Environmental Policy Act of 1969, as amended (“NEPA”), requires the NRC to take a “hard look” at the environmental consequences of a proposed action. See *Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council*, 435 U.S. 519, 558 (1978); *Balt. Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 97 (1983). In addition to the “hard look,” NEPA requires “broad dissemination of relevant environmental information” to the public. *Florida Power & Light Co. (Turkey Point Nuclear Generating Units 3 and 4)*, CLI-16-18, 84 NRC __ (Dec. 15, 2016) (slip op. at 9), quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350. See also *Vermont Yankee*, 435 U.S. at 558; *Entergy Nuclear Operations, Inc. (Indian Point, Units 2 and 3)*, CLI-16-7, 83 NRC 293, 328 (“*Indian Point I*”); *Entergy Nuclear Operations, Inc. (Indian Point Nuclear Generating Units 2 and 3)*, CLI-16-10, 83 NRC 494, 510 (2016) (“*Indian Point II*”).

While NEPA requires a “hard look” at environmental impacts, NEPA “should be construed in the light of reason if it is not to demand’ virtually infinite study and resources.” *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station)*, CLI-10-11, 71 NRC 287, 315 (2010) (quoting *Natural Resources Defense Council v. Hodel*, 865 F.2d 288, 294 (D.C. Cir. 1988)). Because there will always be more data that could be gathered, an agency must have some discretion to move forward with decisionmaking. *Id.* (quoting *Town of Winthrop v. FAA*, 535 F.3d 1, 11-13 (1st Cir. 2008)). Likewise, if an agency is evaluating reasonably foreseeable significant adverse environmental impacts of a proposed action and there is incomplete or unavailable information, the agency can explain that in its evaluation. See 40 C.F.R. § 1502.22. NEPA does not call for certainty or precision, but an *estimate* of anticipated (not unduly speculative) impacts in an EIS. *Louisiana Energy Services, L.P. (National Enrichment Facility)*, CLI-05-20, 62 NRC 523, 536 (2005) (emphasis in original).

II. CASE HAS NOT ESTABLISHED STANDING

The NRC Rules of Practice state that “if [a] party or participant [to the proceeding] has already satisfied the requirements for standing under [§ 2.309(d)] in the same proceeding in which the new . . . contentions are filed, it does not need to do so again.” 10 C.F.R. § 2.309(c)(4). As indicated above, the Board dismissed CASE from this proceeding in 2012. *See Turkey Point*, LBP-12-07, 75 NRC at 520. Accordingly, CASE is not now a party to this proceeding, nor is CASE a participant in this proceeding under 10 C.F.R. § 2.315. Therefore, CASE is required to demonstrate standing in this proceeding afresh and has failed to do so. *See Bell Bend*, CLI-10-7, 71 NRC at 138. While the Staff would not object if the Board afforded CASE an opportunity to cure its failure to establish standing,⁸ the Board need not reach this issue because, as explained below, CASE did not satisfy the standards of 10 C.F.R. § 2.309(c), nor are any of CASE’s proposed contentions admissible under § 2.309(f)(1), and either of these failings is dispositive of the Petition.

III. THE PROPOSED NEW CONTENTIONS ARE INADMISSIBLE

CASE proposes four new contentions regarding (1) the use of reclaimed water to cool proposed Units 6 & 7, (2) the use of radial collector wells as a backup source of plant cooling water, (3) the impact of injecting liquid radioactive and chemical wastes into the Boulder Zone, and (4) the Staff’s asserted failure to comply with NEPA with respect to consideration of energy alternatives. The Petition is silent regarding the requirements of § 2.309(c) for contentions filed after the deadline in the Notice of Hearing, and because that deadline passed long ago, in

⁸ From a November 2016 telephone conversation with CASE’s representative, Staff counsel understands that members of CASE who personally have standing continue to authorize CASE to represent them in this proceeding. Thus, CASE should be able to establish standing under § 2.309(d).

August 2010 (see 75 Fed. Reg. 34,777), this alone is fatal to all four proposed contentions. See *Calvert Cliffs*, CLI-98-25, 48 NRC at 347; *St. Lucie*, CLI-06-21, 64 NRC at 33-34.

While the Petition's failure to address the requirements of § 2.309(c) is dispositive, the Staff nonetheless also submits that, as explained below, none of the proposed contentions is admissible because CASE has not satisfied 10 C.F.R. § 2.309(f)(1) with respect to any one of them.

A. Proposed Contention 1:

The use of reclaimed waste water for the cooling towers was not fully evaluated and is unlikely due to the high cost of removing nitrogen and phosphorus and the eventual unavailability of reclaimed waste water.

Petition at 8. In proposed Contention 1, CASE challenges the viability of the proposed use of reclaimed waste water from the Miami-Dade County Water and Sewer Department ("MDCWS"⁹) and also makes broad assertions about the effects of climate change and water availability on the Turkey Point project. CASE asserts that the estimated cost of building the treatment plant for removing nitrogen and phosphorus from the reclaimed waste water is "quite expensive," which CASE says may cause the applicant to rely on the proposed radial collector wells ("RCWs") as the source of cooling water for the project. Petition at 8. However, CASE also states that it is "most likely" that "by the time such a water treatment plant is built, the technology and the cost would make the plant economically feasible to build and to operate[.]" *Id.*

CASE also asserts that future sea level rise may cause the reclaimed water treatment plant to be relocated and the piping abandoned.¹⁰ CASE states that MDCWS has had to abandon wells due to saltwater intrusion. CASE also claims that future sea level rise will cause

⁹ In the DEIS and FEIS, the Staff indicates the Miami-Dade County Water and Sewer Department with the initials "MDWASD."

¹⁰ In the DEIS and FEIS, the Staff denotes the water treatment plant as the South District Waste Water Treatment Plant ("SDWWTP"), which CASE denotes as the MDCWS facility

the proposed Turkey Point facility to be surrounded by water and its cooling canals inundated. CASE contends that sea level rise will threaten the reclaimed waste water pipelines and that injected waste water could migrate upward into the Floridan aquifer, which CASE identifies as a possible future source of drinking water. Petition at 9-11.

CASE also states that, if the cost of treating the waste water to remove nitrogen and phosphorus is too high or the treatment facility needs to be moved, and if the use of the RCWs is limited to 60 days by FPL's FDEP permit, there will not be an adequate supply of cooling water for the Turkey Point facility. Petition at 12.

Staff Response:

Proposed Contention 1 is inadmissible because it does not meet the requirements of 10 C.F.R. § 2.309(c) and (f)(1)(vi). CASE fails to show good cause for filing after the initial intervention deadline, as it does not demonstrate that the information upon which it has based its claims has been previously unavailable or that the relevant information is materially different from previously available information. Additionally, CASE has not raised a genuine dispute on a material issue of law or fact. Accordingly, the Board should find proposed Contention 1 inadmissible.

1. Proposed Contention 1 Does Not Meet the Requirements of 10 C.F.R. § 2.309(c).

As noted above, 10 C.F.R. § 2.309(c) requires petitioners to demonstrate that new or amended contentions are based on information that was not previously available or is materially different from previously available information. CASE makes no attempt to explain why any of its claims in proposed Contention 1 could not have been raised previously. CASE's failure to address the "good cause" standards for filing after the initial intervention deadline constitutes sufficient grounds for dismissing the contention. *Calvert Cliffs*, CLI-98-25, 48 NRC at 347; *St. Lucie*, CLI-06-21, 64 NRC at 33-34.

For several of its claims in proposed Contention 1, CASE fails to reference any facts or analyses, let alone explain how the information is new or materially different. CASE cites no support for its claim that the expense of the planned waste water treatment facility may, in the future, cause FPL to revert to the use of seawater from the RCWs as a source of cooling water. In this regard, CASE attributes the asserted high cost of the treatment facility to the mistaken assumption that the facility must be capable of removing nitrogen and phosphorus from the reclaimed water to make it suitable for use at Turkey Point Units 6 and 7. The ER, DEIS, and FEIS, however, nowhere indicate that removal of nitrogen and phosphorus is needed or planned in connection with the use reclaimed wastewater at Turkey Point Units 6 and 7. Further, CASE appears to contradict its own speculation, describing it as “most likely” that the treatment plant would be “economically feasible.” Petition at 8. Similarly, CASE does not explain the basis for its assumption that MDCWS (MDWASD) may abandon or relocate the treatment facility. CASE cites vaguely to “sea level rise and/or the increase in salinity of water in the Biscayne Aquifer,” but provides no specific facts to support the supposition that the treatment plant may be abandoned.

Information about the treatment plant has been available since the applicant submitted its ER in 2009. See ER Rev. 0, §§ 2.3.2.1.4.2 (Units 6 & 7 Water Use), 3.3 (Plant Water Use) and 3.4.1.1.1 (Circulating Water System). The treatment plant was also discussed at length in the DEIS, issued in 2015. See DEIS § 3.4.2.2. No changes were made to the analysis in the FEIS regarding the treatment of nitrogen and phosphorus at what CASE denotes as the MDCWS facility. See FEIS § 3.4.2.2. To the extent CASE wished to raise concerns regarding the economic feasibility or location of the waste water treatment facility, it could have done so earlier in this proceeding. Not having done so, CASE fails to demonstrate that its concerns with the treatment facility are based on information that was not previously available or that is materially different from information previously available. See *Florida Power & Light Co.*

(Turkey Point Nuclear Power Station, Units 6 & 7), LBP-15-19, 81 NRC 815, 826 (2015) (holding that the city of Miami failed to show that its contention, which focused on FPL's groundwater model and had been available for years as a part of FPL's initial application, was based on materially different information from that which was previously available).

CASE also asserts that FDEP's permit limits on use of the RCWs to a period of sixty days per year means that the Turkey Point facility may not have an adequate source of cooling water for the project and that without using the RCWs "all of the time" "it might not be possible to build the reactors at all." Petition at 12. Intervenors provide no basis for this claim and they do not explain how any of these statements regarding the use and availability of cooling water are based on previously unavailable information. The RCWs, including the associated FDEP permit limitations on their use, were discussed at length in the DEIS. See DEIS §§ 3.2.2.2, 3.3.1.5, 5.2.1.1, 5.2.1.2; 5.3.2.1, 5.3.2.2 and 5.3.2.4. CASE even cites to a discussion in the FEIS that directly acknowledges the limitations on the FDEP permit. Petition at 12 (citing FEIS § 5.3.2.1). Accordingly, CASE has not explained how any information referenced in proposed Contention 1 was either not previously available or is materially different from information that was previously available in the ER or DEIS, contrary to the requirements of 10 C.F.R. § 2.309(c). See *Strata Energy, Inc.* (Ross in Situ Uranium Recovery Project), CLI-16-13, 83 NRC __ (June 29, 2016) (slip op. at 14-15) (affirming ASLB's denial of the proposed contention because it was based on previously available information); *DTE Elec. Co.* (Fermi Nuclear Power Plant, Unit 3), CLI-15-1, 81 NRC 1, 7 n. 29, 7-8 (2015) (stating that proponents of a new or amended contention are required to show "good cause" both before and after the 2012 amendments affecting 10 C.F.R. § 2.309(c)(1) & refusing to disturb ALSB's denial of proposed contention for being untimely because of a failure to point to any material difference between the environmental documents).

Finally, with respect to its claims about the extent and impacts of sea level rise (including CASE's speculation that the water treatment facility might be relocated), CASE likewise fails to

show that these claims could not have been raised earlier in the proceeding.¹¹ CASE refers to two recent e-mails from Dr. Douglas Yoder and Dr. Harold Wanless, as well as a citation to a 2012 NOAA study in global sea level rise. Petition at 9-11. However, CASE does not demonstrate that any information in these e-mails or the 2012 NOAA study is new, let alone materially different from previously available information. The impacts of potential sea level rise on the Turkey Point project and on surrounding resources, including impacts on salinity, were discussed in the DEIS. See DEIS Appendix I, § I.3.2. CASE does not explain how any of its assertions about potential sea level rise, salt intrusion, or effects on drinking water are based on any changed information or analyses in the FEIS. For these reasons, CASE has not met the requirements of 10 C.F.R. § 2.309(c). See *Turkey Point*, LBP-15-19, 81 NRC at 826; *Strata Energy*, CLI-16-13, 83 NRC ____, slip op. at 14-15; *Fermi*, CLI-15-1, 81 NRC at 7 n. 29, 7-8.

2. Proposed Contention 1 Does Not Meet the Requirements of 10 C.F.R. § 2.309(f)(1)(vi).

Besides failing to meet the requirements of 10 C.F.R. § 2.309(c), CASE's proposed Contention 1 does not raise a genuine dispute on a material issue of law or fact, and therefore also fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(vi). CASE fails to show that any of its statements in proposed Contention 1 contradict any analysis or conclusion in the FEIS, let alone show that there is a genuine dispute on a material issue of law or fact.

Proposed Contention 1 includes a series of general statements about the waste water treatment facility, sea level rise, and water availability, but CASE does not identify any portion of the FEIS with which it specifically disagrees. In order for a contention to be admissible, it must

¹¹ CASE previously filed a contention claiming that FPL's application was deficient because it failed to provide valid projections for sea level rise. The Board dismissed this contention because CASE failed to "controvert a specific portion of FPL's COL application or otherwise explain why FPL's analyses or conclusions are incorrect or inadequate." See *Florida Power and Light Co.* (Turkey Point Nuclear Power Station, Units 6 & 7), LBP-11-15, 73 NRC 629, 643-45 (2011).

contain sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. See *Texas Utilities Co.* (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992); *Entergy Nuclear Vermont Yankee, L.L.C. and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), LBP-04-28, 60 NRC 548, 576 (2004). As discussed further below, CASE fails to meet that standard.

CASE asserts that the treatment facility may be cost-prohibitive and speculates that it may lead the applicant to seek greater use of the RCWs or that “it might not be possible to build the reactors at all.” Petition at 8, 12. But as noted above, CASE’s own statements indicate that this does not constitute a genuine dispute with the EIS, because CASE in the same paragraph describes it as “most likely” that the treatment plant would be “economically feasible.” Petition at 8. As noted above, the ER, the DEIS, and the FEIS do not refer to any need to remove nitrogen or phosphorus from the reclaimed wastewater in order to prepare it for use as service water for Turkey Point Units 6 and 7, and CASE does not identify any such reference. In any event, the Commission has said that the NRC is “not in the business of regulating the market strategies of licensees.” *Louisiana Energy Serv.* (National Enrichment Facility), CLI-05-28, 62 NRC 721, 726 (2005). An agency’s primary duty under NEPA is to take a hard look at environmental impacts. To the extent that the environmental review considers economic information, the Commission has stated that, on review for adequacy, “we ask not whether every assumption contained in the FEIS was the best or whether it will turn out true, but ‘whether the economic assumptions of the FEIS were so distorted as to impair fair consideration of those environmental effects.’” *Private Fuel Storage, Inc.* (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 144-45 (2004). CASE’s speculation about the potential future expense of building and operating the water treatment plant does not demonstrate, or even clearly assert, that the feasibility or environmental impacts of the waste treatment facility

were inadequately analyzed in the FEIS. As such, these claims do not raise a genuine dispute on a material issue of law or fact.

Similarly, CASE speculates that the waste water treatment plant could be abandoned in the future due to sea level rise or an increase in salinity, and states that “the availability of freshwater in the area is already a major challenge[.]” Petition at 8-9. However, CASE fails to identify any deficiency in the FEIS’s discussion of water quality impacts and sea level rise. CASE fails to even acknowledge the discussion of sea level rise in Appendix I of the EIS (see FEIS, App. I at I-3 to I-4 and § I.3.2), and in any event does not explain why the sea level rise posited by CASE would be likely to result in abandonment of the treatment plant or a shortage of cooling water for the proposed project. Indeed, the e-mail that CASE quotes from Dr. Yoder states that “[o]ur modeling thus far indicates that into the 2040 timeframe our wellfield should be able to provide water meeting chloride standards.” Petition at 9. CASE asserts that MDCWS has abandoned water wells due to saltwater intrusion, but does not explain why this statement has any bearing on the use of reclaimed water from the treatment facility. Nor does CASE explain how any of its excerpts from Dr. Yoder’s and Dr. Wanless’s e-mails and the 2012 NOAA report contradict assumptions and analyses in the EIS regarding sea level rise or the environmental impacts of the project. In short, none of CASE’s statements in proposed Contention 1 explains how the use of reclaimed waste water “was not fully evaluated” in a way that is material to any analysis or conclusion in the FEIS.

NEPA requires agencies to analyze impacts that are reasonably foreseeable at the time the project at issue is proposed. An agency must make a “good faith” effort to predict reasonably foreseeable environmental impacts and that the agency apply a “rule of reason” after taking a “hard look” at potential environmental impacts. *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n. 21 (1976); *Balt. Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 97 (1983); *Natural Res. Def. Council, Inc. v. Morton*, 458 F.2d 827, 834 (D.C. Cir. 1972). See also

WildEarth Guardians v. Jewell, 738 F.3d. 298, 310 (D.C. Cir. 2013); *Nuclear Fuel Servs., Inc.*, LBP-05-8, 61 NRC 202, 207 (2005). Because CASE has failed to directly engage with the discussion and analysis of the waste water treatment facility in the FEIS (see, e.g., FEIS § 3.4.2.2), CASE has not raised a genuine dispute on a material issue of law or fact. CASE makes a number of claims about possible effects of sea level rise and poses a rhetorical question about whether or not the FEIS sufficiently considered climate change. Petition at 11. However, CASE again does not directly challenge any analyses or conclusions in the FEIS. It is well established that: “[P]etitioners must do more than submit ‘bald or conclusory allegation[s]’ of a dispute with the applicant. They must ‘read the pertinent portions of the license application, including the Safety Analysis Report and the Environmental Report, state the applicant’s position and the petitioner’s opposing view,’ and ‘explain[] why they have a disagreement with [the applicant].’” *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 2), LBP-03-12, 58 NRC 75, 81 (2003) (Internal citations omitted). In the EIS, the Staff found that, for most resources (except for terrestrial and socioeconomic resources), there would not be any noticeable changes due to climate change. The EIS further explained that for terrestrial resources impacted by the project, there could be additional impacts due to climate change. This is fully discussed in Appendix I to the FEIS. See FEIS § I.3.3.2. CASE does not acknowledge these findings, much less explain how it disagrees with them.

The Staff also extensively considered the implications of sea level rise for the Turkey Point project in the EIS. See DEIS, Appendix I; FEIS, Appendix I. CASE implies that the FEIS did not sufficiently consider sea level rise scenarios, and it cites to a 2012 NOAA report that includes a potential sea level rise projection of up to 6.6 feet by 2100. Petition at 10-11. However, the report that CASE cites is referenced in the 2014 Global Change Research Program report that was, in fact, used by the Staff in its sea level rise analysis in the DEIS. See DEIS Appendix I, at I-3. Furthermore, in response to public comments on the DEIS, the Staff

analysis in the FEIS acknowledges an extreme high-end prediction of an 8.2 foot sea level rise by 2100. See FEIS, Appendix I, § I.2 at I-3. As such, to the extent CASE asserts that the sea level rise projections it posits in proposed Contention 1 were not considered in the FEIS, that claim is unfounded. Moreover, CASE does not explain why any of the information it cites in its Petition about sea level rise indicates that any of the analyses or assumptions in the FEIS are unreasonable for NEPA purposes. See *Progress Energy Florida, Inc.* (Levy County Nuclear Power Plant, Units 1 and 2), LBP-13-4, 77 NRC 107, 211 (2013) (citing *Town of Winthrop v. Federal Aviation Administration*, 535 F.3d 1, 11-13 (1st Cir. 2008)) (“...the appropriate inquiry under NEPA is not whether there are alternative models that NRC could have used, or whether the analysis could have been refined, or improved by gathering additional data, but is whether the NRC's chosen methodology is reasonable”).

Finally, with respect to CASE's general concerns regarding the availability of cooling water for the proposed reactors, CASE speculates that, due to cost or sea level rise, “the applicant would ask to use the RCW's all of the time” and that such additional operating time “is not guaranteed.” Petition at 12. However, this fails to raise a genuine dispute with the EIS because CASE does not identify what material impact was overlooked. First, the sole quote CASE includes from the FEIS acknowledges that RCW use would be limited to a maximum of 60 days per year. Petition at 12 (quoting FEIS at 5-58). There is no dispute about FPL's obligation to comply with this limitation. Accordingly, even assuming the need to employ the RCWs due to unavailability of water from the wastewater treatment facility, the scenario CASE hypothesizes (FPL reaching the 60 day maximum for RCW use) would simply be expected to entail temporary shut down or derating of the Turkey Point units, in which case operational impacts would cease or decrease during that time. CASE has not demonstrated how this speculative need for the units to cease operation would have a material impact on the analyses

in the FEIS. If anything, the units' ceasing operation would render the environmental impacts of operation described in the FEIS more conservative.

As noted above, NEPA does not require an agency to analyze any number of speculative circumstances in its environmental review. Instead, an agency must take a "hard look" at reasonably foreseeable environmental impacts. *Kleppe*, 427 U.S. at 410 n. 21; *Balt. Gas & Elec. Co.*, 462 U.S. at 97. In order to advance a claim under NEPA, Intervenor's "must allege with adequate support that the Staff has unduly ignored or minimized pertinent environmental effects of the proposed action." *Pacific Gas and Electric Co.* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-26, 68 NRC 509, 514 (2008); *Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-03-17, 58 NRC 419, 431 (2003). Given the FEIS's discussion of the wastewater treatment facility, RCWs, water quality, and sea level rise, CASE simply does not explain what specific, material environmental impacts have been ignored or minimized. Accordingly, CASE has not raised a genuine dispute on a material issue of law or fact.

For the reasons stated above, the Board should find CASE proposed Contention 1 inadmissible because it fails to meet the requirements of 10 C.F.R. §§ 2.309(c) and (f)(1)(vi).

B. PROPOSED CONTENTION 2:

The probable heavy use of water from the Upper Floridan Aquifer using radial collector wells has not been fully evaluated and could result in catastrophic drainage of the actual and near freshwater from the Upper Floridan Aquifer required to abate saltwater intrusion and for human use.

Petition at 12.

In proposed Contention 2, CASE asserts that "[t]he multi-layered aquifer system in South Florida is interconnected in many ways so extracting the vast amount of sea water (UP to 125 mgd) [*sic*] required for the cooling towers will draw water from every direction and will increase and force the flow of water between the various levels and strata of the aquifer." *Id.* at 13.

CASE states that “[g]iven the scarcity of freshwater in the area, any action which diverts or uses it will be catastrophic given the already challenged aquifer.” *Id.* CASE contends that “[t]here is just not enough freshwater in South Florida so any diversion of it is problematical.” *Id.* CASE goes on to assert that “[f]reshwater is required to abate the inland flow of salt water as well as for human, agricultural and business use.” *Id.* CASE also contends that the NRC Staff “ignored the reservations of the review team” regarding the reliability of data used in groundwater modeling for evaluating impacts from RCWs. *Id.* at 15.

Staff Response:

Proposed Contention 2 is inadmissible because CASE has not met the requirements of 10 C.F.R. § 2.309(c). Although this failure is dispositive, proposed Contention 2 is also inadmissible because: 1) CASE failed to explain why proposed Contention 2 is material to the findings that the NRC must make in this proceeding; 2) proposed Contention 2 is unsupported by alleged facts or expert opinion; and, 3) CASE failed to identify a genuine dispute with the application regarding a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(iv)-(vi). Accordingly, the Board should find proposed Contention 2 inadmissible.

Before addressing CASE’s failure to meet the § 2.309(c) and § 2.309(f)(1) standards, the Staff considers it necessary to provide some background to address what appear to be some essential misconceptions underlying CASE’s claims. Throughout its discussion of proposed Contention 2, CASE expresses concern about descriptions of “uncertainties” in FPL’s groundwater model and erroneously asserts that NRC Staff “ignored the reservations of the review team.” Petition at 13-15. This claim appears to be based on CASE’s fundamental misunderstanding of 1) the term “review team,” 2) the fact the Staff, in its review of the ER, commissioned the USGS report (before completion of the DEIS) to address questions about FPL’s model and explained the results in the DEIS, and 3) the ultimate Staff decision, in response to public comments on the DEIS, to independently develop a third model to confirm

the adequacy of the modeling discussed in the DEIS and report the results of this third model in the FEIS. These points are discussed in turn below.

First, the Staff is part of the “review team.” As defined in the FEIS at pages 1-2 and 1-3, the review team consisted of the Staff, its contractor staff, and the U.S. Army Corps of Engineers staff. As a result, the analyses and conclusions by “the review team” are also conclusions of the NRC Staff, so the Staff by definition did not “ignore” them.

Second, CASE refers in proposed Contention 2 to a “USGS study” (or “USGS report”). CASE quotes what it describes as “cautionary statements” in that document, and CASE points to the “uncertainties” the USGS report discusses regarding the FPL groundwater model as evidence that the NRC Staff ignored “review team” concerns about “the reliability of the data in the FPL model.” Petition at 14-15. However, as described further below, the Staff commissioned the USGS study in light of the review team’s evaluation of FPL’s groundwater model, and the USGS performed independent confirmatory modeling that was discussed in the DEIS.¹² Thus the “uncertainties” and “cautionary statements” to which CASE refers were Staff critiques of the initial FPL model described in the ER, and those very concerns were addressed in the DEIS through the USGS modeling and in the FEIS through the review team’s (the Staff’s) independent modeling analysis. Yet CASE neither cites nor disputes those analyses.

Third, the FEIS itself explains the different models considered and reflects the Staff conclusions based, in part, on the model results. In this regard, the FEIS states:

This appendix describes three separate modeling efforts performed to estimate the effects of radial collector well (RCW) pumping on the Biscayne aquifer, Biscayne Bay, and other portions of the hydrologic environment including nearby drainage canals and the cooling canals of the industrial wastewater facility (IWF). Two of these modeling efforts were performed before the NRC issued the draft environmental impact statement (EIS) in

¹² The Board itself explained this precise point in rejecting a contention proposed by the City of Miami. See *Turkey Point*, LBP-15-19, 81 NRC at 825.

2015, while the third was performed afterwards. The staff also used the two earlier studies to simulate the effects of dewatering the Units 6 and 7 plant excavations. To further confirm their understanding of the groundwater hydrodynamics and to consider whether certain actions proposed after the two earlier modeling studies were completed would alter the earlier conclusions documented in the draft EIS (EIS, NRC 2015-TN4444), the review team performed a third modeling analysis (Oostrom and Vail 2016-TN4739).

FPL conducted modeling (FPL 2014-TN4069) using a local-scale groundwater model of the Biscayne aquifer including the portion of the aquifer underlying Biscayne Bay near the Turkey Point site. The NRC commissioned the U.S. Geological Survey (USGS), to conduct additional modeling to help identify the potential effects of RCW pumping (NRC 2014-TN3078). As indicated above, after the Draft EIS was issued, the review team itself performed a third modeling analysis.

FEIS App. G at G-26. As indicated by the above, ultimately, in response to public comments on the DEIS, the Staff itself independently developed a third model to confirm the adequacy of the modeling discussed in the DEIS, and the results of this third model were included in the FEIS.

As explained in the FEIS, the determinations in the FEIS related to groundwater are based on the FPL numerical model analysis, the USGS model analysis, the review team's independent numerical modeling analysis, and the review team's knowledge and expertise. FEIS § G.3.2. The conceptual models that served as the basis for the numerical models are based on available characterization information for the Turkey Point site and surrounding region. The FEIS explains in detail how uncertainties in the information and conceptual model were addressed, as well as why some uncertainties remain and why the review team took care not to rely solely on the output of any numerical model. FEIS, App. E, at E-207.

As explained in Appendix E of the FEIS, analyses from the USGS groundwater-surface water model presented in the FEIS showed that in the absence of remediation of the IWF hypersaline plume, increases in groundwater salinity may occur inland from Turkey Point because of movement of the existing hypersaline plume, regardless of whether or not the proposed units are built and operated. FEIS, App. E, at E-186 to E-187. The FEIS also noted

that the model-predicted increase in ground water salinity is not caused by RCW pumping or other activities related to the proposed units, and it explained that the model-predicted increase in groundwater salinity also does not reach the location of drinking water wells. *Id.* The FEIS explained that several comments on the DEIS indicated that the FPL groundwater model provides limited insight into groundwater behavior because it does not consider density differences. *Id.* The FEIS observed that the review team evaluation documented in the draft EIS made the same point, and this is why the review team commissioned the USGS to perform additional groundwater modeling that is also documented in the FEIS and which accounts for density differences. *Id.*

With that background in mind, the Staff will address CASE's failure to meet the requirements of 10 C.F.R. § 2.309(c) and 10 C.F.R. § 2.309(f)(1).

1. Proposed Contention 2 Does Not Meet the Requirements of 10 C.F.R. § 2.309(c).

In proposed Contention 2, CASE has not even attempted to demonstrate that the information upon which proposed Contention 2 is based was previously unavailable or is materially different from information that was previously available, as required by 10 C.F.R. § 2.309(c). This alone is fatal to the proposed Contention 2, as a petitioner's failure to address the "good cause" standards for filing after the initial intervention deadline constitutes sufficient grounds for dismissing the contention. *Calvert Cliffs*, CLI-98-25, 48 NRC at 347; *St. Lucie*, CLI-06-21, 64 NRC at 33-34. Further, FEIS § 5.2.1.1 documents the Staff review of FPL and National Park Service assessments of salinity impacts and groundwater modeling developed by the USGS that compared existing (base case) salinity conditions to predicted conditions under three RCW operational scenarios. FEIS at 5-71 to 5-77. CASE does not acknowledge the FEIS evaluation, challenge the analysis, or explain how it is materially different from the information in the DEIS. Moreover, CASE directly quotes the DEIS for USGS report statements regarding the FPL model (*compare* Petition at 13-14 *with* DEIS App. G at G-28; Petition at 14-15 *with* DEIS

App. G at G-30), but fails to explain how the USGS report provides information that is materially different from what was previously available with respect to impacts of operation of the RCWs.

2. Proposed Contention 2 Does Not Meet the Requirements of 10 C.F.R. § 2.309(f)(1).

For similar reasons, CASE's proposed Contention 2 also fails to meet the applicable standards of 10 C.F.R. § 2.309(f)(1). The issues with the FPL groundwater model identified in the USGS study were subsequently assessed through additional review team analysis described in both the DEIS and FEIS. CASE thus fails to explain the factual basis for its claims that there are inconsistencies or uncertainties that have been ignored or insufficiently evaluated, contrary to 10 C.F.R. § 2.309(f)(1)(v). A petitioner's imprecise reading of a document cannot be the basis for a litigable contention. See *Ga. Inst. of Tech.* (Ga. Tech Research Reactor, Atlanta, Ga.), LBP-95-6, 41 NRC 281, 300, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff'd*, CLI-95-12, 42 NRC 111 (1995). Similarly, CASE provides no factual support for its assertion that "any action" that diverts or uses freshwater will be "catastrophic." Petition at 13. In determining a proposed contention's admissibility, a "bald assertion that a matter ought to be considered or that a factual dispute exists . . . is not sufficient"; rather, "a petitioner must provide documents or other factual information or expert opinion that set forth the necessary technical analysis to show why the proffered bases support its contention." *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-98-7, 47 NRC 142, 180 (1998) (*citing Georgia Institute of Technology*, LBP-95-6, 41 NRC at 305, *vacated in part and remanded on other grounds*, CLI-95-10, 42 NRC 1, *aff'd in part*, CLI-95-12, 42 NRC 111 (1995) (A petitioner is obligated "to provide the [technical] analyses and expert opinion" or other information "showing why its bases support its contention.")). Accordingly, proposed Contention 2 does not satisfy 10 C.F.R. § 2.309(f)(1)(v).

In addition, CASE appears to believe that the existence of "uncertainties" in an environmental analysis is contrary to NEPA. However, it is well established that NEPA "does

not call for certainty or precision, but an *estimate* of anticipated (not unduly speculative) impacts.” See *LES*, CLI-05-20, 62 NRC at 536 (emphasis in original); see also 40 C.F.R. § 1502.22. Accordingly, to the extent that proposed Contention 2 is based on the mistaken premise that an EIS cannot acknowledge uncertainties as part of the impact evaluation, CASE fails to show that the issue is material, contrary to 10 C.F.R. § 2.309(f)(1)(iv).

Finally, proposed Contention 2 does not identify a genuine dispute with the application regarding a material issue of law or fact. As explained above, CASE’s assertion that the Staff “ignored the reservations” of the “review team” simply misreads the EIS, because the Staff was part of the review team and agreed with the concerns the USGS described regarding the initial FPL groundwater model. More fundamentally, CASE asserts that the impacts of water use have not been fully evaluated, but, as explained above, CASE fails to acknowledge, let alone dispute, the additional groundwater modeling that was performed (and discussed in both the DEIS and FEIS) to address the very uncertainties about which CASE expresses concern. These integrated analyses of multiple groundwater models were in turn used to inform the use and impacts of RCWs as described and examined in the DEIS and FEIS (see, e.g., DEIS and FEIS §§ 5.2.1.1, 5.2.1.4 and 5.2.1.5). CASE’s incomplete reading of the sections of the EIS relevant to its concern – and its failure to specify any dispute with those portions of the evaluation – cannot constitute a genuine material dispute. “[P]etitioners must do more than submit ‘bald or conclusory allegation[s]’ of a dispute with the applicant. They must ‘read the pertinent portions of the license application[...], state the applicant’s position and the petitioner’s opposing view,’ and ‘explain[] why they have a disagreement with [the applicant].” *Millstone*, LBP-03-12, 58 NRC at 81. For these reasons, CASE fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(vi).

For the foregoing reasons, proposed Contention 2 should not be admitted.

C. Proposed Contention 3:

CASE proposes new Contention 3 as follows:

The impact of injecting toxic chemicals and liquid radwaste laden water from the reactors directly into the Boulder Zone was not fully evaluated in the EIS.

Petition at 16. Proposed Contention 3 appears to comprise three parts: First, CASE asserts that the EIS does not include an “in depth level” of analysis of deep-well injection, and that “such analysis would only require checking the literature and available information on the nature of the Biscayne Aquifer.”¹³ *Id.* at 19. In this regard, CASE offers the testimony of a Mr. Anderson on behalf of FPL in another NRC proceeding and a study by Donald F. McNeill (“A Review of Upward Migration of Effluent to Subsurface Injection at Miami-Dade Water and Sewer South District Plant,” 2000, Prepared for Sierra Club – Miami Group) (“McNeill 2000 Study”) to support CASE’s claim that there is “upward connectivity from the lower levels of the aquifer to the upper.” *Id.*

Second, CASE claims that the EIS does not fully evaluate “the implications of toxic chemicals and even low levels of tritium, cesium and strontium 90 which will be introduced in the Boulder Zone,” and accordingly, “the EIS reaches dangerous and unsupported conclusions.” *Id.* at 26. In this regard, CASE cites the EIS for concentrations of radionuclides, and offers a report by Cindy Folkers, Nuclear Information and Resource Service, April 2006, to the effect that “even the smallest amount of tritium can have negative health effects.” *Id.* at 24.

¹³ In asserting the inadequacy of the EIS analysis, CASE also refers to “the land of which the Turkey Point wetland is a part.” Petition at 19. This reference to wetlands is the only one in CASE’s discussion of proposed Contention 3, and CASE does not specify how wetlands might be affected by liquid radioactive or chemical effluents injected into the Boulder Zone. Accordingly, this portion of proposed Contention 3 fails to satisfy 10 C.F.R. § 2.309(f)(1)(i), which requires a petitioner to provide a specific statement of the issue of law or fact to be raised or controverted.

Third, CASE argues that the EIS does not mention a possible pathway from the Boulder Zone to the Atlantic Ocean. *Id.* at 30. For support, CASE cites the “USGS Ground Water Atlas of the United States (Alabama, Florida, Georgia, South Carolina HA 730-G)” to the effect that the Boulder Zone “is thought to be connected to the Atlantic Ocean, possibly about 25 miles east of Miami,” and asserts that the EIS does not mention “this possible pathway.”¹⁴ *Id.*

Staff Response:

As explained in detail below, the Staff opposes admission of proposed Contention 3 because CASE (1) fails to satisfy the 10 C.F.R. § 2.309(c) requirements for filing contentions after the deadline set in the Notice of Hearing and (2) fails to establish a genuine dispute with the EIS on a material issue of law or fact, as required by 10 C.F.R. § 2.309(f)(1)(vi), has not asserted facts or expert opinion that support CASE’s position on the issue, as required by 10 C.F.R. § 2.309(f)(1)(v), or has not explained why the issue raised is material to the findings the NRC must make to support the proposed action, as required by § 2.309(f)(1)(iv). In regard to CASE’s assertions regarding the dangers of tritium, cesium, and strontium, CASE is also challenging Commission regulations in 10 C.F.R. § 20.1302(b)(2)(i) and Part 20, Appendix B, without requesting a waiver, as required by 10 C.F.R. § 2.335(b).

1. Proposed Contention 3 Does Not Meet the Requirements of 10 C.F.R. § 2.309(c).

The CASE Petition is silent regarding the requirements of § 2.309(c) for contentions filed after the deadline in the Notice of Hearing, and since that deadline passed long ago (August 2010; see 75 Fed. Reg. 34,777) this alone is fatal to proposed Contention 3. In addition, the original Application, which is dated June 30, 2009, described the FPL proposal to dispose of

¹⁴ The Final EIS, however, does indeed include a statement almost identical to that which CASE cites, *i.e.*, that the Boulder Zone “is thought to be connected to the Atlantic Ocean, possibly about 25 miles east of Miami.” Final EIS § 2.3.1.2 at 2-54.

liquid radioactive effluents together with cooling tower blowdown. ER Rev. 0, §§ 3.3.1.2, 3.3.2.1, 3.4.2.2, and 5.4.1.1. A later revision to the ER, dated October 29, 2014, set forth additional details regarding the liquid waste streams that proposed Units 6 and 7 would generate, including chemical constituents in water released by deep well injection. ER Rev. 6, § 5.5. Further, the draft EIS, which the Staff published in February 2015, was based on ER Rev. 6, and described the FPL plan for deep well injection and analyzed the resulting environmental impacts. Draft EIS §§ 3.2.2.2, 3.4.3.1, 3.4.3.1, 5.2.1.3, and 5.9.2.1. CASE did not identify any information in its Petition as previously unavailable in ER Rev. 6 or the Draft EIS, or even ER Rev. 0, much less explained how such information might be materially different from previously available information, as required by 10 C.F.R. § 2.309(c). Accordingly, CASE fails to show good cause for filing proposed Contention 3 after the deadline in the Notice of Hearing, as required by § 2.309(c), and for this reason alone, proposed Contention 3 should be rejected. See *Calvert Cliffs*, CLI-98-25, 48 NRC at 347; *St. Lucie*, CLI-06-21, 64 NRC at 33-34.

2. Proposed Contention 3 Does Not Meet the Requirements of 10 C.F.R. § 2.309(f)(1).

In regard to each of the three aspects of proposed Contention 3 identified above, CASE either does not show that a genuine dispute exists with the EIS, including the supporting reason for each dispute, as required by § 2.309(f)(1)(vi), does not assert facts or expert opinion to support its position on the issues, as required by § 2.309(f)(1)(v), or does not demonstrate that the issue raised is material to the findings the NRC must make to support the action proposed in the Application, as required by § 2.309(f)(1)(iv). Although CASE liberally quotes the Final EIS (see Petition at 18, 20, 21-22, 25-26, 27-28, and 30-31), CASE either fails to identify a specific portion of the EIS with which it disagrees or fails to support a genuine issue on the matters CASE claims to dispute. The Staff below discusses each aspect of proposed Contention 3.

CASE incorrectly asserts that the Final EIS omits in-depth analysis of deep well injection, and CASE fails to dispute any specific aspect of the analysis in the Final EIS, contrary to § 2.309(f)(1)(vi).

As discussed above, the first aspect of proposed Contention 3 is the CASE assertion that the Final EIS does not include an “in depth level” of analysis of deep-well injection, and that “such analysis would only require checking the literature and available information on the nature of the Biscayne Aquifer[.]” Petition at 19. At the outset, it is most important to emphasize that the Staff analysis of the impacts of disposal of liquid radioactive and chemical effluents in the Boulder Zone *does not* rely on confinement of the injected effluents, but relies on a conservative transport analysis that postulates exposures through a postulated well 2.2 miles from the injection site. Final EIS § 5.2.1.3 at 5-20 to 5-21 and 5-27 to 5-28; § 5.9.3.3. The FEIS indicates that confinement of the wastewater below the underground source of drinking water (“USDW”), however, will provide an additional level of protection. FEIS at 5-21. Accordingly, and notwithstanding that CASE has not established a genuine dispute with the EIS regarding confinement, as explained below, any such dispute would not be material to the Staff findings in the EIS regarding disposal of radioactive and chemical effluents by deep well injection, contrary to the requirements in 10 C.F.R. § 2.309(f)(1)(iv).

In regard to confinement of injected radionuclides and chemicals below the USDW, the Final EIS does include in-depth analysis of deep-well injection (Final EIS, §§ 5.2.1.3 (which includes pages 5-21 to 5-29); 5.2.3.2 (at 5-39 to 5-41); 5.9.3.3; 5.10.2; and Appendix G, § G.2.1), and CASE does not assert any error in any particular portion of the Staff analyses in the Final EIS. Rather, CASE cites the McNeill 2000 Study in support of proposed Contention 3 and implies that the Staff should have considered information in that study in its analysis in the Final EIS. But the Final EIS itself cites the McNeill 2000 Study—the Staff did indeed consider the McNeill 2000 Study in the Staff analysis. Final EIS at 5-40. CASE does not assert any error in the Staff’s consideration of the McNeill 2000 Study. Further, the Staff analysis considers

several other studies of geohydrology relating to deep well injection in South Florida (Final EIS, §§ 5.2.1.3, 5.2.3.2), which shows that the Staff did perform the literature search CASE asserted was necessary. CASE does not even acknowledge the Staff literature review, let alone identify any dispute with it.¹⁵

In addition, CASE quotes Final EIS § 3.4.3.1 for a description of the constituents that will be disposed of by deep-well injection (Petition at 21-22), and concludes it is “quite a soup” (*id.* at 22). CASE, however, does not claim to take issue with the EIS analysis of the disposal of these materials, except in regard to tritium and CASE’s postulated flowpath to the Atlantic Ocean, both of which are discussed below. However, petitioners bear the responsibility for setting forth their grievances clearly. *Pilgrim*, CLI-10-15, 71 NRC at 482.

As for the portion of the Final EIS at pages 5-21 to 5-29 that CASE cites, CASE states that it is “so convoluted and internally contradictory and self-serving that it will [take a hearing] to separate fact from fiction.” CASE Petition at 20. CASE, however, does not identify a single specific “internal contradict[ion]” or any other error in this analysis. CASE cannot have it both ways: CASE cannot complain that the FEIS omits analysis and at the same time protest (without factual support) that eight pages of in-depth analysis means that impacts of deep-well injection are more significant than is stated in the FEIS. Because CASE has not identified any specific inadequacy in the Staff analyses of deep-well injection, CASE has not satisfied § 2.309(f)(1)(vi) with respect to this aspect of proposed Contention 3.

¹⁵ CASE also recites a snippet of testimony from another NRC proceeding (Petition at 19), but that testimony does not indicate that it applies to deep-well injection into the Boulder Zone, nor does CASE explain its significance, if any, in the context of deep-well injection. It “should not be necessary to speculate about what a pleading is supposed to mean,” and petitioners bear the responsibility for setting forth their grievances clearly. *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), CLI-10-15, 71 NRC 479, 482 (2010), citing *Commonwealth Edison Co.* (Zion Nuclear Power Station, Units 1 and 2), CLI-99-4, 49 NRC 185, 194 (1999).

CASE incorrectly asserts that the EIS does not fully evaluate the introduction of chemicals and radionuclides into the Boulder Zone; CASE does not provide factual or legal support for its position, contrary to § 2.309(f)(1)(v); and CASE does not identify any error in the Final EIS, contrary to § 2.309(f)(1)(vi).

As stated above, the second aspect of proposed Contention 3 is the CASE claim that the EIS does not fully evaluate the implications injecting “toxic chemicals” and “low levels of tritium, cesium and strontium 90” into the Boulder Zone. Petition at 26. Although CASE quotes text from the Final EIS (Petition at 21-22, 25-26, 27-28, and 30), CASE does not specify any particular part of the Staff analysis in the Final EIS as in error, except for the Staff analysis of tritium, and, as discussed further below, flowpaths. In all other respects, CASE does not even identify the nature of the “implications” of disposal of radionuclides and chemicals by deep well injection CASE believes are not properly treated in the Staff analysis in the EIS.

In regard to tritium, CASE cites a study to the effect that “even the smallest amount of tritium can have negative health effects.” Petition at 22-24. The NRC, however, has established requirements in 10 C.F.R. § 20.1302(b) and Part 20, Appendix B, to govern the release of tritium and radioactive isotopes of cesium and strontium, among other radionuclides, at specified concentrations the NRC has determined adequate to protect the public health and safety. The analysis in the Final EIS is based on these requirements of Part 20 (Final EIS § 5.9.3.3), and CASE’s assertions regarding the hazards of tritium and radioactive isotopes of cesium, and strontium amount to a challenge to Part 20, which is prohibited by 10 C.F.R. § 2.335 in the absence of a waiver.¹⁶ *U.S. Dep’t of Energy* (High-Level Waste Repository), CLI-10-10, 71 NRC 281, 284 (2010). CASE did not seek such a waiver here, and CASE’s challenge to the regulations in Part 20 is not acceptable as a basis for proposed Contention 3. Accordingly, CASE fails to assert facts or expert opinion adequate to support proposed

¹⁶ In this regard, the Petition also amounts to a challenge to the NRC regulations in 10 C.F.R. § 20.2002 and 10 C.F.R. Part 50, Appendix I.

Contention 3, including in regard to tritium, as required by § 2.309(f)(1)(v), and otherwise fails to raise a genuine dispute with the EIS in regard to the second aspect of proposed Contention 3, as required by § 2.309(f)(1)(vi).

CASE fails to establish that a possible pathway from the Boulder Zone to the Atlantic Ocean is material to an NRC finding required to support the proposed action, contrary to § 2.309(f)(1)(iv), and fails to assert facts or expert opinion to support its position, contrary to § 2.309(f)(1)(v).

The third aspect of proposed Contention 3 relates to CASE's claim that the EIS does not mention a possible pathway from the Boulder Zone to the Atlantic Ocean. CASE Petition at 30. CASE, however, does not offer any facts or expert opinion to support the assertion that radionuclides disposed of in the Boulder Zone will somehow be transported to the Atlantic Ocean via this "possible pathway," as required by § 2.309(f)(1)(v). Nor has CASE explained how the existence of this "possible pathway" might be material to the findings the NRC must make to support the proposed action, as required by § 2.309(f)(1)(iv).¹⁷

Moreover, the Staff determined there was no need to perform a dose assessment at a location 7.7 miles away from the proposed Turkey Point Units 6 and 7 because "the injectate plume never reached that far" in the 100 year duration of transport modeled in the FEIS, which

¹⁷ In connection with this aspect of proposed Contention 3, CASE asserts that "[e]ven small, diluted amounts of radioactive waste will accumulate and concentrate radiation which is not confined like water and can be absorbed by plant life," and suggests that radionuclides will concentrate if they migrate through the Boulder Zone to the Atlantic Ocean as CASE presumes. Petition at 29. In this context, CASE also objects to the dilution of effluents in ensuring that the concentrations of any chemicals that are released will be within established limits. *Id.* at 26-27. Contrary to § 2.309(f)(1)(iv), CASE has not explained how these assertions are material to the NRC decision on the Application. The absence of any factual or expert support for the claim that wastewater disposed of in the Boulder Zone will be transported to the Atlantic Ocean further highlights CASE's failure to explain the materiality of these assertions.

In addition, CASE quotes EIS § 6.1.4 in connection with this argument. EIS § 6.1.4, however, discusses liquid chemical effluents produced in fuel-cycle processes, as the quotation in the Petition indicates, and not effluents from proposed Turkey Point Units 6 & 7. See Petition at 26. The CASE reference to EIS § 6.1.4 therefore does not support proposed Contention 3.

included consideration of radioactive decay.¹⁸ FEIS, App. G, § G.1.1 at G-5; FEIS, App.E, at E-190. The Staff reached that conclusion based on FPL geohydrology transport analysis that the Staff confirmed with its own independent analysis. *Id.* § 5.2.1.3 at 5-26; § 5.9.2.1 at 5-118; § 5.9.3.3 at 5-123; see Safety Evaluation Report, Chapter 11 at 11-21, “Radial Transport Model” (ML16266A126). CASE does not provide any information to the contrary; specifically, CASE does not propose any analysis purporting to show that the injectate plume from the Turkey Point injection wells might extend 25 miles to a postulated connection to the Atlantic Ocean, so as to result in exposure to radiation through that pathway. Accordingly, CASE does not raise any genuine dispute with the Final EIS in regard to wastewater transport within the Boulder Zone, as required by § 2.309(f)(1)(vi). In view of the above, CASE fails to satisfy §§ 2.309(f)(1)(iv), (v), and (iv) regarding this aspect of proposed Contention 3.

In view of the foregoing, CASE fails to satisfy § 2.309(c) and § 2.309(f)(1) with respect to proposed Contention 3, and it should be rejected.

D. Proposed Contention 4

NEPA was not fully honored in spirit or letter by the NRC staff which approved measures harmful to the environment.

Petition at 31. In proposed Contention 4, CASE makes several assertions about compliance with NEPA. These assertions include a claim that the NEPA analysis is inadequate because it relied on computer modeling and not “field research and studies.” *Id.* at 32. CASE also questions the need for the project and the NRC’s objectivity and proposes that decisions about energy generation projects should be made at a “higher governmental level[.]” *Id.* at 33-34, 38. CASE also asserts that the EIS analysis of alternatives omits “the decentralized, distributed

¹⁸ To the extent CASE asserts that the FEIS at 5-123 predicts activities of tritium, cesium, and strontium reaching the Ocean Reef Yacht Club, that assertion is incorrect. Rather, the FEIS at 5-123 is discussing the activities modeled at the hypothetical well 2.2 miles from the injection location.

production of energy at the point of use including solar, wind and geothermal energy” and that energy efficiency and reduced demand “should have been figured into the EIS.” *Id.* at 36-37.

Staff Response:

Proposed Contention 4 is inadmissible because CASE has failed to demonstrate good cause for filing after the initial deadline in the Notice of Hearing, as required by 10 C.F.R. § 2.309(c). Even if it were not untimely, proposed Contention 4 is also inadmissible because 1) CASE fails to demonstrate that proposed Contention 4 is within the scope of the proceeding, 2) the proposed contention is not sufficiently supported by facts or expert opinion, and 3) CASE fails to identify a genuine dispute with the EIS on a material issue of fact or law. See 10 C.F.R. §§ 2.309(f)(1)(iii), (v), (vi). Accordingly, the Board should dismiss proposed Contention 4.

1. Proposed Contention 4 Does Not Meet the Requirements of 10 C.F.R. § 2.309(c).

CASE fails to demonstrate that any of its assertions are based on information that was not previously available or is materially different from information that was previously available. Accordingly, CASE has failed to show that it has good cause for raising these challenges after the initial deadline for intervention in this proceeding. Both FPL’s ER and the Staff’s DEIS used computer modeling for aspects of the impact analysis. For example, ER Rev. 0, Chapter 4 (ML091870918), Chapter 5 (ML091870919), and Chapter 7 (ML091870922) and DEIS Chapters 4, 5 (both at ML15055A103), and 7 (ML15055A109) use computer modeling to analyze impacts of construction, operation, and postulated accidents, respectively. Additionally, the purpose and need for Turkey Point, Units 6 & 7 was discussed in § 1.1.1 of ER Rev. 0 (ML091870902) and DEIS § 1.3 (ML15055A103), and the need for power was analyzed in ER Rev. 0, Chapter 8 (ML091870923) and DEIS Chapter 8 (ML15055A109).

Likewise, the ER and the DEIS discuss energy alternatives. Specifically, ER Rev. 0, Chapter 8 (ML091870923), § 8.2.3 discussed energy efficiencies and demand-side management. Similarly, ER Rev.0, Chapter 9 (ML091870924), §§ 9.2.2.2, 9.2.2.3, and 9.2.2.5

discuss wind, solar, and geothermal renewable energy sources, respectively. In the DEIS (ML15055A109), §§ 8.2.1.6 and 9.2.1.3 discuss energy efficiencies and demand-side management, respectively. Additionally, DEIS §§ 9.2.3.2, 9.2.3.3, and 9.2.3.5 discuss wind, solar, and geothermal renewable energy sources, respectively. Because each of these topics was previously addressed, and because CASE fails to specify how any of its statements in proposed Contention 4 (including its quotes from the FEIS) differ materially from information previously available, CASE has not shown good cause as required by 10 C.F.R. § 2.309(c). That alone constitutes sufficient grounds for the Board to dismiss proposed Contention 4. See *Calvert Cliffs*, CLI-98-25, 48 NRC at 347; *St. Lucie*, CLI-06-21, 64 NRC at 33-34.

2. Proposed Contention 4 Does Not Meet the Requirements of 10 C.F.R. § 2.309(f)(1).

In addition to being untimely, proposed Contention 4 does not meet the contention admissibility criteria of 10 C.F.R. § 2.309(f)(1), because it is not within the scope of the proceeding, is insufficiently supported by facts or expert opinion, and fails to identify a genuine dispute with the EIS, as required by §§ 2.309(f)(1)(iii), (v), and (vi), respectively.

CASE expresses concern that some impacts of the project “have only been evaluated through computer modeling” (Petition at 32), and that the EIS did not consider “field research or studies specifically related” to the project (*id.*). Despite this expression of concern, CASE does not specify to which impact evaluations within the EIS it is referring. Likewise, it is readily apparent that the impact evaluations in the FEIS do not rely solely on computer modeling; the Staff considered a wide range of sources including direct observations, field studies, and academic research. See *generally* DEIS Chapters 1, 2, 4, 5, & 9. For example, the Staff analysis in § 2.3 of the DEIS relies on observations, site audits, historical conditions, academic literature, and an isotope tracer analysis. And while the Staff thus did consider other sources in addition to computer modeling, NEPA in any event does not require agencies to use a particular scientific methodology - “NEPA allows agencies to select their own methodology as long as that

methodology is reasonable.” *Nuclear Innovation N. Am. LLC* (South Texas Project, Units 3 & 4), LBP-11-38, 74 NRC 817, 831 (2011), quoting *Pilgrim*, CLI-10-11, 71 NRC at 315-16 (internal citations omitted); see also *Town of Winthrop v. Federal Aviation Administration*, 535 F.3d 1, 11-13 (1st Cir. 2008). It is well-established that an agency’s NEPA “hard look” evaluation is assessed by a standard of reasonableness and that it “should be construed in the light of reason if it is not to demand virtually infinite study and resources.” *Pilgrim*, CLI-10-11, 71 NRC at 315-16 (internal citations omitted); see also *Winthrop*, 535 F.3d at 11-13; *The Lands Council v. McNair*, 537 F.3d 981, 1003 (9th Cir. 2008) (an EIS need not be based on the “best scientific methodology available”). While more study and research could always provide additional data, “agencies must have some discretion to draw the line and move forward with decisionmaking.” *Pilgrim*, CLI-10-11, 71 NRC at 315; *Winthrop*, 535 F.3d at 11 (internal quotations omitted).

In proposed Contention 4, CASE provides no specific basis to challenge the evaluation methodologies used in the EIS, with respect to computer modeling or otherwise. A petitioner must “proffer at least some minimal factual and legal foundation in support of [its] contentions.” *Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999). Likewise, bare or conclusory assertions will not suffice to allow the admission of a proposed contention. See *USEC, Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 472 (2006); *Fansteel, Inc.* (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003). Here, CASE fails to identify any factual or expert support for its generalized criticism, contrary to the requirements of 10 C.F.R. § 2.309(f)(1)(v). For similar reasons, as CASE fails to explain how its observations contradict any specific impact analysis or conclusion in the EIS, let alone how that would be significant to the outcome of the analysis, proposed Contention 4 does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(vi) to show that a genuine dispute exists on a material issue of law or fact. *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001); “Rules of Practice for Domestic

Licensing Proceedings—Procedural Changes in the Hearing Process,” 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989) (“[A] protestant does not become entitled to an evidentiary hearing merely on request, or on a bald or conclusory allegation that . . . a dispute exists. The protestant must make a minimal showing that material facts are in dispute, thereby demonstrating that an ‘inquiry in depth’ is appropriate”).

CASE also makes several statements either rhetorically questioning the purpose of the project or expressing CASE’s discomfort with portions of the analysis and conclusions in the EIS. Petition at 33–35, 38 (e.g., “What is so necessary for the welfare of man to merit it?”; “[Reading Section 4.2.1.1 of the EIS] made this writer physically nauseous at the draconian insult to the rare and precious Turkey Point Wetland...”; “...gross insults...as described heartlessly [at 4-23]”; “Is the production of energy worth the use and destruction of the natural resources and the land for short term gain?”). CASE also opines that energy generation project decisions should be made “at a higher governmental level” instead of at the NRC while implying the NRC analysis was not objective. Petition at 34. Such comments and rhetorical statements only express generalized disagreement with the proposed action and the NRC or express CASE’s preference for other forms of energy production or changes in agency jurisdiction. Petition at 33. It is well established that a petitioner cannot seek to use a specific adjudicatory proceeding to express generalized policy grievances. *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Unit 3), CLI-08-17, 68 NRC 231 (2008) (quoting *Oconee*, CLI-99-11, 40 NRC at 334-35); *Philadelphia Elec. Co.* (Peach Bottom Atomic Power Station, Units 2 & 3), ALAB-216, 8 AEC 13, 21 (1974)). Additionally, § 1.1.1 of ER, Rev. 0, and § 1.3 of both the DEIS and FEIS describe the purpose and need of the Turkey Point project. Further, ER Rev. 0, Chapter 8, and both DEIS and FEIS Chapter 8 describe the need for power. Furthermore, DEIS § 10.6 provides an overall cost-benefit analysis comparing the benefits and

impacts of the Turkey Point project. In proposed Contention 4, CASE neither references these portions of the documents nor identifies a dispute with their conclusions.

Furthermore, “NEPA, as a procedural statute, does not require any particular substantive result. NEPA serves the purpose of environmental protection through ‘action-forcing’ procedures that require agencies to take a ‘hard look’ at environmental impacts and that provide for ‘broad dissemination of relevant environmental information.’” *Florida Power & Light Co.* (Turkey Point Nuclear Generating Units 3 and 4), CLI-16-18, 84 NRC __ (Dec. 15, 2016) (slip op. at 9) quoting *Methow Valley*, 490 U.S. at 350; see also *Vermont Yankee*, 435 U.S. at 558; *Indian Point I*, CLI-16-7, 83 NRC at 328; *Indian Point II*, CLI-16-10, 83 NRC at 510. Accordingly, these aspects of proposed Contention 4 fail to meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(iii) and (vi) and do not support an admissible contention.

Finally, CASE asserts that the FEIS § 9.2.5 omitted analysis of renewable energy generation alternatives such as solar, wind, and geothermal (Petition at 36); improved energy efficiency (*id.* at 36); and demand reductions (*id.* at 37). Contrary to CASE’s assertions, the FEIS addresses alternative energy generation sources, like renewables, and alternatives not requiring new generating capacity. While § 9.2.5 of the FEIS primarily compares the environmental impacts of nuclear and fossil-fuel energy generation, other portions of the FEIS analyzed renewable energy generation alternatives. FEIS at 9-30 to 9-33. For example, § 9.2.3, “Other Alternatives,” addresses alternative energy generation including wind (*id.* at 9-23), solar (*id.* at 9-24), and geothermal (*id.* at 9-26). Additionally, while CASE broadly asserts that energy efficiency and demand reductions analyses “should have been figured into the EIS” (Petition at 37), the FEIS specifically discusses energy efficiencies and demand-side management programs in Chapter 8 (FEIS at 9-5). A petitioner’s imprecise reading of a document cannot be the basis for a litigable contention. See *Ga. Inst. of Tech.* (Ga. Tech Research Reactor, Atlanta, Ga.), LBP-95-6, 41 NRC 281, 300, *aff’d*, CLI-95-12, 42 NRC 111

(1995). Similarly, a contention of omission may be summarily rejected as inadmissible if the topic that allegedly is omitted is, in fact, included. *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 6 & 7), LBP-11-6, 73 NRC 149, 235 (2011) (citing *USEC, Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 456 (2006)). Because CASE fails to acknowledge, let alone dispute, the EIS's analysis of renewable energy generation in FEIS Chapter 9 and analyses of energy efficiency and demand reductions in FEIS Chapter 8, these aspects of proposed Contention 4 lack the requisite factual or expert support and fail to demonstrate a genuine material dispute with the EIS, contrary to the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi).

For the reasons outlined above, proposed Contention 4 is inadmissible because it is not within the scope of the proceeding, is insufficiently supported by facts or expert opinion, and fails to identify a genuine dispute with the EIS. Accordingly, proposed Contention 4 does not meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(iii), (v), and (vi), and should be rejected.

CONCLUSION

In view of the foregoing, the Petition does not address the requirements of 10 C.F.R. § 2.309(c) nor do any of CASE's proposed contentions satisfy the contention requirements of 10 C.F.R. § 2.309(f)(1), and the Petition should be denied.

Respectfully submitted,

/Signed (electronically) by/

Robert M. Weisman
Counsel for the NRC Staff
U.S. Nuclear Regulatory Commission
Mail Stop O-14 A44
Washington, D.C. 20555-0001
(301) 287-9177
(301) 415-3200 fax
Robert.Weisman@nrc.gov

Executed in Accord with 10 C.F.R. § 2.304(d)

Anthony Wilson
Counsel for the NRC Staff
U.S. Nuclear Regulatory Commission
Mail Stop O-14 A44
Washington, D.C. 20555-0001
(301) 287-9124
(301) 415-3200 (fax)
Anthony.Wilson@nrc.gov

Executed in Accord with 10 C.F.R. § 2.304(d)

Megan Wright
Counsel for the NRC Staff
U.S. Nuclear Regulatory Commission
Mail Stop O-14 A44
Washington, D.C. 20555-0001
(972) 294-5792
(301) 415-3200 (fax)
Megan.Wright@nrc.gov

Dated at Rockville, Maryland
this 19th day of December, 2016

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 & 52-041
)
(Turkey Point Units 6 and 7))

CERTIFICATE OF SERVICE

I hereby certify that the "NRC STAFF ANSWER TO 'CITIZENS ALLIED FOR SAFE ENERGY PETITION TO INTERVENE AND REQUEST FOR HEARING IN OPPOSITION TO THE FINAL REPORT EIS GRANTING COL'S FOR TURKEY POINT UNITS 6 & 7'" has been filed through the E-Filing system this 19th day of December, 2016.

/Signed (electronically) by/

Robert M. Weisman
Counsel for the NRC Staff
U.S. Nuclear Regulatory Commission
Mail Stop O-14 A44
Washington, D.C. 20555-0001
(301) 287-9177
(301) 415-3200 fax
Robert.Weisman@nrc.gov

Dated at Rockville, Maryland
this 19th day of December, 2016