UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	Docket Nos. 52-029-COL
Progress Energy Florida, Inc.	)	52-030-COL
	)	
Levy County Nuclear Plant,	)	ASLBP No. 09-879-04-COL
Units 1 and 2	)	

Progress Energy's Answer Opposing
Petition for Intervention and Request for Hearing
By the Green Party of Florida,
the Ecology Party of Florida, and Nuclear Information and Resource Service

March 3, 2009

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I. Introduction

Progress Energy Florida, Inc. ("Progress" or "PEF") hereby submits this answer ("Answer") in opposition to the Petition to Intervene and Request for Hearing ("Petition") by the Green Party of Florida, the Ecology Party of Florida, and Nuclear Information and Resource Service (collectively the "Petitioners") filed in this proceeding on February 6, 2009. The Petitioners seek to intervene in this proceeding and request that the Nuclear Regulatory Commission ("Commission" or "NRC") conduct a hearing regarding Progress's application for a combined construction permit and operating license ("COL" or "combined license") for new Units 1 and 2 at the Levy County Nuclear Plant ("Levy" or "LNP") site. The Petition should be denied because Petitioners have not proposed an admissible contention.

Petitioners proffer twenty-seven Contentions.[1] Many of the Contentions are virtually identical to contentions filed by other petitioners in other COL proceedings, and their deficiencies as admissible contentions have been addressed by a number of licensing boards and, in some cases, the Commission. As explained fully below, every proposed Contention falls short of any number of the applicable pleading requirements. This Answer, for completeness, addresses the multiple failures of each Contention to meet the Commission's requirements for an admissible contention – even where a recent decision of the Commission that is on point or where a particularly egregious and obvious failing alone could dispose of a Contention with a brief paragraph and citation to controlling law. Thoroughness has resulted in a necessarily lengthy Answer.

The Commission's regulations and case law clearly set forth the requirements that a petitioner *must* satisfy in order to propose an admissible contention.[2] In summary, the Petition fails to meet, and in many respects simply ignores, these requirements. A number of Petitioners' Contentions impermissibly challenge Commission Rules or Rulemaking without requesting a waiver of the applicability of the Rule or Rulemaking. A number of the Contentions are outside the scope of this proceeding. While the Commission's regulations require that a petitioner include references to specific portions of the Application that the petitioner disputes, this is rarely done by Petitioners here. Numerous contentions claim an omission in the Application, where the information alleged missing is indeed discussed.

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[1] Contentions 1 through 11; Contention 4 includes 4A through 4O – including two 4Ns (denominated 4N1 and 4N2 herein) – and Contention 6 is divided into 6A and § 6B.

[2] The controlling Commission's Rules at 10 C.F.R. § 2.309(f)(1) emphasize the mandatory nature of the pleading requirements: "A request for hearing or petition for leave to intervene must set forth with particularity the contentions sought to be raised. For each contention, the request or petition must:" comply with each of the six enumerated strict requirements.

The Contentions include an extraordinary number of vague, conclusory, often incorrect, and unsupported statements. These statements fail to satisfy Petitioners' obligation to specifically identify an issue of law or fact to be raised. They also amount to bald assertions that do not point to deficiencies in the Application, thereby failing to raise a genuine dispute on a material issue of law or fact. Petitioners routinely cite to lengthy documents without providing specific page references or even attempting to demonstrate how those documents raise a dispute with the Application.

Petitioners often do not provide any facts or expert opinions supporting their positions. When they do attempt to rely on experts, Petitioners' approach violates the pleading requirements. The Petition appears to be "supported" by four Declarations[3] and other documents attached to or referenced in the Declarations.[4] The Petition, however, never directly references the text of those Declarations. Where Progress could discern Petitioners' apparent intent, Progress addresses in this Answer the Declaration and any other document that appear related to a Contention.[5] Petitioners' experts, however, either suggest something that should be considered without basis for the suggestion or fail to provide support for the Contention in question.

As this Answer describes 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, would focus on concrete issues that are relevant to the proceeding and that are supported by some factual and

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[3] Other than Declarations made by members of Petitioners' organizations for standing purposes.

[4] See "Declaration Of Diane D'Arrigo In Support Of Joint Petitioners"; "Declaration Of Carter M. Quillen In Support Of Joint Petitioners"; "Expert Declaration By E. Leon Jacobs, Jr., Esq., In Support Of Petitioners' Standing To Intervene In This Proceeding"; "Expert Declaration By Sydney T. Bacchus In Support Of Petitioners' Standing To Intervene In This Proceeding."

[5] Particularly with respect to Contention 4 and its subparts, the text of the Contention is often copied from the Declaration of Sydney Bacchus.

60legal foundation. Each of Petitioners' Contentions falls woefully short of reaching the required threshold. Accordingly, the Board should reject all of Petitioners' Contentions and deny their request for hearing.

II. Background

This proceeding involves Progress's application, dated July 28, 2008, for a combined license to construct and operate two Westinghouse AP1000 pressurized water reactors at Levy (the "Application" or "COLA").[6] Levy is located in Levy County, Florida near Inglis, Florida. The two AP1000s will be designated as Levy Nuclear Plant Units 1 and 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.

The NRC promulgated its Part 52 regulations in 1989,[7] and amended them in 2007,[8] 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

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[6] Levy Nuclear Plant Units 1 and 2 Combined License Application (Rev. 0, July 28, 2008), transmittal letter available at ADAMS Accession No. ML082260277. Entire Application available at http://www.nrc.gov/reactors/new-reactors/col/levy.html.

[7] 54 Fed. Reg. 15,372 (Apr. 18, 1989).

[8] 72 Fed. Reg. 49,352 (Aug. 28, 2007).

> 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 Commission's intent with this rulemaking is . . . to have a sensible and stable procedural framework in place for the consideration of future designs, and to make it possible to resolve safety and environmental issues before plants are built, rather than after.

54 Fed. Reg. at 15,373.

The Application exercises two of the regulatory improvements established in Part 52. First, the Application seeks a combined license. Second, the Application references a certified design, Appendix D to 10 C.F.R. Part 52 (71 Fed. Reg. 4,464 (Jan. 27, 2006) ("AP1000 DC Rule")). Aspects of the design certification covered by 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")), and Westinghouse's associated technical report, APP-GW-GLR-134 (AP1000 DCD Impacts to Support COLA Standardization, Revision 3) ("TR-134"), since incorporated into AP1000 DCD Revision 17 ("Revision 17").[9]

[9] The AP1000 Design Control Document Rev. 16 is available at http://www.nrc.gov/reactors/new-reactors/design-cert/amended-ap1000.html and at ADAMS Accesssion No. ML071580939. TR-134 is available at ADAMS

Application, Cover Letter at 1. The Commission has not yet issued an amendment to the AP1000 DC Rule to incorporate either Revision 16 or Revision 17. However, the Commission has stated:

> 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.

Statement of Policy on Conduct of New Reactor Licensing Proceedings, 73 Fed. Reg. 20,963, 20,972 (Apr. 17, 2008).

The NRC Staff conducted a sufficiency review and, finding the Application acceptable for docketing, docketed the Application on October 6, 2008. 73 Fed. Reg. 60,726 (Oct. 14, 2008). On December 8, 2008, the NRC published a Notice of Hearing and Opportunity to Petition for Leave to Intervene ("Hearing Notice"). 73 Fed. Reg. 74,532 (Dec. 8, 2008).

On February 6, 2009, Petitioners filed their Petition now before the Board.

III. The Petition Should Be Denied Because Petitioner Has No Admissible Contentions

To be admitted as a party in this proceeding, Petitioners must plead at least one admissible contention and demonstrate standing. 10 C.F.R. § 2.309(a). As set forth below, Petitioners have proferred no admissible contention and therefore should not be admitted to this proceeding.[10]

Accession No. ML080220389. Revision 17 has not yet been incorporated into the Levy COLA. See NRC letter to Progress, Feb. 18, 2009 available at ADAMS Accession No. ML090350045.

[10] Progress notes that no member of a Petitioner who filed a Declaration authorizing Petitioners to represent that individual resides closer than approximately twenty miles from the Levy site. Because Progress believes that none of the Contentions meets the requirements of 10 C.F.R § 2.309(f)(1), Progress has not addressed standing for any of the Contentions. Progress reserves its position on Petitioners' standing with regard to any specific Contention at this time. See generally, Davis v. FEC, 128 S.Ct. 2759, 2769 (2008) (citing DaimlerChrysler Corp. v. Cuno, 547 U.S. 332, 352 (2006) (quoting Friends of Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc., 528 U.S.

A. Standards For The Admissibility Of Contentions

1. Contentions Must Be Within The Scope Of The Proceeding

As a fundamental requirement, a petitioner must demonstrate that the issue raised in a contention addresses matters within the scope of the proceeding and is material to the findings the NRC must make. 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv). Licensing boards "are delegates of the Commission" and, as such, they may "exercise only those powers which the Commission has given [them]." Public Service Co. of Indiana (Marble Hill Nuclear Generating Station, Units 1 and 2), ALAB-316, 3 N.R.C. 167, 170 (1976) (footnote omitted); accord Portland General Electric Co. (Trojan Nuclear Plant), ALAB-534, 9 N.R.C. 287, 289-90 & n.6 (1979). Accordingly, it is well established that a contention is not cognizable unless it is material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. Marble Hill, ALAB-316, 3 N.R.C. at 170-71; see also Commonwealth Edison Co. (Zion Station, Units 1 and 2), ALAB-616, 12 N.R.C. 419, 426-27 (1980); Commonwealth Edison Co. (Carroll County Site), ALAB-601, 12 N.R.C. 18, 24 (1980).

2. Contentions May Not Challenge NRC Rules Or Issues In Rulemaking

It is also well established that a petitioner is not entitled to an adjudicatory hearing to attack generic NRC rules or regulations. 10 C.F.R. § 2.335; Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 N.R.C. 328, 334 (1999). "[A] licensing proceeding . . . is plainly not the proper forum for an attack on applicable statutory requirements or for challenges to the basic structure of the Commission's regulatory process." Philadelphia Electric

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167, 185 (2000)); see also Rosen v. Tenn. Comm'r of Fin. & Admin., 288 F.3d 918, 928 (6th Cir. 2002) ("It is black-letter law that standing is a claim-by-claim issue").

Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 A.E.C. 13, 20, aff'd in part on other grounds, CLI-74-32, 8 A.E.C. 217 (1974) (footnote omitted). Thus, a contention which collaterally attacks a Commission rule or regulation is not appropriate for litigation and must be rejected. Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 A.E.C. 79, 89 (1974).

Similarly, it is well established that licensing boards "should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission." Oconee, CLI-99-11, 49 N.R.C. at 345, quoting Douglas Point, ALAB-218, 8 A.E.C. at 85. This principle is particularly important in a COL proceeding in which the application references a design certification application under review. As the Commission has explained:

> With respect to a design for which certification has been requested but not yet granted, the Commission intends to follow its longstanding precedent that 'licensing boards should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission.' . . . In accordance with these decisions, a licensing board should treat the NRC's docketing of a design certification application as the Commission's determination that the design is the subject of a general rulemaking. 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. Accordingly, in a COL proceeding in which the application references a docketed design certification application, the licensing board should refer such a contention to the staff for consideration in the design certification rulemaking, and hold that contention in abeyance, if it is otherwise admissible. Upon adoption of a final design certification rule, such a contention should be denied.

73 Fed. Reg. at 20,972 (citations omitted). The Commission recently affirmed this Statement of Policy. Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-08-15, 68 N.R.C. __, slip op. at 3-4 (July 23, 2008).

3. Contentions Must Be Specific And Supported By A Basis, With Factual Information Or Expert Opinion Sufficient To Demonstrate A Genuine, Material Dispute

In addition to the requirements previously discussed, a contention is admissible only if it provides:

- a "specific statement of the issue of law or fact to be raised or controverted;"
- a "brief explanation of the basis for the contention;"
- a "concise statement of the alleged facts or expert opinions" supporting the contention together with references to "specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue;" and
- "[s]ufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact," which showing 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)(i), (ii), (v) and (vi). The failure of a contention to comply with any one of these requirements requires dismissal of the contention. Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 N.R.C. 149, 155-56 (1991).

These pleading standards governing the admissibility of contentions are the result of a 1989 amendment to 10 C.F.R. § 2.714, now § 2.309, which was intended "to raise the threshold for the admission of contentions." Final Rule, Rules of Practice for Domestic Licensing Proceedings – Procedural Changes in the Hearing Process, 54 Fed. Reg. 33,168 (Aug. 11, 1989); see also Oconee, CLI-99-11, 49 N.R.C. at 334; Palo Verde, CLI-91-12, 34 N.R.C. at 155-56. The Commission has stated that the "contention rule is strict by design," having been "toughened . . . in 1989 because in prior years 'licensing boards had admitted and litigated numerous contentions that appeared to be based on little more than speculation.'" Dominion Nuclear

Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 N.R.C. 349, 358 (2001), petition for reconsideration denied, CLI-02-01, 55 N.R.C. 1 (2002) (citation omitted). The pleading standards are to be enforced rigorously. "If any one of the requirements [now in 10 C.F.R. § 2.309(f)(1)] is not met, a contention must be rejected." Palo Verde, CLI-91-12, 34 N.R.C. at 155 (citation omitted). A licensing board is not to overlook a deficiency in a contention or assume the existence of missing information. Id.

The Commission has explained that this "strict contention rule" serves multiple purposes, which include putting other parties on notice of the specific grievances being raised and assuring that full adjudicatory hearings are triggered only by those able to proffer at least some minimal factual and legal foundation in support of their contentions. Oconee, CLI-99-11, 49 N.R.C. at 334. By raising the threshold for admission of contentions, the NRC intended to "obviate lengthy hearing delays caused in the past by poorly defined or unsupported contentions." Id. As the Commission reiterated in incorporating these same standards into the new 10 C.F.R. Part 2 rules, "[t]he threshold standard is necessary to ensure that hearings cover only genuine and pertinent issues of concern and that issues are framed and supported concisely enough at the outset to ensure that the proceedings are effective and focused on real, concrete issues." 69 Fed. Reg. 2,182, 2,189-90 (Jan. 14, 2004). "Mere 'notice pleading' does not suffice." AmerGen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 N.R.C. 111, 119 (2006) (footnote omitted).

Under these standards, 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 N.R.C. 281, 305, vacated in part and remanded on other grounds, CLI-95-10, 42 N.R.C. 1, aff'd

in part, CLI-95-12, 42 N.R.C. 111 (1995). Where a petitioner has failed to do so, "the [Licensing] Board may not make factual inferences on [the] petitioner's behalf." Id., citing Palo Verde, CLI-91-12, 34 N.R.C. at 149. See also Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-98-7, 47 N.R.C. 142, 180 (1998) ("Private Fuel Storage") (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).

Further, admissible contentions "must explain, with specificity, particular safety or legal reasons requiring rejection of the contested [application]." Millstone, CLI-01-24, 54 N.R.C. at 359-60. In particular, this explanation must demonstrate that the contention is "material" to the Commission findings and that a genuine dispute about a material issue of law or fact exists. 10 C.F.R. §§ 2.309(f)(1)(iv), (vi). The Commission has defined a "material" issue as one where "resolution of the dispute *would make a difference in the outcome* of the licensing proceeding." 54 Fed. Reg. at 33,172 (emphasis added).

As the Commission observed, this threshold requirement is consistent with judicial decisions, such as Connecticut Bankers Association v. Board of Governors, 627 F.2d 245, 251 (D.C. Cir. 1980), which held that:

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

627 F.2d at 251 (footnote omitted); see also Baltimore Gas & Electric Co. (Calvert Cliffs Nuclear Power Plant, Units 1 and 2), CLI-98-14, 48 N.R.C. 39, 41 (1998) ("It is the responsibility of the Petitioner to provide the necessary information to satisfy the basis

requirement for the admission of its contentions . . . ."). A contention, therefore, is not to be admitted "where an intervenor has no facts to support its position and where the intervenor contemplates using discovery or cross-examination as a fishing expedition which might produce relevant supporting facts." 54 Fed. Reg. at 33,171. 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 N.R.C. 419, 424 (2003).

Accordingly, under the Rules of Practice, a statement "that simply alleges that some matter ought to be considered" does not provide a sufficient basis for a contention. Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 N.R.C. 200, 246 (1993), review denied, CLI-94-2, 39 N.R.C. 91 (1994). Similarly, 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 N.R.C. 325, 348 (1998).

4. Contentions Cannot Ignore Publicly Available Documentation Relating To The Licensing Request

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. 54 Fed. Reg. at 33,171; Millstone, CLI-01-24, 54 N.R.C. 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 N.R.C. 460, 468 (1982), vacated in part on other grounds, CLI-83-19, 17 N.R.C. 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 N.R.C. 2069, 2076 (1982); Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), LBP-82-107A, 16 N.R.C. 1791, 1804 (1982); Philadelphia Electric Co. (Limerick Generating Station, Units 1 and 2), LBP-82-43A, 15 N.R.C. 1423, 1504-05 (1982).

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." 54 Fed. Reg. at 33,170; Palo Verde, CLI-91-12, 34 N.R.C. at 156. A contention that does not directly controvert a position taken by the applicant in the license application is subject to dismissal. See Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 N.R.C. 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 & Light Co.

(Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-90-16, 31 N.R.C. 509, 521 & n.12 (1990).

As set forth below, none of Petitioners' Contentions satisfies the Commission's pleading standards.

IV. Discussion

A. Contention 1 (AP1000 Design) Is Inadmissible

1. Overview Of Contention And Alleged Supporting Bases

Petitioners' Contention 1 states:

> The COLA is incomplete because at the moment many of the major safety components and procedures proposed for the Levy County reactors are only conditionally designed at best. In its COLA, PEF has adopted the AP1000 DCD Revision 16 which has not been certified by the NRC and with the filing of Revision 17 by Westinghouse, Revision 16 will no longer be reviewed by the NRC Staff. PEF is now required to resubmit its COLA as a plant-specific design or to adopt Revision 17 by reference and provide a timetable when its safety components will be certified. Either the plant-specific design or adoption of AP1000 Revision 17 would require changes in PEF's application, including the final design and key operational procedures. Regardless of whether the components are certified or not, the COLA cannot be reviewed without the full disclosure of all designs and operational procedures.

Petition at 14. With respect to Revision 16, Petitioners, presumably in an effort to provide a basis, first cite the NRC Staff's January 18, 2008 docketing letter, which they claim indicates that the recirculation screen design is incomplete. Petition at 15. Without reference to any supporting documents, Petitioners then assert that "[t]he AP1000 reactors also have unresolved instrumentation and controls problem," that purportedly will ultimately impact the safety of the facility in some undefined way. Petition at 16. Finally, Petitioners claim that the DCD (and thus

the Application) is inadequate because "certified" components (unidentified by Petitioners) interact with "non-certified components." Petition at 16.

Without any specificity, Petitioners attempt to explain this purported interaction, stating:

> These non-certified "Tier 2" components are not trivial, but run the gamut of containment, control room set up, seismic qualifications, fire areas, heat removal, human factors engineering design, plant personnel requirements, operator decision-making, alarms and piping. These non-certified components interact with Tier 1 components and each other to a significant degree.

Petition at 16. Without further explaining how this laundry list of ten items interacts or how such interaction is significant, Petitioners then baldly assert that Revision 17 of the AP1000 DCD includes additional "uncertified components." Petition at 17. According to Petitioners, these allegedly "uncertified" items include "turbine design changes, physical security, human factors engineering, responses to seismic activities and adverse weather conditions, radiation protection measures, technical specifications for valves and piping, accident analyses, and aircraft impact." Petition at 17.

Petitioners contend that the alleged missing components and procedures, which, at best, are vaguely described in their Petition, make it "impossible to conduct a meaningful technical and safety review of the COLA." Petition at 15. In particular, they claim that it is not possible to conduct probabilistic risk assessment ("PRA") and severe accident mitigation alternative ("SAMA") analyses for the proposed reactors "without the current configuration, design and operating procedures in the application." Petition at 16, 17, 18. Petitioners further assert that completion of the AP1000 design certification process, for which there is no "timetable," may prompt future modifications to the Application. Petition at 17-18.

2. Proposed Contention 1 Is Not Admissible

Contention 1 is inadmissible because it: (1) impermissibly challenges the NRC's Part 52 regulations; (2) is not supported by factual information or expert opinion; and (3) fails to controvert relevant portions of the Application. 10 C.F.R. §§ 2.309(f)(1)(iii), (v), and (vi). Furthermore, while the Commission's New Reactor Policy Statement indicates that a proposed contention relating to an ongoing design certification amendment may be held in abeyance "if it is otherwise admissible," Petitioners' proffered contention challenging the AP1000 design certification amendment (*i.e.*, DCD Revisions 16 and 17) is not admissible and, therefore, should be denied.

a. Contention 1 Raises Issues Beyond The Scope Of This Proceeding Because It Challenges The NRC's Design Certification Amendment Regulations

As a threshold matter, Contention 1 simply does not present a litigable challenge 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 and Revision 16. In so doing, Progress has incorporated by reference in its Application all of the categories of information that Petitioners allege have been omitted from the Application. This is fully documented as explained below and in Attachment A to this Answer, "Levy COLA Sections That Address Contention 1."

Petitioners erroneously claim that Progress must "resubmit its COLA as a plant-specific design or to adopt Revision 17 by reference and provide a timetable when its safety components will be certified." Petition at 14. Petitioners further assert that either of these actions "would

require changes in PEF's application," and that the "COLA cannot be reviewed without the full disclosure of all designs and operational procedures." Petition at 14. Petitioners cite no regulations or other legal authorities to support these claims. As discussed below, the Commission has repeatedly rejected such assertions. Petitioners also provide no legal basis for their claim that review of the Application is not meaningful until Progress adopts Revision 17 of the AP1000 DCD. To the extent Petitioners' statement that "Revision 16 will no longer be reviewed by the NRC Staff" (Petition at 14) may be correct in a literal sense, it is substantively of no consequence, inasmuch as Revision 17 is merely an update to the Revision 16 amendment application. And, notwithstanding the fact that Progress has not yet incorporated Revision 17 into its Application, its incorporation of the Revision 16 AP1000 design certification amendment is expressly authorized by 10 C.F.R. § 52.55(c). While Progress will amend the Application to reference Revision 17,[11] there is no legal basis – in statute, NRC regulation or case law – that provides a reason why the Board's review of the Application cannot continue.

Accordingly, Contention 1 is simply an impermissible attack on the Part 52 process. The Commission has observed that "[a] licensing board considering a COL application referencing a design certification application might conclude the proceeding and determine that the COL application is otherwise acceptable before the design certification rule becomes final." 73 Fed. Reg. at 20,973. If Progress were to revise its Application in response to the NRC Staff's review of AP1000 DCD Revision 16 or 17, then Petitioners could submit contentions at that time.

Furthermore, Petitioners' assertions regarding Revisions 16 and 17 impermissibly challenge the standard design certification rule for the AP1000 design, which is found in Appendix D to 10 C.F.R. Part 52. Appendix D defines the scope of this COL proceeding by

[11] NRC letter to Progress, February 18, 2009 available at ADAMS Accession No. ML090350045.

addressing AP1000 design-related issues, by establishing the requirements for a COL applicant that references the Appendix, and by creating a process for making changes and departures to the certified design. Additionally, NRC regulations explicitly provide a process for amending existing design certification rules. 10 C.F.R. § 52.63(a). Petitioners' suggestion that Progress's Application is incomplete because it references the AP1000 design certification amendment application (Revision 16) ignores these regulations and clearly challenges the basic structure of the NRC's regulatory process, contrary to 10 C.F.R. § 2.309(f)(1)(iii).

The Commission addressed Petitioners' concerns in its New Reactor Policy Statement. In particular, the Commission explained that:

> With respect to a design for which certification has been requested but not yet granted, the Commission intends to follow its longstanding precedent that "licensing boards should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission." In accordance with these decisions, a licensing board should treat the NRC's docketing of a design certification application as the Commission's determination that the design is the subject of a general rulemaking. 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*. Accordingly, in a COL proceeding in which the application references a docketed design certification application, the licensing board should refer such a contention to the staff for consideration in the design certification rulemaking, and hold that contention in abeyance, *if it is otherwise admissible*. Upon adoption of a final design certification rule, such a contention should be denied.[12]

Moreover, in responding to public comments on a draft of the Policy Statement, the Commission explicitly stated that the discussion of design certification applications also encompasses an application for an amendment to a design certification. 73 Fed. Reg. at 20,966.

[12] 73 Fed. Reg. at 20,972 (emphasis added) (quoting Oconee, CLI-99-11, 49 N.R.C. at 345; Douglas Point, ALAB-218, 8 A.E.C. at 85.

Accordingly, Petitioners cannot litigate aspects of the design certification amendment in this COL proceeding, because such matters are outside the scope of the proceeding. Insofar as Petitioners wish to raise concerns relating to the AP1000 amendments, including the determination of what material is included in Tier 1 or Tier 2, they may file comments on the proposed rule.[13]

Indeed, the Commission has reiterated this policy. In the Harris COL proceeding, the Commission expressly applied the principles set forth in its New Reactor Policy Statement when it rejected a motion (to suspend the notice of hearing in that proceeding) that relied on essentially the same arguments advanced by Petitioners regarding the pendency of a design certification rule.[14] The Commission reiterated that "[a] specific provision of Part 52 . . . allows applicants to reference a certified design that has been docketed but not approved, and Petitioners may not challenge Commission regulations in licensing proceedings."[15]

In the Lee COL proceeding, the Board applied the foregoing principles to dismiss a proposed contention that is materially indistinguishable from Contention 1 in this proceeding.[16] There, the Licensing Board ruled that "[b]ecause [the petitioner] challenges the Applicant's reliance on a pending design certification fundamentally on procedural grounds, [the contention] constitutes an impermissible challenge to NRC regulations that allow the procedure [the

[13] See Duke Energy Carolinas, LLC (Combined License Application for William States Lee III Nuclear Station Units 1 & 2), LBP-08-17, 68 N.R.C. __, slip op. at 11 (Sept. 22, 2008) (stating that a petitioner "may raise concerns relating specifically to the AP1000 amendment[s] by filing comments on the proposed rule when it is issued") (footnote omitted).

[14] See Harris, CLI-08-15, slip op. at 3-4.

[15] Id. at 3 (citations omitted); Detroit Edison Co. (Fermi Unit 3), CLI-09-04, 69 N.R.C. ___, slip op. at 7 (Feb. 17, 2009).

[16] LBP-08-17, slip op. at 10-12.

Applicant] has chosen."[17] In so ruling, the Board emphasized that "referencing a reactor design for which a design certification application has been docketed but not yet granted[,] is expressly authorized by the Commission's regulations."[18] The Licensing Board in the Summer COL proceeding similarly rejected a contention materially indistinguishable from Petitioners' Contention 1.[19]

Finally, Petitioners' claim regarding improper reliance on non-certified design documents not only represents a direct attack on Appendix D to 10 C.F.R. Part 52, but also reflects their misunderstanding of the two-tier structure of the AP1000 DCD. Appendix D incorporates by reference the generic AP1000 DCD. 10 C.F.R. Part 52, App. D, § III.A. Currently, Appendix D incorporates by reference Revision 15 of the DCD. Westinghouse has submitted Revisions 16 and 17 of the DCD as part of its request to amend Appendix D.[20] The AP1000 DCD is separated into two major divisions of design-related information: Tier 1 and Tier 2. Tier 1 information is both approved and certified by Appendix D. 10 C.F.R. Part 52, App. D, § II.D. Tier 2 information is approved as a sufficient method for meeting Tier 1 requirements. 10 C.F.R. Part 52, App. D, § II.E. Petitioners, therefore, are simply incorrect to suggest that any "interaction" between Tier 1 and Tier 2 "components" makes Tier 1 dependent on Tier 2. Petition at 16. In the event of a conflict, Tier 1 controls. 10 C.F.R. Part 52, App. D, § III.C.

In summary, Contention 1 must be rejected as an impermissible challenge to the Commission's Part 52 regulations, as construed by the Commission in its recent Policy

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[17] Id. at 11-12 (footnote omitted).

[18] Id. at 10-11 (footnote omitted).

[19] See South Carolina Electric & Gas (Virgil C. Summer, Units 2 and 3), LBP-09-02, 69 N.R.C. __, slip op. at 9 (Feb.18, 2009).

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

Statement and applied in recent adjudicatory proceedings. Although Petitioners *ostensibly* challenge the completeness of the Application, Petitioners actually take issue with the provisions of Part 52 discussed above. But, Petitioners have not requested a waiver of the applicable Part 52 provisions here (nor would such a waiver appear justified), and this adjudicatory proceeding plainly is not a forum for reviewing or challenging the adequacy of NRC rules.

b. Contention 1 Is Vague And Must Be Dismissed For Lack Of Specificity And Adequate Factual Or Technical Support

Contention 1 also should be dismissed because it fails to comply with 10 C.F.R. § 2.309(f)(1)(v). That provision requires a concise statement of "the alleged facts or expert opinions" and "the specific sources and documents" on which the petitioner intends to rely to support its position on the issue. 10 C.F.R. § 2.309(f)(1)(v). In particular, Commission regulations require a petitioner "to 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." Id. (emphasis added). Petitioners fall far short of meeting these requirements. At best, Petitioners' criticisms of the Application and the AP1000 design are vague, conclusory, and unfounded. As explained below, Petitioners allege that there are "serious safety inadequacies" in the AP1000 design, but they provide no competent facts, references, or expert opinion to particularize or substantiate this cryptic claim. Petition at 15-16.

Petitioners cite an NRC Staff letter docketing the AP1000 DCD amendment application that identifies the need for additional information, also known as a Request for Additional Information ("RAI"), regarding the recirculation screen design.[21] That letter, however, does not

[21] Letter from D. Matthews, NRC, to W. Cummins, Westinghouse, "Acceptance Review of the AP1000 Design Certification Amendment Application for Revision 16" at 2 (Jan. 18, 2008), available at ADAMS Accession No. ML073600743.

support Petitioners' allegation that "serious safety inadequacies" exist in the AP1000 design. Such RAIs are routine; without more, simple reference to the Staff's RAI as a basis for Contention 1 also runs afoul of longstanding Commission precedent.[22] In particular, the Commission has held that "petitioners must do more than rest on the mere existence of RAIs as a basis for their contention," and must provide "analysis, discussion, or information of their own on any of the issues raised in the RAIs."[23] Petitioners have not done so here.

Moreover, Petitioners ignore supplemental information submitted by the AP1000 vendor, Westinghouse, in the AP1000 docket that provides additional details concerning the screen design.[24] Again, Petitioners have presented no analysis or information in response to this supplemental information. As such, Petitioners have not shown that a genuine dispute of fact exists with respect to the safety of the recirculation screen design. Accordingly, Contention 1 lacks the requisite specificity and support, including appropriate technical analysis, to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v).

Petitioners have not provided sufficient information to show a dispute regarding the recirculation screen design, much less with the adequacy of AP1000 design as a whole. Nor have they provided sufficient information, including references to specific sources and documents, to support their manifestly incorrect claim that the PRA and SAMA evaluation are invalid or cannot be completed at this time. Instead, they have eschewed their iron-clad

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[22] Oconee, CLI-99-11, 49 N.R.C. at 336 (stating that "the NRC Staff's mere posing of questions does not suggest that the application [is] incomplete," and that "[t]o satisfy the Commission's contention rule, then, Petitioners must do more than rest on [the] mere existence of RAIs as a basis for their contention") (quotations and citations omitted).

[23] Id. at 336-37.

[24] See Letter from R. Sisk, Westinghouse, to NRC, "Review Schedule for the AP1000 Design Certification Amendment Application, Revision 16" (May 20, 2008), available at ADAMS Accession No. ML081430068.

obligation to review the content of the Application. Moreover, to the extent Contention 1 raises issues relevant to the design certification amendment process, as discussed above it also is outside the scope of the proceeding.

c. Contention 1 Does Not Directly Controvert The Application Or AP1000 Design Certification Amendment Application, Nor Does It Demonstrate The Omission Of Any Material Information

(i) Petitioners Fail To Controvert A Position Taken By The Applicant In The Application

Contention 1 clearly also fails to meet the admissibility criterion set forth in 10 C.F.R. § 2.309(f)(1)(vi). Petitioners' vague allegations that Progress cannot prepare a proper PRA or perform a SAMA analysis, *due to alleged deficiencies in the AP1000 design*, do not raise a genuine dispute on a material issue. Petition at 15-17. Apart from the vague, generic nature of their complaint, Petitioners completely ignore and make no attempt to controvert the applicable sections of the Application (i.e., Section 19.59 of the FSAR (PRA Result and Insights), Section 7.3 of the ER (Severe Accident Mitigation Measures), Chapter 19 (Probabilistic Risk Assessment), and Appendix 1B (Severe Accident Mitigation Design Alternatives) of Tier 2 of the AP1000 DCD). Petitioners simply ignore and thereby fail to dispute any information in these sections of the Application or explain why they do not meet regulatory requirements.

Petitioners also fail to provide any basis or support for their assertion that Revisions 16 and/or 17 to the AP1000 DCD somehow invalidate the existing PRA and SAMA analyses. Petitioners claim that "certified" Tier 1 components may "interact" to a "significant degree" with certain Tier 2 components for which sufficient information purportedly is not available in the Application or AP1000 DCD. Petition at 16. Specifically, as explained above, Petitioners provide a list of 10 items or information categories that they allege are not addressed in the DCD.

Petitioners do not explain why they believe the specified items are missing from the Application or DCD.[25] Nor do they point to any specific portion of the Application or DCD that they believe should contain the purportedly missing information. The very information that Petitioners claim is missing, however, is in fact addressed both in the AP1000 DCD and the Application, which incorporates the former by reference. Attachment A to this Answer, "Levy COLA Sections That Address Contention 1," demonstrates this fact by listing each of the items identified by Petitioners and identifying the *specific sections* of the COLA (FSAR and Appendices) and the DCD (Tier 1 and 2) that address those items. Attachment A also indicates which DCD sections have been revised by Revisions 16 and 17. Once again, as fully documented in Attachment A, Petitioners have relied on bare assertions and failed to read or perform any meaningful analysis of the Application, contrary to 10 C.F.R. § 2.309(f)(1)(vi).

Petitioners' claim regarding alleged "uncertified components specifically addressed in Revision 17" (Petition at 17) of the DCD similarly fails to meet 10 C.F.R. § 2.309(f)(1)(vi). Revision 17, which was made available on the NRC website on November 25, 2008, provides updated and supplemental information regarding those items. Petitioners have not challenged the adequacy of the discussion contained in Revision 16 or Revision 17 and, therefore, have not identified a genuine dispute with the Applicant on a material issue of law or fact.

(ii) Petitioners Fail To Present An "Otherwise Admissible Contention" Concerning The AP1000 Design Certification Amendment Application

As explained above, a contention that raises an issue on a design matter addressed in a design certification amendment application may be referred to the NRC Staff and held in

[25] The 10 items identified by Petitioners appear to be a paraphrase of descriptions derived from a table listing Tier 2 items that require NRC approval before they can be changed and indicating where in the DCD each is addressed. See AP1000 DCD, Introduction, Table 1-1.

abeyance "if it is otherwise admissible."[26] Petitioners present no such contention here. As discussed above, Petitioners' claims are both ill-defined and lacking in legal or factual support.

The Licensing Boards in both the Lee and Summer proceedings reached the same conclusion with respect to contentions substantially similar to Contention 1.[27] The Board in each case dismissed the contention, noting that those petitioners, like the Petitioners here, challenged the applicant's reliance on a pending design certification primarily on impermissible procedural grounds.[28] A contention that raises an issue on a design matter addressed in a design certification amendment application may be referred to the NRC Staff and held in abeyance *only* "if it is otherwise admissible."[29] Petitioners present no such contention here. As shown above, Petitioners' claims are ill-defined, lack any basis in law or fact, and must be dismissed in their entirety.

B. Contention 2 (Part 50 Should Apply) Is Inadmissible

Contention 2 alleges "PEF Should Withdraw the COLA Until the AP 1000 Certification is actually complete, or Apply under Part 50." Petition at 19. Contention 2 is a suggestion and certainly not an admissible contention because it: (1) does not state an issue of law or fact that can be adjudicated; (2) lacks an adequate basis; (3) is not within the scope of this proceeding; and (4) fails to show any omission of information required or reasons supporting Petitioners' belief that a genuine dispute exists with the Application on a material issue of law or fact. 10 C.F.R. §§ 2.309(f)(1)(i), (ii), (iii), (iv), (v), and (vi).

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[26] Harris, CLI-08-15, slip op. at 4 (footnote omitted).
[27] LBP-08-17, slip op. at 10-12; LBP-09-02, slip op. at 8-10.
[28] LBP-08-17, slip op. at 11-12; LBP-09-02, slip op. at 8.
[29] 72 Fed. Reg. at 20,972.

Contention 2 does not a state an issue of law or fact to be adjudicated. Petitioners merely state their desire that Progress withdraw the Application until sometime in the future, or submit a different application. Contrary to 10 C.F.R. § 2.309(f)(1)(i), Petitioners do not state an adjudicable issue in Contention 2.

Even if Contention 2 is thought to articulate an issue of law or fact to be adjudicated, it lacks an adequate basis. The Contention merely provides two quotes from regulations that are set forth in 10 C.F.R. Part 52. Petition at 19. Neither of these partially-quoted regulations relates to withdrawing an application, nor relates in any way to 10 C.F.R. Part 50. Accordingly, Petitioners fail to articulate any basis for a purported issue. 10 C.F.R. § 2.309(f)(1)(ii).

As a fundamental requirement, a petitioner must demonstrate that the issue raised in a contention addresses matters within the scope of the proceeding. 10 C.F.R. § 2.309(f)(1)(iii). As discussed in Progress's answer to Contention 1, challenges to the Part 52 process are outside the scope of this proceeding. The Commission's regulations allow the Application to reference a docketed but not issued design certification. 10 C.F.R. § 52.55(c). Contention 2 raises, if anything, an issue outside the scope of the proceeding, and thus it fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii).

Contention 2 states no information besides quotes from two NRC regulations. It provides no support for a genuine dispute with the Application on a material issue of law or fact. Accordingly, it fails to address the requirements of 10 C.F.R. § 2.309(f)(1)(iv), (v), and (vi).

C. Contention 3 (Financial Qualification) Is Inadmissible

Contention 3 states: "The applicant does not meet the financial qualification requirements of 10 CFR § 50.33." Petition at 20. As discussed below, Contention 3 is inadmissible because Petitioners set forth no basis for the Contention, Petitioners have not provided sufficient facts or

expert opinions supporting the Contention, and the Contention does not raise a genuine issue of material dispute with the Application. 10 C.F.R. § 2.309(f)(1)(ii), (v), and (vi).

1. Contention 3 Does Not Set Forth A Basis For The Contention And Fails To Raise A Genuine Issue Of Material Dispute With The Application

Contention 3 alleges that Progress "does not meet the financial qualification requirements of 10 CFR § 50.33." Petition at 20. Petitioners' basis for that Contention is a disjointed discussion of a variety of topics, including "Progress Energy Inc.'s" rate base, Florida's cost recovery statute, nuclear plant construction costs, nuclear plant operation and maintenance costs, Florida's economy, the need for power, the U.S. economy, financial markets, and alternative sources of energy. Petition at 20-32. Petitioners, however, never show how any of those topics demonstrate that Progress did not satisfy the financial qualification requirements of Section 50.33(f).[30]

Petitioners' entire discussion "supporting" Contention 3 does not even mention, much less challenge, any of the relevant data set forth in the Application. As the publicly available index to Part 1 ("General and Financial Information") of the Application shows, Section 2.0 of the Application contains information demonstrating Progress's financial qualification to "carry out the activities for which" the Levy COL "is sought," as required by Section 50.33(f). Progress requested confidential treatment of that information due to its sensitive commercial nature. Pursuant to procedures set forth in the Hearing Notice,[31] the confidential information was available to the Petitioners when they prepared their Contentions.

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[30] 10 C.F.R. § 50.33(f) will often be referred to in this Answer as "Section 50.33(f)".

[31] See Hearing Notice, 73 Fed. Reg. at 74,534.

Although Contention 3 claims that Progress does not meet the Commission's financial qualification requirements, the Contention fails to challenge any of the actual information Progress provided in the Application to satisfy those requirements. Petitioners do not even reference Section 2.0 of the Application, much less provide expert testimony or facts calling into question the accuracy or sufficiency of the data contained therein. Petitioners' arguments merely raise economic matters they believe the Board should address. None of those matters, however, goes to the question of whether Progress's Application satisfies the Commission's financial qualification requirements.

As the Commission has found, statements that "simply allege[] that some matter ought to be considered" do not provide a sufficient basis for a Contention. Rancho Seco, LBP-93-23, 38 N.R.C. at 246. Rather, an allegation that a license application is inadequate must be supported by facts and a reasoned statement as to why the showing in the application is unacceptable in some material way. Turkey Point, LBP-90-16, 31 N.R.C. at 521 & n.12. Because Petitioners have not in any way challenged the relevant data that Progress provided to demonstrate its financial qualification, Contention 3 raises no genuine dispute with the Application on a material issue of fact or law. For these reasons, Petitioners have failed to explain a basis for Contention 3 and have not raised a material dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(ii) and (vi).

In addition, the "expert declaration" of E. Leon Jacobs ("Jacobs Declaration") (which Petitioners may be relying on for Contention 3 but do not actually cite in the Petition)[32] likewise does not support admission of Contention 3. That Declaration calls for "close review" and "careful oversight" by the Commission of Progress's financial qualification, and asks that the

[32] It is not at all clear whether the Jacobs Declaration is meant to "support" Contention 3. Indeed, its title "Expert Declaration by E. Leon Jacobs, Jr. Esq. *In Support of Petitioners' Standing to Intervene In This Proceeding*" indicates otherwise (emphasis added).

NRC "revisit and, if necessary amend the former theory that economic issues have little relevance to health and safety of the public." Jacobs Declaration at 2. As discussed below, nothing in that Declaration cites to Progress's actual financial qualification showing, nor claims that anything in that showing is insufficient to satisfy Section 50.33(f). Accordingly, the Declaration does not constitute expert support for Petitioners' claim that Progress fails to meet the Commission's financial qualification requirements. In addition, to the extent that the Declaration takes issue with the degree to which the Commission reviews a COL applicant's financial qualification, that matter is inadmissible as outside the scope of this proceeding. 10 C.F.R. § 2.309(f)(1). See Peach Bottom, ALAB-216, 8 A.E.C. at 20 ("a licensing proceeding … is plainly not the proper forum for an attack on applicable statutory requirements or for challenges to the basic structure of the Commission's regulatory process"); See also Douglas Point, ALAB-218, 8 A.E.C. at 89.

2. The Alleged Bases For Contention 3 Do Not Support Admission Of That Contention

As stated above, because Contention 3 completely fails to challenge the financial qualification information actually set forth in the Application, the Board should find that Contention inadmissible under 10 C.F.R. §§ 2.309(f)(1)(ii) and (vi). Moreover, as the following discussion demonstrates, Petitioners' specific arguments raised in Contention 3: (a) do not establish the basis for the Contention; (b) raise issues outside the scope of this proceeding; (c) are not supported by facts or expert opinions; and/or (d) fail to show that a genuine dispute exists with Progress on a material issue of fact or law. 10 C.F.R. §§ 2.309(f)(1)(ii), (iv), (v) and (vi).

a. Petitioners' Claims Regarding "The Company" Do Not Set Forth A Basis For Contention 3, And Lack The Required Factual and Expert Support

In support of Contention 3, Petitioners begin with a brief discussion under the unnumbered heading, "The Company." Petitioners state that, with the addition of four new units (two units at the Harris site to be owned by Progress Energy Carolinas and the two Levy units), Progress Energy, Inc. ("PEI") seeks to "quadruple" its existing rate base. Petition at 20. Petitioners make this statement without any attempt to show how the size of PEI's subsidiary companies' rate bases could possibly be relevant to the question of whether the Application satisfies the Section 50.33(f) requirements. In addition, Petitioners provide no support for their claim regarding "PEI's" rate base. In fact, given Petitioners' internal note stating "[confirm!]" which appears in the text (Petition at 20), Petitioners themselves are unsure whether their statement regarding PEI's rate base is accurate. Such unsupported, bald assertions are not sufficient to support the admissibility of a contention. See Private Fuel Storage, LBP-98-7, 47 N.R.C. at 180.

Petitioners also state: "it is important to note a vital factor in PEF's application: Florida's early cost recovery statutes." Petition at 21. Petitioners, however, do not explain why this is "important" or "vital." The factual statement that Florida has an "early cost recovery statue" is not an argument, does not raise a dispute with anything in the Application, and does not support a Contention that Progress has failed to satisfy the Commission's financial qualification regulations. Indeed, the existence of such statute which, as Petitioners admit, "allows pass-through recovery of early costs of nuclear power development" (Petition at 21), that are prudently incurred, enhances Progress's financial ability to construct and operate Levy.

Accordingly, under 10 C.F.R § 2.309(f)(1)(ii) and (vi), Petitioners' discussion of "the Company" does not support admitting Contention 3.

b. Petitioners' Claims Regarding Construction Costs Fail To Raise A Material Dispute With The Application And Lack The Required Support

"Section A" of Contention 3 discusses construction costs for Levy and other proposed new nuclear power plants. According to Petitioners, Progress "has opted to omit public disclosure of projections of the construction costs for Levy Units 1 and 2, and the basis of those projections, in this application." Petition at 21. That statement is false. ER Section 10.4.2.2 – which is publicly available – expressly states that Progress "estimates a total escalated construction cost of $16.6 billion" for Levy. ER at 10-71. ER Section 4.4.2 – which also is publicly available – makes the exact same statement. ER at 4-60. Thus, contrary to the Petitioners' claim, Progress has not "opted to omit public disclosure" of its construction cost projections.

In addition, as indicated in the publicly available "Table of Contents" to Part 1 of the Application, Section 2.1 of that Part contains detailed information regarding Levy's construction costs. Application, Part 1 at 1-i. In order to protect sensitive commercial information, Progress sought proprietary treatment for the Section 2.1 data. However, pursuant to the procedures set forth in the Hearing Notice,[33] the proprietary data were available for Petitioners' review when they prepared their Contentions. Thus, despite Petitioners' argument that projections of Levy's construction costs were omitted from the Application, Petitioners could have reviewed both publicly-available and proprietary data provided by Progress regarding those very costs. Petitioners, however, failed to satisfy their "ironclad obligation" to review the Application in its

[33] 73 Fed. Reg. at 74,534.

entirety. See Catawba, ALAB-687, 16 N.R.C. at 468. As a result of this failure, Petitioners do not reference – much less challenge – Progress's specific construction cost estimates for Levy. They therefore raise no dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi).

The Jacobs Declaration suffers from a similar problem. That Declaration appears to suggest that Progress was not required to submit construction costs and other financial information set forth in Section 50.33(f) and Appendix C to Part 50 because it is an existing power company. The Declaration is simply incorrect. The Declaration states: "While in 10 CFR §§ 50.33 Appendix C, the NRC requires filing of the total construction costs for nuclear generation plants, this requirement is substantially relaxed for existing power companies. The applicant has elected to take advantage of the relaxed oversight at an inopportune moment." Jacobs Declaration at 2.

However, the Commission's regulations *do* require Progress to provide, and the Commission to review, the construction cost information and other financial data described in Section 50.33 and Part 50, Appendix C, of the Commission's regulations. And Progress provided that information. Compare Section 50.33(f) and Part 50, Appendix C of the Commission's regulations with Part 1 of Progress's Application. Clearly, the Declaration misinterprets the Commission's regulations and fails to recognize that the Application contains the required construction cost data. Accordingly, nothing in the Jacobs Declaration supports the Contention 3 claim that Progress failed to disclose its estimated construction costs or any other information required by Appendix C to Part 50.

Moreover, the Petition merely engages in a discussion concerning the uncertainty of nuclear plant construction costs generally, and how such estimates have evolved over time.

Petition at 21-24. That discussion, however, contains no facts or expert opinion referencing and challenging the actual construction cost data contained in the Application. The Jacobs Declaration likewise only vaguely states that there "are examples from new nuclear construction projects underway in other regions of the world where delayed schedules and dramatic budget overruns are more and more common." Jacobs Declaration at 2. That Declaration does not address or challenge Progress's actual cost construction estimates that are set forth in the Application. Accordingly, Petitioners' arguments regarding construction costs lack the required support. 10 C.F.R §§ 2.309(f)(1)(v).[34]

In addition, notwithstanding Petitioners' unsupported hyperbole that cost estimates of new nuclear plants "have spiraled out of control to gargantuan proportions," Petitioners' position boils down to the unremarkable proposition that projections of new nuclear plant construction costs have increased over time. Petition at 21. The fact that a cost estimate is subject to uncertainty, however, does not make the estimate invalid. Estimating costs for projects such as new nuclear plants with long lead times for licensing and construction is inherently uncertain. Accordingly, as the Board in the Clinton ESP proceeding recognized, economic assumptions and forecasts, especially those regarding future markets and technologies, "'provide no absolute answers' and must be 'judged on their own reasonableness.'" Exelon Generating Co., LLC

[34] If the Board were to interpret Petitioners' construction cost discussion in Contention 3 as a challenge to the cost estimate used in the Application's NEPA cost-benefit analysis (which Petitioners do not even mention), such a challenge is not relevant here. As the Board in the Harris COL proceeding recently held, construction cost estimates in COL proceedings are only relevant in the NEPA context where the applicant's alternatives analysis indicates that there is an environmentally preferable alternative. Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), LBP-08-21, 68 N.R.C. ___, slip op. at 25 (Oct. 30, 2008). Progress's alternatives analysis for Levy concludes that there is no environmentally preferable alternative. ER at Section 9.2.4. In addition, although the Board in the Bellefonte COL proceeding admitted a NEPA-based construction cost contention, it did so only because the applicants were not subject to state utility regulation and because the Bellefonte ER suggested that at least one alternative to the proposed plant could be environmentally equivalent. Tennessee Valley Authority (Bellefonte Nuclear Power Plant Units 3 and 4), Memorandum and Order (Ruling Regarding Motion for Reconsideration), slip op. at 6-8 (Dec. 19, 2008), available at ADAMS Accession No. ML083540075. Neither of those factors apply here.

(Early Site Permit for Clinton ESP Site), LBP-05-19, 62 N.R.C. 134, 167 (2005), quoting Louisiana Energy Services (Clairborne Enrichment Center), LBP-96-25, 44 N.R.C. 331, 355 (1996), reversed on other grounds, CLI-97-15, 46 N.R.C. 294 (1997). The Petition and the Jacobs Declaration do not challenge the reasonableness of, nor do they reference, Progress's actual construction cost projections.[35]

For these reasons, Petitioners' claims regarding nuclear plant construction costs lack the required support and raise no material dispute with the Application. They therefore provide no grounds for admitting Contention 3. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

c. Petitioners' Claims Regarding Ratepayer Impacts Are Not Properly Supported, Raise Issues Outside The Scope Of This Proceeding, And Fail To Raise A Material Dispute With The Application

Petitioners also make various arguments regarding the alleged "ratepayer impact" of the Levy plant construction. Petitioners argue that the level of rate increase associated with construction of Levy will "cause shock to PEF customers, and substantially increase the regulatory risk of the project." Petition at 24. Petitioners state – without support – that Progress estimates "the ratepayer impact to add Levy Units 1 and 2 could exceed 30% of present bills by the time the plants are completed." Petition at 23. Petitioners refer to (1) rate increases related to Florida Power and Light Co.'s recovery of costs for its new nuclear plants; and (2) "public response" to Progress's rate increases relating to the Crystal River nuclear power plant, as offering a "preview of the likely regulatory impact this rate shock might have." Petition at 24. Petitioners' claims regarding rate increases, rate shocks, potential public response, and likely

[35] Nor would such a challenge have been valid, given that the total estimate set forth in the Application of $16.6 billion, or $8.3 billion for each 1100 MWe plant, is in line with the other recent cost estimates for new nuclear plants cited by Petitioners.

regulatory impacts at Levy are speculative and not supported by facts or expert opinion. 10 C.F.R. § 2.309(f)(1)(v). Such bald, unsupported assertions cannot provide the basis for an admissible contention. Private Fuel Storage, LBP-98-7, 47 N.R.C. at 180. In addition, Petitioners' claims regarding ratepayer impact do not raise a dispute with anything in the Application. 10 C.F.R § 2.309(f)(1)(vi).

Moreover, the Florida Public Service Commission ("FPSC"), not the NRC, has responsibility for protecting Florida's ratepayers. The U.S. Supreme Court has made it clear that, while the NRC has the authority to regulate the safety aspects of nuclear plant construction and operation, the States have responsibility over economic questions such as ratemaking. See Pacific Gas & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n., 461 U.S. 190, 205-11 (1983). According to the Supreme Court, the Atomic Energy Act removed "[a]ny doubt that ratemaking … questions were to remain in state hands." Id. at 208. Indeed, the Commission has recognized that, as articulated in Pacific Gas & Electric Company, its authority extends to safety and "nuclear" aspects of energy generation, while the states exercise authority over ratemaking. Pacific Gas & Elec.Co. (Diablo Canyon Power Plant, Units 1 and 2), CLI-02-16, 55 N.R.C. 317, 343 n.53 (2002), citing, Pacific Gas & Elec., 461 U.S. at 205-13. As described below and in Chapter 8 of the ER, Florida has in place an extensive regulatory process for ensuring its ratepayers' interests are protected with respect to Levy's construction and operation. Accordingly, issues regarding "ratepayer impacts" are outside the scope of this COL proceeding. 10 C.F.R.§ 2.309(f)(1)(iii).

3. Petitioners' Claims Regarding Levy's Operating and Maintenance Costs And Other Economic Matters Do Not Support Admission Of Contention 3

In Section B of Contention 3, Petitioners discus a wide range of issues, including Levy's O&M costs, the need for Levy, Florida's economy, the fiscal responsibility of the project, and financial markets. As an initial matter, none of these arguments reference the financial qualification data provided in the Application or even address the subject matter of the Contention – whether Progress has satisfied the financial qualification requirements set forth in Section §50.33. For these reasons alone, nothing in Section B provides a basis for Contention 3, nor does anything in Section B raise a material dispute with the Application. 10 C.F.R. §§2.309(f)(1)(ii) and (vi). Nevertheless, in the interest of being complete, the following sections discuss each of Petitioners' Section B claims.

a. Petitioners' Claims Regarding O&M Costs Do Not Raise A Material Dispute With The Application And Are Outside The Scope Of This Proceeding

Petitioners state that Progress "has opted to omit public disclosure of projections of O&M costs for Levy Units 1 and 2 in this application." Petition at 25. However, as Section 2.2 of the Application states, Progress was not required to submit such projections in order to meet the Commission's financial qualification requirements.[36]

Section 50.33(f) sets forth the information that a COL applicant must provide to the Commission in order to demonstrate it has the financial qualification necessary to carry out the activities for which the COL is sought. Specifically, Section 50.33(f) states that a COL applicant must submit the information described in paragraphs (f)(1) and (f)(2) of Section 50.33(f). Paragraph (f)(1) requires the applicant to demonstrate that it possesses or has reasonable assurance of possessing the funds necessary to cover estimated construction costs and related

[36] Progress notes that, for purposes of its NEPA cost-benefits analysis, ER Section 10.4.2.3 generally discusses projected operating costs associated with new nuclear facilities.

fuel cycle costs. As described above, Progress provided that information in Section 2.0, Part 1 of the Application. Paragraph (f)(2) of Section 50.33 states that an applicant ordinarily must provide information demonstrating that it possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operating costs for the period of the license, including estimates of total annual operating costs for each of the first five years of the facility's operation and the sources of funds to cover such costs. However, the introductory language of Section 50.33(f) exempts "electric utility" applicants for "operating licenses" from having to provide the Section (f)(2) operating cost information.

The Commission has issued regulatory guidance emphasizing that the Section 50.33(f) exemption for operating cost information applies not only to electric utility applicants for an "operating license," but also to electric utility applicants seeking operating licenses as part of a COL. Thus, NRC Regulatory Guide 1.206 states: "except for applications submitted by electric utilities," a COL applicant must provide information regarding operating costs. NRC Regulatory Guide 1.206 (Combined License Applications For Nuclear Power Plants), Section C.IV.5.1 (June 2007) ("Reg. Guide 1.206"). In addition, final interim Commission staff guidance further confirms this interpretation, revising Section C.IV.5.1 of Regulatory Guide 1.206 to clearly state:

> The COL application must provide the following general information …
>
> - *Except for applications submitted by electric utilities*, information showing that the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover the estimated operating costs for the period of the license;
>
> - *Except for applications submitted by electric utilities*, estimates of the total annual operating costs for each of the first 5 years of operation as well as sources of funds to cover those costs.

Final Interim Staff Guidance COL-ISG-02 on Financial Qualifications of Applicants, at 3-4 (May 2, 2008) (emphasis added), available at ADAMS Accession No. ML080710301 ("COL-ISG-02"). Moreover, the exemption regarding operating costs is based on the rationale that regulated electric utilities will be entitled to recover the cost of electricity they generate or distribute through regulated rates. There is no reason – nor have the Petitioners alleged one – why that rationale should apply to regulated electric utilities seeking an operating license but not to regulated electric utilities seeking a combined construction and operating license.

An "electric utility" is defined under 10 C.F.R. § 50.2 as:

> Any entity that generates or distributes electricity and which recovers the cost of this electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority.

Because Progress is engaged in the generation, sale and distribution of electricity in Florida and recovers the cost of this electricity through cost-of-service based rates regulated by the FPSC and the Federal Energy Regulatory Commission,[37] Progress meets the definition of an "electric utility" under 10 C.F.R. § 50.2. Progress, therefore, is exempt from providing operating cost information that otherwise would be required under Section 50.33(f)(2). Accordingly, Petitioners' claim that the Application improperly omitted such data does not raise a material dispute with the Application. 10 C.F.R, § 2.309(f)(1)(vi).

In addition, to the extent that Petitioners and the Jacobs Declaration intended, or may now desire, to challenge the "electric utility applicant" exemption for operating costs data that was established by Section 50.33(f), such a challenge to an existing regulation raises an issue

[37] See Application §§ 1.1.3 and 1.1.7. Petitioners do not appear to challenge Progress's status as an "electric utility."

that is outside the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii). It is well-settled that a contention which collaterally attacks a Commission regulation is not appropriate for litigation in a licensing proceeding and must be rejected. Douglas Point, ALAB-218, 8 A.E.C. at 89.

b. Petitioners' Claims Regarding Need For Power Do Not Set Forth A Basis For Contention 3, Are Not Properly Supported, And Fail To Raise A Material Dispute With The Application

In Section B of Contention 3, Petitioners argue that, in light of current financial conditions, Levy is not needed. Petition at 25-29. As demonstrated below, Petitioners' arguments provide no basis for Contention 3, are not properly supported, and do not raise a material dispute with the Application. 10 C.F.R. §2.309(f)(1)(ii), (v), and (vi).

As an initial matter, nothing in the Commission's financial qualification regulations – which are the subject of Contention 3 – requires that Progress demonstrate a need for power. In COL proceedings, the Commission must conduct a "reasonable assessment" of the need for power as part of its analysis *under NEPA*, but that is an issue wholly distinct from whether Progress has met the Commission's financial qualification requirements. Petitioners' need for power arguments, therefore, shed no light on whether Progress has met the Section 50.33(f) requirements. Accordingly, Petitioners' arguments do not support admitting Contention 3 because they do not set forth an adequate basis for that Contention and do not raise a material dispute with the financial qualification data actually provided in the Application. 10 C.F.R. §§ 2.309(f)(1)(ii) and (vi).

Even if the Board were to consider Petitioners' argument to be a challenge to Progress's need for power under NEPA, as discussed below, Petitioners fail to raise a material dispute with the Application's need for power data.

First, the Application's ER contains an entire Chapter, with eighty pages of discussion, demonstrating the need for power from Levy in the 2016-2017 timeframe. See ER Chapter 8. Petitioners completely ignore that Chapter. They do not directly challenge any statement in Chapter 8, nor do they even reference it. Accordingly, Petitioners have raised no genuine issue of material dispute regarding the Application's need for power analysis. 10 C.F.R. § 2.309(f)(1)(vi).

Second, the Commission has traditionally deferred to state determinations regarding need for power assessments. According to the Supreme Court, "[t]here is little doubt under that under the Atomic Energy Act of 1954, State public utility commissions or similar bodies are empowered to make the initial decision regarding need for power." Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 550 (1978) (citation omitted). See also Pacific Gas & Elec., 461 U.S. at 205-208."The [NRC's] prime area of concern in the licensing context… is national security, public health, and safety." Id. at 207.

As the NRC has recognized and as Progress notes above, the NRC's responsibilities regarding need for power have arisen in the context of NEPA, rather than the Atomic Energy Act. Rochester Gas & Electric Co. (Sterling Power Project, Nuclear Unit No. 1), ALAB-502, 8 N.R.C. 383, 388 (1978), aff'd, CLI-08-23, 11 N.R.C. 731 (1980). Nevertheless, the NRC has concluded that NEPA "does not foreclose 'the placement of heavy reliance upon the judgment of local regulatory bodies which are charged with the duty of insuring that the utilities within their jurisdiction fulfill the legal obligation to meet customer demands.'" Id. at 388-89, quoting, Carolina Power & Light Co. (Shearon Harris Nuclear Plant, Units 1, 2, 3, 4), ALAB-490, 8 N.R.C. 234, 241 (1978). More recently, the NRC has confirmed that the need for power analysis required by NEPA "does not supplant the States, which have traditionally been

responsible for assessing the need for power generating facilities … ." Denial of Petition for Rulemaking , NEI, 68 Fed. Reg. 55,909 (Sept. 29, 2003).

The Commission's Staff will rely on a state's need for power analysis, if it meets certain criteria. According to Section 8.1 of the Commission's Environmental Standard Review Plan ("ESRP"):

> Affected States and/or regions may prepare a need for power evaluation as part of a State or regional energy planning exercise. Similarly, State or regional agencies may require the applicant to document a need for power or plan for future plant construction. The [COL] applicant may choose to rely on those documents rather than prepare a description of the power system on its own. If so, NRC staff should review these documents to determine if they are (1) systematic, (2) comprehensive, (3) subject to confirmation, and (4) responsive to forecasting uncertainty. …. If NRC staff conclude these other documents are acceptable, no additional independent review by NRC staff may be needed.

Nuclear Regulatory Commission Environmental Standard Review Plan, NUREG 1555 ("ESRP" or "NUREG-1555"), Rev.1 (July 2007) at 8.1-3.

As discussed in the Application, Florida has a comprehensive statutory scheme requiring investor owned utilities such as Progress to submit detailed plans regarding the utility's load and resource needs. ER at 8-1 to 8-2. Florida also has in place a Power Plant Siting Act ("PPSA"), which requires a utility proposing to construct a new power plant exceeding 75 MWe of steam generating capacity to, among other things, obtain from the FPSC an order approving the utility's need for the additional capacity. ER at 8-2. In 2006, the PPSA was amended to add specific provisions regarding the showing necessary to obtain a need authorization for a proposed nuclear power plant. ER at 8-2. In addition, the FPSC has adopted detailed rules implementing the

PPSA and the 2006 amendments, specifying in detail the requirements a utility must meet to obtain FPSC approval of the need. ER at 8-2 to 8-4.

As described in the Application, on March 11, 2008, Progress submitted to the FPSC its Petition for Determination of Need for Levy. ER at 8-4. Progress submitted a detailed Need Study and testimony from ten witnesses. ER at 8-4 to 8-5. Several interested parties intervened in the FPSC docket, including the Office of Public Counsel, the independent ratepayer advocate, and large industrial customers. ER at 8-5. After extensive discovery and a three-day hearing, the FPSC voted unanimously to approve Progress's need for the plant. ER at 8-5. Subsequent to Progress's filing the Application, on August 12, 2008 the FPSC issued its "Final Order Granting Petition for Determination of Need For Proposed Nuclear Power Plants." Order No. PSC-08-0518-FOF-EI (Docket No. 080148-EI) ("Final Order"). Among other things, the Final Order concludes "we find that PEF has demonstrated a need for Levy Units 1 and 2." Id. at 24.

As the ER describes in detail, Florida's regulatory process for analyzing and evaluating the need for Levy meets the four criteria set forth in the ESRP that must be satisfied to allow the Commission Staff to rely on a state's need for power determination. Specifically, ER Section 8.1.1 describes how the Florida process is "systematic;" ER Section 8.1.2 describes how that process is "comprehensive;" ER Section 8.1.3 describes how that process is "subject to confirmation;" and ER Section 8.1.4 describes how that process is "responsive to forecasting uncertainty." Petitioners raise no challenge to the ER's claims that the Florida regulatory scheme meets these criteria. Nor do Petitioners make any other argument as to why the Commission should not rely on Florida's need determination,[38] or why the eighty-page

[38] Petitioners cite a quote from the Final Order which supposedly "acknowledge[s] the clear challenges in establishing electric demand to support" Levy. Petition at 26. The quote relied on by Petitioners states that

discussion regarding need for power in Chapter 8 is deficient. Accordingly, Petitioners have not raised a material dispute with the Application's need for power analysis. 10 C.F.R. § 2.309(f)(1)(vi).

c. Petitioners' Claims Regarding Florida's Economy Are Not Properly Supported And Fail To Raise A Dispute With The Application

Petitioners' other apparent "need for power" challenge is based on a variety of claims regarding Florida's economy. Those claims lack adequate support and fail to dispute anything in the Application.

For example, Petitioners argue that "economic reports and forecasts confirm that Florida's economy is in decline." Petition at 25. However, the report cited by Petitioners for that proposition merely contains a discussion of projected population growth in Florida. It does not address Florida's economy, much less confirm that it is "in decline." Petitioners also claim that Florida's population has "slowed severely," and that expected delays in retirements due to economic conditions will affect migration of retirees to the State, "leaving the economy in line for a long, slow recovery." Id. Petitioners add that Florida's "reliance on tourism is in serious jeopardy as well, with projections of visits to the state showing little or no growth for more than a year." Id. at 25-26. No factual or expert support is cited for any of these conclusions. Nor do

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"slower customer growth could reduce peak demands (an obvious factual point), but then adds that models provided by Progress in the state need proceeding appeared to be "a reasonable extension of historical trends," and that Progress's forecast "accounted for recent trends of decreasing population growth." Petition at 26. Rather than calling into question Progress's need for Levy's power, this quote demonstrates that Progress properly considered demand trends. In any event, the Final Order, from which this quote is extracted, found after a comprehensive review that Progress had demonstrated the need for Levy. Petitioners also state that Progress has not identified any joint owners for Levy, as suggested by other language in the Final Order which Petitioners quote. Petition at 27. The Final Order, however, merely encourages Progress to seek joint owners; adding joint owners was not a condition to the FPSC's need determination. The Final Order is available at www.psc.state.fl.us/dockets/cms/docketFilings2.aspx?docket=080148.

Petitioners make any effort to discuss how those statements – even if properly documented and currently accurate – call into question the plan to construct Levy, which is not scheduled to come on line until the 2016-2017 timeframe and which the FPSC has determined is necessary. Those statements, therefore, raise no dispute with the Application.

Petitioners cite to other "evidence" of a "drop-off in Florida's economy," such as "reports" by the "Florida Economic Estimating conference" of "double-digit reductions in housing starts in 2008, with only modest rebound of housing starts in 2009." Id. at 25. Petitioners do not provide a cite to these reports. Therefore, Progress was unable to review them for accuracy and context. Nor do Petitioners make any attempt to show how these data – even if properly documented and accurate – would affect the need for power from a plant that will not come on line until 2016-2017 and which the FPSC has authorized. Similarly, quotes provided by Petitioners from Florida utilities' financial statements of September 2008 – and Petitioners' cite to Progress's decreased customers base in 2008 – offer merely a snapshot of then-recent customer demand; that information says nothing regarding the need for power to be generated by Levy eight or nine years into the future. Petition at 26.

At most, Petitioners offer only a snapshot of Florida's current economy. In contrast, as Chapter 8 of the Application explains in detail, Progress's case regarding the need for Levy (which the FPSC relied upon in making its need determination) in the 2016-2017 timeframe is supported by numerous studies, long-term forecasts, and models that carefully consider a wide variety of factors too numerous to list here, including historical economic and demographic

trends. See e.g., ER Sections 8.1.4, 8.2.1, 8.2.2, and 8.2.2.1.[39] Petitioners do not challenge any of the information set forth in Chapter 8 of the Application.

Accordingly, Petitioners' statements regarding Florida's current economy are not supported by facts or expert opinion, and do not raise a material dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

d. Petitioners' Claims Regarding Financial Markets Raise Matters Outside The Scope Of This Proceeding, Are Not Properly Supported, And Fail To Raise A Material Dispute With The Application

Section B of Contention 3 also contains a disjointed discussion entitled, "Financial Market Risks Are Unacceptable." Petition at 27-30. These arguments do not support admitting Contention 3 because they raise matters outside the scope of this proceeding, are not properly supported, and fail to raise a material dispute with the Application. 10 C.F.R. § 2.309(f)(1)(iii), (v), and (vi).

As an initial matter, questions regarding Progress's business decision to construct Levy are outside the scope of this proceeding. As the U.S. Supreme Court has found, the "Commission's prime area of concern in the licensing context … is national security, public health, and safety." Vermont Yankee, 435 U.S. at 550 (citations omitted). According to the Supreme Court, under the Atomic Energy Act, the Commission "was not given authority … over the economic question whether a particular plant should be built." Pacific Gas & Elec., 461 U.S at 207. As the Commission has stated, "the NRC does not supplant the States, which have traditionally been responsible for assessing the need for power generating facilities, *their*

[39] For example, as the discussion in Section 8.2.2.1 indicates, Progress's forecasts demonstrating the need for Levy considered current economic trends, including slowdown in the economy, and in many cases, assumed that customer and power consumption growth would be less than ten-year historical averages.

economic feasibility and for regulating rates and services." 68 Fed. Reg. at 55,909 (emphasis added). And, as described above, the FPSC has determined that there is a need for Levy. Thus, Petitioners' arguments regarding whether construction of Levy is a sound economic decision raise matters that are outside the scope of this proceeding and are immaterial to the decision the Commission must make. 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv).

Regarding Petitioners' specific arguments, Section B of Contention 3 references the current economic downturn in the United States, and then makes various claims regarding the economics of building Levy. According to Petitioners, constructing Levy "defies sound financial logic," will "increase business and operating risks," and will harm Progress's credit ratings. Petition at 27-29. Part 1, Section 2.1 of the Application sets forth Progress's financing plan for Levy.[40] However, when Petitioners discuss Levy's supposed financial risks, Petitioners never even cite to the Section 2.1 discussion. Petitioners, therefore, fail to raise any challenge to the relevant portion of the Application. Accordingly, Petitioners' claims regarding Levy's financial risks raise no material dispute. 10 C.F.R. § 2.309(f)(1)(vi).

To the extent that Petitioners are relying on the Jacobs Declaration to support these claims, that Declaration likewise fails to raise a material dispute because it fails to challenge anything that appears in the Application. The theme of the Jacobs Declaration is that, due to current economic conditions, the Commission should look carefully at the financial qualification of COL applicants. He states that:

- The "regulatory history of the nuclear industry, as well as the financial history of electric power industry, and, actual present-day experience relating to construction of nuclear

[40] Although Application Section 2.1 contains proprietary data, pursuant to procedures established by the Hearing Notice Petitioners could have obtained that information prior to submitting their Contentions. See Hearing Notice, 73 Fed. Reg. at 74,534.

plants demand higher scrutiny and oversight of the financial qualifications to build and operate nuclear plants;"

- "[I]n times of harsh economic conditions, the NRC has conducted close oversight and review of the qualifications of all prospective licensees in order to protect the public's health and safety" and "[s]uch an approach is clearly in order in this case …."
- "The severe economic downturn, underway since 2007, requires a return to the close review of the financial qualifications of all potential licensees;"
- Due to schedule delays and cost overruns for nuclear projects in other regions of the world, "development of nuclear plants must be accompanied by careful oversight of the financial qualifications of applicants;" and
- "This evidence is sufficient for the NRC to revisit and, if necessary amend the former theory that economic issues have little relevance to health and safety of the public."

Jacobs Declaration at 2.

The Jacobs Declaration does not question any of the financial data contained in the Application, or even reference the information Progress provided to demonstrate its financial qualification. The Declaration makes generic statements urging the Commission to look carefully at COL applicants' financial qualification, without providing even a single example of where Progress may have failed to satisfy the Commission's requirements.

Moreover, Mr. Jacobs's comments urging a "return" to higher scrutiny appear to stem from his apparently mistaken belief, as described above, that Progress was not required to, and did not, submit construction cost and financing information. In any event, his statements regarding what level of scrutiny the Commission should employ do not raise a dispute with the Application, and do not support a Contention which claims that Progress failed to satisfy the Commission's financial qualification requirements. And, to the extent that Mr. Jacobs is challenging the degree to which the Board is required to review COL applicants' financial data, such a challenge is outside the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii). See Peach

Bottom, ALAB-216, 8 A.E.C. at 20 ("a licensing proceeding … is plainly not the forum for an attack on applicable statutory requirements or for challenges to the basic structure of the Commission's regulatory process").

Petitioners also seek to support Contention 3 by reciting statistics purporting to show a decline in nationwide consumer spending and power sales in the third quarter of 2008. Petition at 27-28. While Progress does not deny Petitioners' claim that there is a nationwide "economic downturn," Petitioners provide no citations so that the parties can verify the data (or its context) on which the Petition relies. More importantly, the fact that consumer spending and power sales in the U.S. may have declined during the third quarter of 2008 hardly supports a conclusion that building a plant to provide power in Levy's service territory in the 2016-2017 timeframe is an unsound financial decision, especially in light of the FPSC's determination that Levy is needed.

Petitioners also refer to (1) a Moody's "Special Comment" from October 2007 (which according to Petitioners states that companies building new nuclear plants will see increases in business and operating risks); and (2) a comment by a Moody's "official" contained in that report which states that, if companies "overly rely" on debt financing, they will have a high likelihood of a credit ratings decline. Petition at 28.

The "Special Comment" is dated October 2007, which is more than a year before the Levy Application was filed. Accordingly, the Special Comment obviously was not based upon a review of the financing plan described in the Application or on Progress's particular financial qualification to own and operate Levy (nor do Petitioners claim that it was). Similarly, nothing in the Petition provides any reason to believe that the Moody's "official's" discussion of credit ratings for companies that "overly rely" on debt financing, was familiar with, or commenting on,

Progress's financing plan for Levy or the Levy project generally. These citations, therefore, do not support Petitioners' Contention that the Levy Application fails to satisfy the Commission's financial qualification requirements. For this reason, they raise no genuine material dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi).

Petitioners next cite a litany of so-called "prohibitive" challenges that they speculate would cause Progress's credit ratings to "face major scrutiny" throughout the construction and operating life of Levy. Petition at 28. Petitioners offer no support – such as an individual with a background in power plant financing who has reviewed Progress's financing plan or the Application – for their idle speculation. Nor do they claim that Progress's financing plan will be insufficient to address these "challenges," even if real and "prohibitive." Moreover, even if real and prohibitive, the fact that Progress's credit ratings could face "major scrutiny" – whatever that means – is hardly a basis for concluding that Progress is not financially qualified to build Levy.

Petitioners' other claims suffer from similar shortcomings. According to Petitioners, the Energy Information Administration's ("EIA") 2003 Annual Energy Outlook projected that production from new nuclear plants would not be cost-competitive with other power sources until after 2025. Petition at 28. Petitioners add that, according to a 2003 EIA report, by 2011 capital costs for new nuclear plans would be "40 percent to 250 percent above the cost of capital for electricity plants using gas and coal." Petitioners then provide a quote from a "CBO report" which states that the CBO would expect that nuclear power "plant operators would default on the borrowing that financed its capital costs." Petition at 28-29.

As an initial matter, Petitioners provided no citations to pages in the EIA report, nor do they even specify the particular "CBO Report" to which they are referring. Progress believes it

has found the relevant CBO Report (by searching for the quoted language on the CBO's website), which is titled "Congressional Budget Cost Estimate" and is dated May 7, 2003. Progress also located a more than 250 page 2003 EIA Outlook, although it is not clear where in that document the data mentioned by Petitioner can be found.

In any event, isolated information and quotes from a more than five-year-old, generic EIA outlook and CBO report which likely contain outdated information and that obviously do not refer to Levy or result from a review of the Application, cannot possibly shed any light whatsoever on the question of whether the Application provides the required information to demonstrate that Progress is financially qualified to construct and operate Levy. Clearly, these reports do not constitute the type of facts or expert opinions required to support Petitioners' claim in Contention 3 that Levy has not satisfied the Commission's Section 50.33 requirements. 10 C.F.R. § 2.309(f)(1)(v).

Immediately after the CBO quotation mentioned above, Petitioners cryptically quote a statement, allegedly from a "PEF 10k," that "acknowledges this." Petition at 29. First, it is unclear what "this" the 10k is supposedly acknowledging. Second, Petitioners did not provide a citation for the quote, as footnote 28 to the Petition reads "cite PEF 10-k." Petition at 29. Third, even a cursory review of the quote shows that Petitioners' obviously took the quote out of context. Fourth, Petitioners merely include the quote with no explanation of its relevance. Accordingly, it unclear what, if anything, Petitioners believe the quote demonstrates regarding Progress's financial qualification with regard to Levy. For these reasons, the quoted language does not provide a basis for admitting Contention 3, nor does it raise a material dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(ii) and (vi).

Section B of Contention 3 concludes with the stray statement: "PEF has estimated the value of the EPACT production tax credits[41] for customers at only $88 to $167 million if Levy Units 1 and 2 are brought on line by 2016 and 2017." Petition at 29. Petitioners do not cite a source for this information. Moreover, Petitioners merely make this statement, saying nothing about what it proves or demonstrates, much less how it raises a dispute with the Application or how it supports Contention 3's claim that Progress has not met the financial qualification requirements of 10 C.F.R. § 50.33.

In summary, Petitioners' "financial markets" discussion consists of a hodgepodge of generic, irrelevant, unsupported, outdated, sometimes indecipherable claims purporting to show that Levy faces "unacceptable" financial risks, but that fail to even reference Levy's actual financial plan. For these reasons, in light of the requirements of 10 C.F.R. §§ 2.309(f)(1)(ii), (iii), (v), and (vi), Petitioners' financial markets discussion does not support admission of Contention 3.

4. Petitioners' Claims Regarding Alternatives Fail To Set Forth A Basis For Contention 3, Lack Adequate Support, And Do Not Raise A Material Dispute With The Application

a. Petitioners' Discussion Of Alternatives Is Not Relevant To Contention 3

In Section C of Contention 3, Petitioners raise a wide variety of issues claiming that other power generating alternatives are preferable to Levy, such as renewable energy and end use efficiency. Petition at 29-32. As an initial matter, the Section C discussion regarding alternatives to Levy has absolutely nothing to do with the subject matter of Contention 3, which challenges Progress's financial qualification to construct and operate the plant. Accordingly,

[41] See Energy Policy Act of 2005 § 1306, 26 U.S.C.A. § 45J (West 2009).

without further analysis, the Board should conclude that the arguments in Section C do not set forth a basis for that Contention and do not raise a material dispute with Progress's financial qualification data. 10 C.F.R. §§ 2.309(f)(1)(ii) and (vi).

b. Petitioners' Discussion Of Alternatives Lacks The Required Support And Fails To Raise A Material Dispute With The Application

In the event that, despite the argument immediately above, the Board determines Petitioners' arguments in Section C are somehow relevant to Contention 3, Progress addresses Petitioners' individual points below. As the following discussion demonstrates, Petitioners' specific Section C arguments do not support admission of Contention 3 because they consist of claims that are not supported by facts or expert opinion, and they fail to raise issues of material dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

Petitioners begin their alternatives discussion with the conclusory statement that "[n]uclear is the costliest option among all resource expansion options for PEF, whether using PEF's estimates, using MIT's authoritative but now low 2003 cost assessment, using the Keystone Center's mid-2007 update, or later and even higher industry estimates." Petition at 29. The bald, unsupported assertion that "nuclear is the costliest of all resource options" cannot form the basis for an admissible contention. See Private Fuel Storage, LBP-98-7, 47 N.R.C. at 180. The third party cost estimates mentioned by Petitioners (which are specifically set forth in Section A of Contention 3), merely estimate the construction costs of new nuclear plants; the Petitioners cite to nothing actually supporting their conclusion that nuclear is the "costliest" option. In any event, as discussed in footnote 34 of this Answer, Levy's construction costs relative to other alternatives is irrelevant to the Commission's NEPA analysis here, given that Progress's ER concludes there is no environmentally preferable alternative.

Petitioners also make various points regarding alternative energy sources. Petitioners claim that "[a] more reasonable approach would be to seek a more modular approach made up of a greater variety of resource options." Petition at 30. Petitioners advocate the use of renewable energy, such as wind farms and solar cells, and recommend "[e]nd-use efficiency." Id.[42] Petitioners conclude that Progress was "unwilling[] to take alternatives seriously." Id. at 31.

Petitioners fail to mention, however, that Chapter 9 of Progress's ER contains a thirty-page discussion that methodically and carefully analyzes alternatives to Levy, including (a) alternatives that do not require new generating capacity (i.e., conservation measures, extending service life of existing facilities, and purchasing power from other utilities or power generators); and (b) alternatives that require new generating capacity (i.e., wind, geothermal, hydropower, solar power, wood waste (and other biomass), municipal solid waste, energy crops, petroleum liquids, fuel cells, coal, natural gas, integrated gasification combined cycle, and combinations of alternatives). Chapter 9, therefore, addresses all of the topics (and more) raised by Petitioners' claims. Petitioners, however, never once cite Chapter 9, much less take issue with a particular statement or analysis contained therein. Petitioners, therefore, fail to raise a material dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi).

Petitioners claim that a "variety of resource options would be a more reasonable approach." Petition at 30. ER Section 9.2.3.3, however, contains pages of analysis regarding a "combination of alternatives" to Levy. ER at 9-28 to 9-32. That Section analyzes numerous combinations, including wind and solar; wind and solar and fossil fuels (both coal and

[42] The Petition at this point also contains a paragraph discussing the FPSC's suggestion in its Final Order that Progress consider joint owners for Levy. Petition at 30. It is not clear how this point relates to the arguments in Section C. In any event, the FPSC's Final Order was not conditioned on Levy having joint owners.

petroleum); and wind and solar and natural gas. Summarizing that analysis, Section 9.2.4 concludes:

> neither a power generating facility fueled by coal, nor one fueled by natural gas, *nor a combination of alternatives*, would be environmentally preferable to a nuclear power generating facility at the [Levy] site. Furthermore, these alternatives would have higher economic costs, and those costs would ultimately be borne by the rate-payers.

ER at 9-32 (emphasis added). Petitioners provide no support for their claim that a combination of alternatives would be more reasonable (or less expensive) than Levy. Nor do they reference those portions of the ER that actually discuss a combination of alternatives and that conclude such combinations would not be environmentally preferable to Levy and would be more costly. Mere allegations that the Application is inadequate do not give rise to a genuine dispute, unless supported by facts and a reasoned statement of why the Application is unacceptable in some material respect. Turkey Point, LBP-90-16, 31 N.R.C. at 521. Petitioners clearly have failed to meet their obligation to show how the Application itself is deficient. Palo Verde, CLI-91-12, 34 N.R.C. at 156.

As for Petitioners' claims regarding wind, solar, and end use efficiency, in addition to discussing those options in the "combination of alternatives" Sections cited above, the ER addresses each of those items separately in Sections 9.2.2.1, 9.2.2.4, and 9.2.1, respectively. Petitioners do not reference the ER's discussion of those items. Petitioners again have failed to meet their obligation to show how the Application's discussion of wind, solar, and end use efficiency is unacceptable or deficient.

Similarly, without referencing any specific Section of the Application, Petitioners vaguely state that Progress's "disparate treatment" of AP1000 technology vis-a-vis renewable

energy and other alternatives "reflects an unwillingness to take alternatives seriously." Petition at 30-31. As discussed above, Chapter 9 of the Application sets forth a comprehensive, detailed analysis that carefully considers a wide range of alternatives to the AP1000 plant at Levy. Petitioners raise no substantive fact to support its charge that Chapter 9 does not contain a "serious" analysis or that the data and conclusions in Chapter 9 are inaccurate. Petitioners offer no expert opinion supporting their claim that Chapter 9 was not "seriously" or accurately prepared, or was otherwise deficient.[43] Accordingly, Petitioners' argument that Progress did not seriously consider alternatives fails to support Contention 3 because it lacks the required factual or expert support and does not raise a material dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).[44]

Finally, in Section C Petitioners cryptically state: "The financial community fully recognizes the critical juncture at which PEF and other members of the industry find themselves. This recognition is yet another indication of the financial and regulatory risk PEF faces by virtue of its disproportionate consideration of alternatives to Levy Units 1 and 2." Petition at 31. Petitioners then provide a quote from Moody's which mentions that nuclear power faces market and technology risks, and that less costly alternatives such as renewable technologies may be developed in the future. Id. Petitioners conclude: "This is precisely the issue in Florida, where

[43] Progress notes that the Declaration of Carter M. Quillen ("Quillen Declaration"), which Petitioners do not cite for support of Contention 3, broadly states: "PEF has failed to properly and objectively consider the full spectrum of alternative energy technology resources in Florida to meet the future energy needs of it's [sic] ratepayers." Quillen Declaration at 2. Nothing in the Quillen Declaration supports that conclusory statement, or identifies what alternatives he believes Progress has failed to consider. It provides absolutely no facts, specific references or cites to the Application, or any further discussion showing how Progress has supposedly failed to consider the "full spectrum of alternative[s]."

[44] Petitioners add that the FPSC's determination of the need for Levy "offers a skewed analysis." Petition at 31. Petitioners merely provide a quotation from the FPSC's Final Order, without any explanation, facts, or analysis regarding how the FPSC's decision is allegedly "skewed." In any event, the NRC is not the appropriate forum for resolving issues that Petitioners may have with the Final Order, so the matter is outside the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii).

demand-side and renewable alternatives have been dramatically underutilized, and therefore offer an exceptional, economic opportunity." Id at 32.

First, Petitioners do not explain what they mean by Progress's "disproportionate consideration of alternatives." As described above, Progress's Application considered many alternatives to Levy, and Petitioners have raised no direct challenge to any statements or conclusions in the Application's alternatives analysis. Second, notwithstanding Petitioners' claim that the Moody's quote sets forth "precisely the issue in Florida," nothing in that quote or otherwise in the "Special Comment" from which the quote is extracted shows that Moody's was discussing Florida in general or Levy in particular. Third, Petitioners' claims that demand side and renewable alternatives (a) "have been dramatically underutilized;" and (b) provide "an exceptional economic opportunity" in Florida, are not supported by any facts or expert opinion. Fourth, even if were true that such alternatives have been "dramatically underutilized" and "provide excellent economic opportunities" in Florida, as discussed in Chapter 9 of the ER (which Petitioners do not even mention) that does not mean they are viable alternatives for the baseload power to be provided by Levy and that the FPSC found was necessary.

Accordingly, the various matters raised in Section C of Contention 3 regarding alternatives to Levy fail to support admission of that Contention because they: (1) lack adequate factual or expert support; and (2) fail to raise a genuine issue of material dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

D. Contention 4.A – 4.O (HydroEcology) Is Inadmissible

1. Contention 4A (Failure to Address Adverse Environmental Impacts of the Proposed Facility) Is Inadmissible

Contention 4A is a contention of omission, which states that "LNP Units 1 and 2 COL Application Part 3, Environmental Report (ER) failed to address adverse direct, indirect and cumulative environmental impacts of the proposed LNP facility." Petition at 32. Contention 4A also states that "[g]ranting a combined license (col) to Progress Energy Florida (PEF) to construct and operate proposed levy county units 1 and 2 (LNP) would result in THREATS TO WETLANDS, FLOOD PLAINS, special aquatic sites and waters DUE TO FAILURE TO CONSIDER ADVERSE DIRECT, INDIRECT AND CUMULATIVE IMPACTS." Petition at 35. This Contention is inadmissible because it does not provide an explanation of the basis for the Contention. 10 C.F.R. § 2.309(f)(1)(ii). The Contention is also inadmissible because it fails to raise a genuine dispute with a material issue of law or fact, and it does not provide the required support for Petitioners' position on the issue. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

a. The Petition Fails To Provide A Concise Explanation Of The Basis For Contention 4A

A contention is only admissible if it provides, among other things, a "brief explanation of the basis for the contention." 10 C.F.R. § 2.309(f)(1)(ii). Contention 4A fails to meet this basic requirement. In the section of the Contention under the heading "Explanation of basis," Petitioners mention a 1997 report by the Council on Environmental Quality ("CEQ") that describes an approach for considering cumulative effects under NEPA. Petition at 32. The Petition also refers to a "synopsis" of the CEQ report "relevant to the scope of this proceeding." Petition at 32. The author or source of the "synopsis" is not provided. Petition at 32; See also Expert Declaration by Dr. Sydney T. Bacchus ("Bacchus Declaration") at ¶ 8. Despite the unsupported characterization of the "synopsis" as "relevant to the scope of this proceeding," neither the Contention nor the "synopsis" identifies any portion of the CEQ report which is relevant to or provides a basis for the Contention. Petition at 32. The accompanying Declaration

does not cure this failure. That Declaration does not point to any section of the CEQ report which provides a basis for the Contention, nor does it explain the document's relevance. See Bacchus Declaration at ¶ 8. Petitioners' mere reference to a document without any explanation of the document's relevance does not provide an adequate basis for a contention. Calvert Cliffs, CLI-98-25, 48 N.R.C. at 348.

The Petition and Bacchus Declaration claim that, "[b]y comparing the Council's approach for addressing adverse direct, indirect and cumulative impacts and the impacts described in the following sections, specific examples of the significant omissions, misrepresentations and failures to address environmental impacts are apparent in Table 4.6-1 of the LNP ER." Petition at 33-34; Bacchus Declaration at ¶ 10. This vague and unsupported statement does not articulate with specificity any basis for a genuine dispute with the Application on a material issue. The CEQ guidance is not binding on the NRC. 10 C.F.R. § 51.10(a) ("the Commission's announced policy [is] to take account of the regulations of the Council on Environmental Quality published November 29, 1978 (43 FR 55978-56007) voluntarily, subject to certain conditions"); see also Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719, 743 (3d Cir. 1989) ("the CEQ guidelines are not binding on the NRC unless they have been adopted by it"); Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-02-25, 56 N.R.C. 340, 348 n.22 (2002). Accordingly, a comparison of the approach set forth in CEQ guidance and the approach utilized in the Application prepared for the Commission cannot provide a basis for a material dispute on an issue of law or fact. Therefore, Contention 4A lacks an adequate basis. 10 C.F.R. § 2.309(f)(1)(ii).

Moreover, nothing in the purported basis (neither the CEQ report nor the "synopsis") identifies any impacts alleged to be omitted from the ER. The ER addresses the potential

cumulative environmental impacts associated with the construction and operation of Levy. See, e.g., ER at Sections 4.7 and 5.1. Petitioners do not cite, let alone dispute, the cumulative impact analysis provided in ER Sections 4.7 and 5.11. This analysis was prepared in accordance with Commission guidance as set forth in the ESRP. That guidance (ESRP §§ 4.7 and 5.11) incorporates guidance from the CEQ. ESRP at 4.7-3. Therefore, Petitioners' vague reference to the CEQ report cannot demonstrate any basis for a material dispute with the Application because the Application considered the CEQ guidance. 10 C.F.R. § 2.309(f)(1)(vi).

b. Contention 4A Fails To Show That A Genuine Dispute Exists With The Application On A Material Issue Of Fact Or Law

Contention 4A does not establish a genuine dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi). For any contention of omission, when a petitioner claims that a licensing request and supporting documentation fail to address a relevant or necessary issue, the petitioner is "to explain why the application is deficient." 54 Fed. Reg. at 33,170; Palo Verde, CLI-91-12, 34 N.R.C. at 156. 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. Turkey Point, LBP-90-16, 31 N.R.C. at 521 & n.12. And a contention that does not directly controvert a position taken in the license application is subject to dismissal. See Comanche Peak, LBP-92-37, 36 N.R.C. at 384. Contention 4A is inadmissible for failure to show a genuine dispute because it does not directly controvert positions taken in the Application and does not explain why the Application is supposedly incomplete.

Petitioners aver that the ER does not discuss direct, indirect, and cumulative impacts. The Contention itself, however, reveals the specious nature of this claim. Immediately after

repeating its allegation that the ER does not address direct, indirect, and cumulative impacts, the Contention cites to the place in the ER that provides a summary of such impacts. See Petition at 33-34. The Petition lists the categories of potential adverse impacts during construction of Levy that are identified in the Application and summarized in Table 4.6-1. Petition at 34-35.[45] The Contention's citation to these identified potential impacts does not establish a genuine dispute with the Application, because the Contention does not specifically point to any of the listed impacts as being incorrectly or insufficiently considered in the ER. The Contention also does not specify any impact that was improperly omitted from the list. Furthermore, the Petition does not discuss, let alone dispute, the analysis in the ER Sections that Table 4.6-1 summarizes. Therefore, the Contention does not provide a reasoned statement demonstrating that the Application is materially deficient. 10 C.F.R. § 2.309(f)(1)(vi).

Moreover, this Contention of omission does not raise a genuine dispute with the Application because the environmental impacts of Levy are discussed extensively in the ER. For example, Chapter 4 of the ER addresses the potential environmental impacts, including cumulative impacts, during construction of Levy; Chapter 5 of the ER addresses such impacts from station operation of Levy; ER Sections 7.2 and 7.4 address the potential environmental impacts from a severe accident or transportation accident; and Chapter 10 of the ER discusses such impacts overall from Levy. See ER at 4-1 to 4-106; 5-1 to 5-174; 7-21 to 7-41; 7-50 to 7-60; and 10-1 to 10-91. Although Contention 4A alleges that the Petitioners inspected most of these ER Chapters and Sections, it fails to dispute the information in them or to identify any impacts that are not appropriately considered in the ER. Therefore, Contention 4A fails to raise a

[45] Table 4.6-1 also includes a summary of the identified measures and controls to limit any such impacts, though these are not acknowledged in the Contention. ER at 4-90 to 4-97.

dispute with the Application, because the Contention does not directly controvert anything in it. 10 C.F.R. § 2.309(f)(1)(vi).

To raise a genuine dispute, the Contention must include a statement of why the Application is unacceptable. Turkey Point, BP-90-16, 31 N.R.C. at 521 & n.12. Petitioners have the obligation to show that alleged omissions from the Application are significant. See System Energy Resources, Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-05-04, 61 N.R.C 10, 13 (2005). For a contention of omission to be admissible, a petitioner also must demonstrate that the application at issue was required to address the alleged omission. Petitioners do not (and indeed cannot) make such a demonstration, given that – as set forth above – Contention 4A does not even identify a specific omission.

Finally, Contention 4A's claim that threats would occur to wetlands, flood plains, and special aquatic sites and waters because the Application failed to consider direct, indirect, and cumulative impacts, fails to raise a genuine dispute with the Application. It is a bald, unsupported assertion that does not identify any impact the Application was required to address but improperly omitted.

Furthermore, potential threats to wetlands, flood plains, and special aquatic sites and waters are explicitly addressed in the Application. For example, Section 4.2.1.5 of the ER notes that approximately thirty-nine percent of the Levy site is currently comprised of wetlands and that wetlands on the site will be affected by Levy's construction. ER at 4-35 to 4-36. Likewise, Section 4.3.1.1.3 of the ER summarizes that "overall impacts on wetlands as a result of the LNP construction are expected to be MODERATE." ER at 4-43. See also, e.g., ER § 2.4.1.1 (describing terrestrial ecology at the Levy site, including wetlands, flood plains and other aquatic

sites); § 4.2.1.1; § 4.2.2.2; § 4.3.1; Table 4.6-1; § 5.2.1.5; § 5.6.2.2; § 5.8.1.3; § 10.1.1.3; Table 10.1.1, Table 10.1-2; and § 10.3.15. Petitioners do not even acknowledge, let alone dispute, these analyses and assessments.

Accordingly, Petitioners have failed to directly controvert any applicable portion of the Application. They have a duty to read the ER, state Progress's position, and state their opposing view. See Millstone, CLI-01-24, 54 N.R.C. at 358. The Petition does not dispute what is contained in the Application; it simply alleges that the information is not present and that the Application is incomplete. Petitioners do not meet their duty in Contention 4A to reference specific portions of the ER. The Contention, therefore, fails to demonstrate a genuine dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi).

c. Contention 4A Lacks Sufficient Support

To be admissible, a contention must present a statement of 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." 10 C.F.R. § 2.309(f)(1)(v). Because the Petition fails to provide any support for its assertion that impacts required to be addressed have been omitted from the Application, Contention 4A is inadmissible.

The Petition states:

> Direct, indirect and cumulative environmental impacts in site vicinity and region—Llong-term [sic] knowledge of both the 'vicinity' (9.7 km (6 mi) radius) and 'region' (extending from the vicinity perimeter to 80 km (50 mi)) of the proposed 1,257 hectare (3,105 acre) LNP site, as defined on page 1-viii of the Environmental Report (ER). long-term knowledge of the Withlacoochee River, extending from the headwaters in the Green Swamp to the Gulf of Mexico and designated as an Outstanding Florida Water (OFW), as defined on page 1-ix of the

> Environmental Report (ER). Research and numerous site inspections in those areas as well as the ER report for the proposed LNP, including, but not limited to, Chapters 1, 4, 5, 6 and 10 indicates the ER has failed to address significant adverse direct, indirect and cumulative environmental impacts that would occur if the proposed LNP is constructed and operated as proposed.

Petition at 33. This rambling, incoherent collection of phrases is a bald assertion devoid of support. It fails to identify with specificity any omission from the ER. The paragraph immediately following it simply paraphrases a number of the impacts included in the ER at Table 4.6-1. Compare Petition at 34-35 with ER, Ch. 4, Table 4.6-1. Specifically, ER Table 4.6-1 identifies ER Sections that discuss each impact that the Petition incorrectly alleges is omitted. The Petition does not discuss, let alone dispute, the analysis in any of the ER sections associated with the Petition's laundry list of alleged omissions. Because the Petition only regurgitates a catalog of impacts considered in the ER, the laundry list cannot be considered a list of omissions that provide support for Petitioners' claim.

Notably, the Petition does not cite to the Declaration of the purported expert as support for its bald assertion that environmental impacts were improperly omitted from the ER. Even if the Declaration were cited, it would also not proffer support for the Contention's allegation of omissions from the ER because the Bacchus Declaration is self-contradictory in the same manner as the Contention. The Declaration makes a conclusory statement that the ER fails to address direct, indirect, and cumulative impacts from Levy, but goes on within the same page to quote the categories of a chart in the ER summarizing some such effects. Bacchus Declaration at ¶¶ 9 & 10. In its discussion of environmental impacts, the Declaration does not allege that any required impacts were not considered by the ER, but instead charges that the potential impact significances set forth in the chart are wrong. Bacchus Declaration at ¶ 10. Much like

Contention 4A itself, the Bacchus Declaration fails to provide sufficient support for Petitioners' allegations.

Moreover, the vague allegation that "[r]esearch and numerous site inspections in those areas" have been conducted does not provide sufficient support to sustain the Contention. See Petition at 33. Presumably "those areas" refers to the vicinity and region of Levy; it is not clear, however, what research or site inspections have been conducted in that area. More damaging to Petitioners' claim, it is not apparent if or how the unspecified research and site inspections relate to the purported omissions of environmental impacts from the ER. Once again, the Bacchus Declaration cannot cure the Petition's deficiency, because it too fails to identify how the indeterminate research and site inspections relate to the alleged omissions from the Application. See Bacchus Declaration at ¶ 9. The alleged research and site inspections, therefore, cannot support the Contention.

For the reasons set forth above, Contention 4A does not meet the standard of an admissible contention, contrary to 10 C.F.R. § 2.309(f)(1)(v), because it fails to proffer any support for its allegation of an omission from the Application.

In summary, Petitioners fail to provide any basis or support for their assertion that the ER failed to address environmental impacts of the construction or operation of Levy. The unsupported claim does not show a genuine dispute with the Application, does not rise to the level of an admissible contention, and fails to meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(ii), (v), and (vi).

2. Contention 4B (Failure to Address Adverse Environmental Impacts of Constructing Levy Within Flood Plains) Is Inadmissible

The purported issue raised by Contention 4B is: "Constructing in flood plains – The LNP ER failed to address adverse direct, indirect and cumulative environmental impacts of constructing the proposed LNP facility within flood plains and on wetlands, special aquatic sites and waters." Petition at 35-36. Contention 4B is inadmissible because it mischaracterizes the Application. The gravamen of Petitioners' complaint – that Levy will allegedly use "approximately 2.7 m (9ft) of aggregate material (aka 'fill')" over "'approximately 121 ha (300 ac.)'" at the Levy site – is simply not true. The Application states clearly that the ground elevation will primarily be raised by using concrete, and the surface area to be impacted is a fraction of the 300 acres alleged by Petitioners.[46] Contention 4B is inadmissible because: (1) it does not show a genuine dispute with the Application, as required by 10 C.F.R. § 2.309(f)(1)(vi); (2) it does not provide a specific statement of the issue of law or fact to be raised or controverted, as is required by 10 C.F.R. § 2.309(f)(1)(i); and (3) it does not provide an explanation of its basis, as required by 10 C.F.R. § 2.309(f)(1)(ii).

a. In Contention 4B, Petitioners Fail To Demonstrate A Genuine Dispute With The Application

Contention 4B is inadmissible because it does not raise a genuine dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi). The Contention mischaracterizes the Application in several material respects. Most notably, there is nothing in the Application supporting the Contention's underlying assertion that Levy will use aggregate fill to raise the ground elevation of the site. Petitioners are required to review the relevant portions of the Application and all supporting documents. They also must accurately state the applicant's position and explain why

[46] Petitioners' allegations related to use of concrete are contained in Contention 4C, and Progress addresses those allegations in its response to Contention 4C below.

they hold an opposing view. 54 Fed. Reg. at 33,171; Millstone, CLI-01-24, 54 N.R.C. at 358. In this Contention, Petitioners fail to fulfill these fundamental requirements.

The Petition asserts that (1) the majority of the site on which Levy is proposed to be constructed is within the 100-year flood zone; and (2) during "the proposed construction, the ground elevation would be raised to a level up to 2.7 m (9ft) higher than the existing level." Petition at 36. The Petition's description of the proposed Levy site being largely contained within a 100-year flood zone, and the support Petitioners provide (Figure 4.1-4 and the identical Bacchus Exhibit C), do not contradict anything in the Application. In fact, the Petition cites directly to several portions of the ER which confirm that Levy's planned construction site is within the flood zone. Likewise, the Petitioners' assertion that the ground elevation will be raised during proposed construction does not raise a dispute with the Application. The ER explicitly provides that the existing ground elevation of the "land around the reactors and cooling towers will be raised." ER at 4-6. The Contention cites directly to this page of the ER, without contradiction. Because the Petition does not contradict the ER, it does not show a genuine dispute with the Application regarding this issue.

Contention 4B also alleges that: (1) "approximately 2.7 m (9ft) of aggregate material (aka 'fill') would be placed over" much of the floodplain in the proposed Levy site to raise the ground elevation; (2)"the mining of the aggregate material to fill the proposed LNP site in the flood zone will result in destruction and other irreversible adverse impacts to terrestrial ecosystems, as well as to wetlands, flood plains, special aquatic sites and other waters throughout and beyond the proposed plant site, vicinity and region;" and (3) "hydroperiod and related adverse environmental impacts were not addressed in the ER." Petition at 36-37. The misstatement by the Petitioners that "approximately 2.7 m (9 ft) of aggregate material (aka 'fill') would be placed

over" the land areas within the floodplain for which the ground elevation is to be raised, is alone sufficient to render the Contention inadmissible. Petition at 36. There is no basis in the Application for the claim that aggregate material (fill) will be used to raise the ground elevation at the Levy site. Inaccurate statements such as this do not raise a genuine dispute with the Application.

In fact, the ground elevation at the Levy site will be primarily increased through the use of Roller Compacted Concrete ("RCC") and concrete foundations as described in detail in the FSAR. FSAR Section 2.5.4.5.4 plainly states that "[s]tructural fill between the excavation bottom (elevation -7.3 m (-24 ft.) NAVD88) and the nuclear island mudmat (elevation 3.4 m (11 ft.) NAVD 88) will consist of an RCC bridging mat." FSAR at 2.5-285. RCC will be used to perform the majority of the ground elevation raising to 14.3 m. See FSAR at 2.5-296 ("It is important to note that the nuclear island will be supported on RCC above material that is not liquefiable"); FSAR Table 2.0-201 (Sheet 5 of 8) at 2.0-7 ("Roller Compacted Concrete is used to support the nuclear island…Soils beneath the foundation for the nuclear islands will be excavated and replaced with RCC"); and ER Section 4.8. Furthermore, where fill other than RCC is required, "[s]oil removed from excavations may be used." ER at 4-36.

Petitioners are required to review the pertinent portions of the Application and to explain why they disagree with the information therein. See 54 Fed. Reg. at 33,171; Millstone, CLI-01-24, 54 N.R.C. at 358. Contention 4B cannot establish a genuine dispute with the Application by misstating or ignoring the content of the FSAR. See Harris, LBP-82-119A, 16 N.R.C. at 2076; Catawba, LBP-82-107A, 16 N.R.C. at 1804; Limerick, LBP-82-43A, 15 N.R.C. at 1504-05. Because the Application provides that RCC (and not fill) will primarily be used to increase the ground elevation, Contention 4B fails to show a genuine dispute with the Application, and the

Petitioners' allegation that the mining of aggregate material (fill) will have harmful effects upon the environment is irrelevant to this Contention.

Contention 4B also misstates the size of the land area for which the elevation will be raised and the amount by which the ground elevation will be raised. Petitioners state that the ground elevation of the *entire* plant site, "'approximately 121 ha (300 ac.)' at the proposed LNP site in the flood zone," will be raised. Petition at 36. This, however, is an inaccurate depiction of the size of the land area that will be raised. Although "much of the LNP site and much of the vicinity is located in the 100-year floodplain," the Application plainly states that the "existing ground elevation near the main reactors and the cooling towers" is the land area that will be raised to 15.2 m (50 ft) NAVD88. ER at 4-6. The ER makes clear that the "footprint" of the main reactors and cooling towers will affect a land area of 14.8 ha (36.6 ac.). ER at 4-6. Additionally, the areas "in the periphery around the main plant building will be raised to 14.3m (47 ft.) NAVD88." ER at 4-6. The land area to be affected by the elevation for the switchyard in the periphery around the main plant building will be 17.8 ha (44.0 ac). ER at 4-6. Thus, the ER provides that the total land area for which the ground elevation will be raised (land underlying the reactors and cooling towers as well as the periphery around the main plant building) is approximately 32.6 ha (80.6 ac.).[47]

Similarly, Contention 4B inaccurately describes the amount by which the ground elevation will be raised; it states that the "ground elevation would be raised to a level up to 2.7 m (9 ft) higher than the existing level." Petition at 36. The ER states that the maximum amount that the ground elevation will be raised – in the area around the main reactors and cooling towers

[47] See also ER at 4-5 to 4-6 (noting that *all* "[c]onstruction activities [including, among other things, the ground elevation] within the LNP site boundary will change the existing use of [only] 82.2 ha (203.2 ac.) of land"). This total affected area is also much less than the 121 ha (300 ac.) claimed in the Petition. See Petition at 36.

– is 2.4 m (8 ft) above existing grade. ER at 4-6. The raising of the ground elevation by this amount will ensure that those "structures will be above the 100-year floodplain." ER at 4-6. Therefore, Petitioners overstate the volume of material purportedly needed by overstating both the area involved and the height by which the ground elevation will be raised.

Petitioners fail to raise a dispute with the Application because they misinterpreted or misstated the information contained therein regarding the material to be used to raise the ground elevation of the Levy site, the area of land for which the ground elevation will be raised, and the amount by which the ground elevation will be raised. A contention should be rejected if, as here, it inaccurately describes the applicant's proposed actions or ignores or misstates the content of the application and supporting documents. See, e.g., Harris, LBP-82-119A, 16 N.R.C. at 2076; Catawba, LBP-82-107A, 16 N.R.C. at 1804; Limerick, LBP-82-43A, 15 N.R.C. at 1504-05.

b. Petitioners Fail To State An Issue With Specificity, And Fail To Provide A Basis For The Contention

To be admissible, a 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). A petition also must provide a "brief explanation for the basis of the contention." 10 C.F.R. § 2.309(f)(1)(ii). In Contention 4B, Petitioners have failed to state with specificity an issue of law or fact to be raised or controverted, and have made bald allegations that do not provide a basis for the Contention.

The ostensible issue of Contention 4B is a vague allegation regarding environmental impacts from constructing Levy "within flood plains and on wetlands, special aquatic sites and waters." Petition at 35-36. The vague allegation suggests that Levy will be constructed "on…special aquatic sites and waters." Petition at 35-36. It is not clear to what the phrase "special aquatic sites" refers, as that term is not defined in the Petition nor any of its

accompanying Exhibits. The allegation that Levy will be constructed on waters fails to provide a statement of fact to be raised or controverted, because a plan to construct Levy on waters would be outside the site-specific design characteristics enveloped in the AP1000 DCD and is not proposed in the Application. The allegation that Levy will be built on such sites thus does not provide with specificity a statement of fact to be raised.

Contention 4B also fails to specify the environmental issue which it intends to raise. The statement that Levy will be constructed on a floodplain, while not showing a genuine dispute with the Application as discussed above, also does not raise an environmental issue. The purported basis does not provide any helpful insight to clarify what environmental issue Petitioners attempt to allege, because it only discusses increasing the ground elevation to construct Levy. Petition at 36. The ground elevation of the floodplain at the Levy site will be raised to meet the safety parameters of the AP1000 DCD design, as discussed in FSAR Section 2.5. While Petitioners mention that ground elevation will be raised, they do not allege any resulting safety issue, nor do they allege any safety issue relating to Levy's location in a floodplain. Because the Petition does not raise a safety issue with regard to the ground elevation, and because the statement that Levy will be constructed in a floodplain does not raise an environmental issue, Contention 4B fails to 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). The remainder of Contention 4B, which discusses alleged impacts from mining, is not any more edifying with regard to the environmental issue which Petitioners are attempting to raise. The impacts of mining have no relation to the Application, given that the project described in the Application is a nuclear power plant, not a mine.

Additionally, the Petition fails to provide a sufficient basis for Contention 4B. The purported "Explanation of basis" is irrelevant to the vague claims made in the Petition, because it only confirms that Levy will be built on a raised elevation. Petition at 36. The fact that Levy will require an increase in the elevation of a particular land area does not provide a basis for the alleged omission of impacts. The mining impacts asserted by the Petition are also irrelevant to Petitioners' allegation that the ER omits a discussion of the potentially adverse direct, indirect, and cumulative effects of Levy on wetlands, special aquatic sites and waters. Petition at 36-37. Because the Application does not include the creation of any mine, the allegation that impacts will result from mining fails to specify any effects that allegedly will result from the construction of Levy, which are omitted from the ER.

The ER, in fact, extensively discusses the potential environmental impacts from the construction of Levy, including in Chapter 4. Contention 4B fails to dispute, or even to address, any of the analyses provided in the ER. Contention 4B, therefore, does not meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(i) and (ii).

3. Contention 4C (Failure to Address Adverse Environmental Impacts of Mining for Construction Materials) Is Inadmissible

Contention 4C is a contention of omission alleging the ER "failed to address adverse direct, indirect and cumulative environmental impacts on flood plains, wetlands, special aquatic sites and waters from additional mining for the production of raw materials, such as aggregate for concrete, to construct the proposed LNP facility." Petition at 38. This Contention is inadmissible because: (1) it does not demonstrate a genuine dispute with the Application on a material issue of law or fact; (2) it does not provide an adequate explanation of its basis; (3) it lacks sufficient support; and (4) it raises an issue both outside the scope of the proceeding and

immaterial to the findings the Commission must make to support the Application. 10 C.F.R. §§ 2.309(f)(1)(ii), (iii), (iv), and (vi).

a. Contention 4C Fails To Raise A Genuine Material Dispute With The Application

Contention 4C charges that the "ER fails to identify the sources of the mined raw materials (aggregate) for the extensive concrete required to construct the proposed LNP project." Petition at 39. This claim does not raise a material dispute with the Application because the Petitioners have not provided any reasons or justifications for their implied assertion that the ER is required to identify the source of mined raw materials. An allegation that some aspect of an Application is "inadequate" or "omitted" – as is offered in Contention 4C – does not give rise to a genuine dispute with the Application unless it is supported by facts as well as a reasoned statement of why the Application is unacceptable or incomplete in some material respect. See Turkey Point, LBP-90-16, 31 N.R.C. at 521 & n.12. The Petitioners have not provided any such reasoned statement.

The allegation that the "most logical sources for this mined raw material are the existing and proposed mines in Levy and Citrus Counties" is the type of bald assertion that is inadequate to support any contention, much less one with the deficiencies of Contention 4C. Petition at 39. See Private Fuel Storage, LBP-98-7, 47 N.R.C. at 180. In fact, technical and economic considerations, rather than abstract logic divorced from such factors, will determine the source of raw material for Levy.

The Petition concedes that raw material may come from existing mines. However, neither the Petition nor its purported expert allege any impacts from those mines. Bacchus

Declaration at ¶ 20.[48] Rather, Petitioners allege impacts from proposed mines, although they have provided no reason to think that such mines will be used as the source of materials for Levy's construction. The Petition has not alleged any connection between the proposed mines and Levy or Progress, nor does any such connection exist. It is mere speculation that mines, which are not currently operating, will be in operation and supply raw materials of the appropriate specifications for the construction of Levy. Idle speculation about vague impacts from unrelated future actions not directly tied to the Application do not support a genuine dispute of a material fact.

Petitioners believe the source of raw materials needs to be identified in the Application, but state no reasons for their belief. That failure alone is cause to reject Contention 4C. As 10 C.F.R. § 2.309(f)(1)(vi) states, "if the petitioner believes that the application fails to contain information on a relevant matter as required by law," the related contention must include "the identification of each failure and the supporting reasons for the petitioner's belief." Id.

In addition, Petitioners' vague claim that the Application does not address "hydroperiod and related adverse environmental impacts" from the mining of aggregate material, which will result "in the destruction and other irreversible adverse impacts to terrestrial ecosystems, as well as to wetlands, flood plains, special aquatic sites and other waters throughout and beyond the proposed plant site, vicinity, and region," does not demonstrate a genuine dispute with the Application. Petition at 40. This claim fails to show a genuine dispute with the Application because it does not specify any impacts that are not addressed in the ER. Indeed, the Petition does not state with specificity what impacts will result, what will be destroyed, why that is

[48] The Contention does not explicitly reference any of the declarations attached to the Petition. Dr. Bacchus, however, appears to be the expert on which Petitioners intend to rely.

adverse, or how it is irreversible. Petitioners do not even identify a location for these purported impacts, alleging that the impacts are in the region and "beyond." Id. The Bacchus Declaration provides no helpful insight, merely making similar vague and conclusory allegations about destruction and irreversible adverse impacts. Bacchus Declaration at ¶ 22. This failure bars the admissibility of Contention 4C. See Turkey Point, LBP-90-16, 31 N.R.C. at 521 & n.12; Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 N.R.C. 138, 156-57, aff'd, CLI-01-17, 54 N.R.C. 3 (2001) (rejecting a contention alleging impacts to threatened and endangered species because the contention failed to identify any particular species of concern).

Such vague concerns do not contradict the Application. The Application states that the construction of Levy is not anticipated to require the expansion of any mine. ER at 4-10 ("LNP-related construction activities will [not] affect the operation of an active quarry or mine"). In fact, the construction of Levy is planned to minimize the volume of bulk materials, including concrete. See ER at 3-2 ("The overall plant arrangement uses building configurations and structural designs to minimize the building volumes and quantities of bulk materials consistent with safety, operational maintenance, and structural requirements"). Petitioners do not cite, let alone dispute, these assessments. The Petition's assertion that the impacts of mining were not addressed in the ER is nothing more than a statement "that simply alleges that some matter ought to be considered" – without any justification for why such consideration is required. Such a statement does not provide a sufficient basis for demonstrating a material dispute with the Application. Rancho Seco, LBP-92-23, 38 N.R.C. at 246. See 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

Petitioners correctly state that construction of Levy will require the use of concrete, including for some of the various activities listed in the Limited Work Authorization for Levy. Petition at 38. The Petition also correctly states that a temporary concrete batch plant will be installed on the Levy site for operation during the construction period. Petition at 38 (citing ER at 4-56). These are merely statements of fact regarding what is stated repeatedly in the Application – they do not raise a material dispute. Additionally, the Petition does not cite, let alone dispute, the environmental analysis of the Limited Work Authorization activities provided in Part 6 of the Application. The Limited Work Authorization ER states that no terrestrial ecosystems will be impacted by construction, as all impacts arise from pre-construction activities. Application, Part 6 at 3. Because the Contention's claim regarding terrestrial ecosystem impacts does not cite, let alone contradict, Part 6 of the Application, it does not show a genuine dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi).

b. The Reports And Exhibits Referenced In Contention 4C Are Inadequate To Sustain The Contention

(i) The Reports And Exhibits Do Not Provide A Basis For Contention 4C

A contention must have a basis in fact or law. See Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 3), LBP-02-5, 55 N.R.C. 131, 141 (2002). The documents referenced by the Petition fail to provide an adequate explanation of the basis for Contention 4C because they have no relevance to the Application or its alleged deficiencies.

Although Bacchus Exhibit D is cited by Petitioners as support for the allegation that harmful environmental impacts would result if the proposed Tarmac Mine were permitted, this document fails to supply an adequate basis for the Contention. The document does not concern Levy. It provides no support for the assertion that the Tarmac Mine will be operated to support

Levy construction. It is therefore irrelevant to – and cannot provide a sufficient basis for – the Contention. Similarly, taken in context, Bacchus Exhibit E also fails to provide a basis for the Contention. That document includes a study of four mining sites in Florida. It does not reference, or relate to, any portion of the Application and does not explain how or why the Application is allegedly deficient. The mere reference to such a document does not provide an adequate basis for a Contention. Calvert Cliffs, CLI-98-25, 48 N.R.C. at 348. Finally, "Hydrogeologic Setting, Water Budget, and Preliminary Analysis of Ground-Water Exchange at Lake Starr, a Seepage Lake in Polk County Florida," does not serve as an adequate basis for the Contention because it is irrelevant to the claims made. As a two-year study of one Florida lake, it does not concern any aspect of the Application or Levy. Because each of the reports and Exhibits are irrelevant and not applicable to Levy, they cannot provide a basis for the Contention. 10 C.F.R. § 2.309(f)(1)(ii).

(ii) The Reports And Exhibits Fail To Provide Adequate Support To Show A Genuine Dispute Exists On A Material Issue

Even if the reports and exhibits referenced by Contention 4C were somehow thought to provide a basis for the Contention – the "support" that they offer is inadequate to meet the admissibility requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi). A document offered by the Petitioners as the basis for a contention must be scrutinized by this Board both as to those portions that support the Petitioners' assertions and those that do not. See, e.g., Yankee Atomic Electric Co. (Yankee Nuclear Power Station), LBP-96-02, 43 N.R.C. 61, 90 & n.30 (1996). Petitioners rely upon Bacchus Exhibit D, Bacchus Exhibit E, and the report concerning Lake Starr to support Contention 4C. When examined closely, however, those documents cannot support the claims made.

As discussed above, Petitioners do not identify any connection between the proposed mine and Levy. But, even if there were a connection, Petitioners improperly rely on Bacchus Exhibit D to supposedly show that adverse environmental impacts would occur if certain proposed mines were permitted. That document is not sufficient to support the Petitioners' claim, because the characterization of it provided by Petitioners is specious. The Petition declares that "[s]ome of the significant and myriad concerns regarding adverse environmental impacts that would occur if those proposed mines [the Tarmac and Nature Coast Mines] are permitted are expressed in the Florida Department of Environmental Protection's letter to Tarmac America, dated November 19, 2008…[and] incorporated herein as Bacchus Exhibit D." Petition at 37; see also Petition at 39. The Bacchus Declaration makes an identical faulty allegation. Bacchus Declaration at ¶ 14. Although the Petition and accompanying Declaration both assert that the letter identifies adverse environmental effects that "would occur" if the Tarmac mine were permitted, the letter does not, in fact, offer any conclusion about what effects would result from the creation or operation of the Tarmac mine. Petition at 39. It is, instead, simply a "request for additional information" by the Florida Department of Environmental Protection to enable that agency to complete its review of the application submitted by Tarmac America. Bacchus Exhibit D at 1. Because the letter does not reach the conclusions which Petitioners attribute to it, it is not adequate support for the claim made in Contention 4C.

Bacchus Exhibit E is cited by Petitioners as purported support for the claim that "mining irreversibly alters the natural hydroperiod in the vicinity surrounding mines" and "irreversible adverse environmental impacts…occur as a result of natural hydroperiod alterations from mining." Petition at 37 and 39. When viewed in context, however, that Exhibit (written by Dr. Bacchus) does not support the Contention's claims. As noted above, the paper, "Nonmechanical

dewatering of the regional Floridan aquifer system," describes a case study of four mining sites in Florida. Petition at 37. The paper does not offer any support for the Petition's claim that mining activity would be affected by the construction of Levy. As discussed in response to Contention 4D, non-mechanical dewatering due to excavation of the nuclear island at the Levy site will be minimal.

Similarly, "Hydrogeologic Setting, Water Budget, and Preliminary Analysis of Ground-Water Exchange at Lake Starr, a Seepage Lake in Polk County Florida," cannot provide sufficient support to demonstrate a genuine dispute on a material issue. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi). According to the Petition, the document describes "excessive loss of water through evaporation occurring from large bodies of water, such as mine pits." Petition at 39. The document itself, however, makes clear that its purpose "is to describe the hydrogeologic setting of Lake Starr, and present a lake water budget computed at weekly, monthly, and annual time intervals covering the 2-year period from August 1996 through July 1998." Amy Swancar, T.M. Lee, and T.M. O'Hare, "Hydrogeologic Setting, Water Budget, and Preliminary Analysis of Ground-Water Exchange at Lake Starr, a Seepage Lake in Polk County, Florida," U.S. Geological Survey, Water-Resources Investigations Report 00-4030 (2000) at 3.

The document does not pertain to – and in fact does not even mention – mines or the environmental effects of mining. That document, as stated above, does not concern the environmental impacts resulting from mining, and Petitioners have failed to provide a sufficient explanation of its application to "mine pits." Petition at 39. The Bacchus Declaration does not remedy this failure, as it too does not include any explanation of the report's applicability to "mine pits." See Bacchus Declaration at ¶ 21. Thus, in context, the document provides no support for the claim that mining of the construction material for Levy will result in adverse

environmental impacts which have not been addressed in the ER. Moreover, even if the document did concern mine pits, it would still fail to show a genuine dispute with the Application because there is no mine pit on the Levy site. The Application does not propose the creation of any mine pit, and no mine is connected to the construction or operation of Levy. Thus, even if the report did explicitly address the environmental impacts resulting from mine pits, it would not demonstrate a genuine dispute with the Application on a material issue. 10 C.F.R. § 2.309(f)(1)(vi).

c. The Claims In Contention 4C Regarding The Proposed Tarmac Mine Are Outside The Scope Of The Combined License Proceeding, And Are Not Material To The Commission's Decision

To the extent that Contention 4C asserts that the proposed Tarmac Mine should not be permitted, it is inadmissible because it raises an issue not within the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii). A decision about the extent of environmental impacts from the proposed Tarmac Mine, and whether the mine should be permitted, is outside the Commission's purview.

Furthermore, the claim that the Tarmac Mine should not be permitted is also not "material to the findings the NRC must make to support" the Application. 10 C.F.R. § 2.309(f)(1)(iv). The construction of Levy is not dependent upon – nor even connected to – the operation of the proposed Tarmac Mine. Because the permitting of the Tarmac Mine would not make a difference in the outcome of the combined license proceeding for Levy, it is not a material issue.

Moreover, even if Petitioners' assertions about the environmental impacts of mining were true – which has not been shown – the claim would still not be admissible because Petitioners

have not demonstrated that mining impacts are material to the findings the Commission must make. For the construction of Levy, the

> amounts and types of material required should be comparable to those that would be necessary for the construction of any type of power plant or other large industrial facility including materials such as concrete, steel and other metals, glass, and several forms of plastics. According to a recent U.S. Department of Energy (DOE) study, each new reactor would require approximately 9356.6 cubic meters (m^3) (12,239 cubic yards (yd^3)) of concrete…the amount of materials that would be irretrievably committed to the project should be insignificant in relation to the availability of these materials on the national or global market.

ER at 10-37. Because the amount of concrete required for the construction of Levy is minimal in comparison to the availability of concrete on the national or global market, the environmental impacts of mining (for the components of concrete or other materials) is not material to the Commission's determination.

In general, operation of mines for raw materials for the construction of Levy is not within the scope of the Commission's review. The Petition provides no support for Petitioners' statement that the impacts of mining raw materials for Levy need be discussed in the Application. Contention 4C, therefore, fails to raise a genuine dispute with the Application, does not provide an explanation of its basis, is unsupported, and raises an issue not within the scope of the Commission's purview and immaterial to this proceeding. 10 C.F.R. §§ 2.309(f)(1)(ii), (iii), (iv), (v) and (vi).

4. Contention 4D (On-Site Mining And Dewatering) Is Inadmissible

Contention 4D alleges "On-site mining and dewatering - The ER failed to address adverse direct, indirect and cumulative environmental impacts on flood plains, wetlands, special aquatic sites and waters of on-site mining (excavation) and dewatering to construct and operate

the proposed LNP and all associated components." Petition at 40. Contention 4D mischaracterizes the Application, fails to identify with specificity any material omission from the Application, fails to dispute the discussion of excavation and dewatering in the Application, fails to provide any reasons to believe there has been an omission from the Application, and does not provide support for a genuine dispute on a material issue. 10 C.F.R. §§ 2.309(f)(1)(ii), (v) and (vi).

a. Contention 4D Lacks An Adequate Basis

Petitioners make a vague and unsupported allegation that the Application fails to address the impacts of excavation for the nuclear island and dewatering at Levy. The Petitioners put forth the following references as basis for this Contention:

> See Bacchus Exhibit E and the following references for examples of peer-reviewed scientific publications and citations on dewatering in support of statements of fact, opinions and conclusions of these contentions:
>
> Bacchus, S. T., D. D. Archibald, K. O. Britton, and B. L. Haines. 2005. Near infrared model development for pond-cypress subjected to chronic water stress and *Botryosphaeria rhodina*. Acta Phytopathologica et Entomologica Hungarica 40(2-3):251-265.
>
> Bacchus et al. 2003. Near infrared spectroscopy of a hydroecological indicator: New tool for determining sustainable yield for Floridan aquifer system. Hydrological Processes 17:1785-1809.
>
> Bacchus, S. T. 2000. Uncalculated impacts of unsustainable aquifer yield including evidence of subsurface interbasin flow. Journal of American Water Resources Association 36(3):457-481.

Petition at 43-44. Although not mentioned in Contention 4D, to the extent to which Petitioners intend to rely on the Bacchus Declaration, that Declaration provides no additional basis as it only generally references Bacchus Exhibit E and the three articles quoted above. Bacchus Declaration at ¶ 27. A vague citation to a multi-page article for general support provides an inadequate basis for a contention. Public Service Co. of NH (Seabrook Station, Units 1 and 2), CLI-89-03, 29

N.R.C. 234, 240-41 (1989); see also USEC, Inc. (American Centrifuge Plant), LBP-05-28, 62 N.R.C. 585, 597 (2005).

Furthermore, none of these four multi-page documents specifically address the Application, let alone identify any deficiency in the Application. It is not even clear that these documents relate to Levy County. In addition, Petitioners do not demonstrate that the activities described in these four references relate to the excavation at Levy. For example, Contention 4D tries to draw an analogy between mining and excavation for the nuclear island at Levy. See, e.g., Petition at 40. However, the discussion in the four references cited by Petitioners concerns mining activities which involve large areas of ground being converted to surface waters. See e.g., Bacchus Exh. E at 232. The activities planned at Levy are not analogous to mining. Instead, the excavation for the nuclear island is expected to be filled with concrete soon after excavation.[49] FSAR § 2.5.0.4 at 2.5-11. Because Petitioners do not demonstrate that these references are relevant to the Application, Contention 4D lacks an adequate basis. 10 C.F.R. § 2.309(f)(1)(ii).

As a purported "explanation" of basis, Contention 4D quotes from the Application on two topics: (1) embedment and related dewatering on site; and (2) dewatering from water use on site. Petition at 40-42. None of the quotes on these topics provide an adequate basis for the purported issue raised in Contention 4D. Where a petitioner cites one part of a document, the Board should scrutinize the entire document both for what it says and what it does not say. Yankee, LBP-96-02, 43 N.R.C. at 90 & n.30. In context, none of Petitioners' quotes from the Application provide an adequate basis for their purported issue.

(i) Embedment Will Lead To Minimal Dewatering

[49] Petitioners' attempted analogy defies common sense. The excavation for the nuclear island could not be allowed to fill from groundwater as it would be impractical to construct the foundation for the nuclear island underwater.

Contrary to Petitioners' mischaracterization of the Application, when considered in context, the Application states: (a) dewatering due to excavation will be minimal; (b) storm water ponds will maximize recharge to groundwater; (c) water quality impacts will be controlled by best management practices; and (d) temporary monitoring of groundwater level during construction will allow for corrective action to address excessive dewatering. Petitioners' mischaracterization of the description of excavation in the Application provides no basis for their issue. 10 C.F.R. § 2.309(f)(1)(ii).

(A) Dewatering Due To Excavation Will Be Minimized

Petitioner's Contention 4D mischaracterizes the Application when describing the planned embedment of the nuclear island. Contention 4D incorrectly asserts that the ER "confirms that on-site mining would occur to a depth of 'approximately 75 ft.'" Petition at 40. Petitioners also improperly allege that the ER confirms "that ground water 'will need to be removed based on the embedment depth' and that the dewatering will cause 'groundwater depressions' (page 4-34)." Petition at 40-42. Petitioners have selected phrases from the ER to paint a misleading picture of what excavation for Levy will entail. In context, the ER states:

> Dewatering for the nuclear island foundation excavations will be required during construction activities. The planned depth of the excavations is approximately 75 ft. Water from the excavations will be intermittently pumped and discharged to temporary retention/settling ponds. The construction of the ponds will allow the discharged water to percolate back into the subsurface. Measures will be implemented, such as sedimentation traps or filtration, to ensure that erosion or siltation caused by the dewatering will be negligible. However, the effects of these activities will be confined to the construction period. They will be monitored and controlled using Florida BMP Selection and Implementation for sediment control. Proper safeguards will be implemented to prevent long-term effects on local habitats from construction activities. Potential long-term impacts on groundwater levels from dewatering are anticipated to be SMALL.

ER at 4-34 (citation omitted). As part of site preparation activities, the nuclear island foundation excavations will be hydrologically isolated from groundwater prior to excavation. Petitioners' claim that dewatering by excavation ("nonmechnical dewatering" as described in Bacchus Exhibit E) will occur at Levy or the surrounding area is based on their mischaracterization of the Application. In context, the Application explains that non-mechanical dewatering due to excavation of the nuclear island will be minimal. The nuclear island foundation excavations will be hydrologically insulated from groundwater as necessary to minimize groundwater infiltration prior to excavation, as summarized in Part 2 of the Application:

> Dewatering will be required to maintain groundwater levels beneath the nuclear island to an elevation of -7.3 m (-24.0 ft.) NAVD88 or lower during excavation and construction of the nuclear islands. Expected construction dewatering flow rates and anticipated dewatering methods are summarized in this subsection.
>
> Due to the size of the excavation, as well as the expected quantity of groundwater that could potentially be encountered, a diaphragm wall will be constructed around each entire nuclear island to minimize lateral groundwater inflow into the excavation. In addition, the Avon Park Formation will be drilled and pressure grouted to elevation -30.2 m (-99 ft.) NAVD88 before excavation begins to minimize seepage from the rock upward into the excavation, and to resist possible uplift pressure. The diaphragm wall will be keyed approximately 9.1 m (30 ft.) into the grouted bedrock. Thus, two different engineered barriers will form a 'bathtub' with the diaphragm wall being the sides and the grouted Avon Park Formation being the bottom of the "bathtub." With this design, one has to dewater the excavation area with relatively shallow wells and sumps within the area.
>
> Expected construction dewatering pumping rates were calculated using the Visual MODFLOW software package, which includes the U.S. Geological Survey's three-dimensional finite-difference modeling code, MODFLOW 2000.. . .
>
> The model accounts for the results of a sensitivity analysis conducted to determine the susceptibility for increased flow to the shallow interior wells based on postulated leakage "windows" that develop in the diaphragm wall. While state-of-the-art diaphragm wall construction has reduced vulnerability to such defects (such as panels rotating, assuming a degree of curvature, or otherwise not

> aligning adequately), sump pumps located at the bottom of the excavation will be pumped to address any potential "window leakage," as well as rainfall and surface runoff during the excavation process.
>
> The gross permeability of the diaphragm wall is taken as 10^{-6} cm/sec (0.002835 ft/day). Potential leakage through "windows," as mentioned above, may necessitate greater than expected pumping rates in order to maintain dry working conditions within the excavation. The permeability of the grouted Avon Park Formation has been conservatively considered to be 10^{-4} cm/sec (0.2835 ft/day), but this parameter has been varied to account for the possible variation in the effectiveness of the grouting operation.
>
> The hydraulic conductivity of the ungrouted Avon Park Formation at the LNP site ranges from 8.47×10^{-4} to 1.92×10^{-2} cm/sec (2.4 to 54.4 ft/day), and averages approximately 4.9×10^{-3} cm/sec (13.9 ft/day).
>
> The total flow that must be accommodated with sumps and shallow wells is conservatively determined to be in the range of 1136 to 1893 lpm (300 to 500 gpm) at steady-state conditions during construction, based on the site hydraulic conductivity characteristics summarized in Table 2.5.4.6-201 and the hydrogeological conditions at the site, as described in FSAR Subsection 2.4.12.

FSAR § 2.5.4.6.2 at 2.5-288 to 2.5-289. Petitioners' mischaracterization of dewatering during construction of the nuclear island foundation provides no basis for their issue as required by 10 C.F.R. § 2.309(f)(1)(ii).

(B) Storm Water Ponds Will Maximize Recharge

Petitioners mischaracterize the addition of storm water ditches and ponds to imply that the storm water management planned at Levy will result in an adverse hydrologic alteration. Petition at 41 (quoting ER at 4-33, 4-34) and 42. In fact, the Application explains that the storm water management plan for Levy is intended to maximize recharge to the groundwater. The Application states:

> Water from the excavations will be intermittently pumped and discharged to temporary retention/settling ponds. The construction of the ponds will allow the discharged water to percolate back into

> the subsurface. Measures will be implemented, such as sedimentation traps or filtration, to ensure that erosion or siltation caused by the dewatering will be negligible. However, the effects of these activities will be confined to the construction period. They will be monitored and controlled using Florida BMP Selection and Implementation for sediment control. Proper safeguards will be implemented to prevent long-term effects on local habitats from construction activities. Potential long-term impacts on groundwater levels from dewatering are anticipated to be SMALL.

ER § 4.2.1.4 at 4-34 (citation omitted). Contrary to the Petitioners' allegation, the storm water ponds function to recharge the groundwater. Such a mischaracterization of the Application cannot be a basis for a contention.

Also, Petitioners' allegation that all water will be discharged off-site mischaracterizes the Application. Petition at 42. Petitioners mischaracterize the Application by exaggeration when they state that all water will be discharged off-site. Petitioners misinterpret Bacchus Exhibit F. Bacchus Exhibit F correctly identifies where off-site discharges will go. However, as described in the Application, storm water and water from the nuclear island excavation will go to the storm water ponds; it will not be discharged off-site. Petitioners' mischaracterization of the role of storm water ponds provides no basis for their issue as required by 10 C.F.R. § 2.309(f)(1)(ii).

(C) Water Quality Impacts Will Be Controlled By Best Management Practices

Petitioners state that, "[t]he LNP ER also acknowledges that the on-site mining and dewatering may alter water quality (page 4-34)." Petition at 41. In context, the Application states that water quality is one of five factors "that will be considered during the design of the excavation and dewatering activities." ER § 4.2.1.4 at 4-34. The Application describes the best management practices that will be implemented to control water quality impacts. ER § 4.2.1.1 at

4-29 to 4-30. Petitioners' mischaracterization of the water quality controls provides no basis for their issue as required by 10 C.F.R. § 2.309(f)(1)(ii).

(D) Temporary Monitoring Of Groundwater Level During Construction Will Allow For Corrective Action To Address Excessive Dewatering

Petitioners also mischaracterize the Application when they state that "[t]he LNP ER further asserts that 'excessive dewatering effects' can be prevented by installing and monitoring '[T]emporary groundwater wells (page 4-34).'" Petition at 41. Petitioners' mischaracterization of the Application continues when they state that "'excessive dewatering effects'" cannot be prevented by installing and monitoring groundwater wells, regardless of whether those wells are temporary or permanent, as claimed in the LNP ER (page 4-34)." Petition at 43. In fact, the Application does not claim that monitoring water level alone will prevent excessive dewatering effects. As quoted above, the Application describes the corrective action that can be taken with respect to the diaphragm walls or grouted floor of the "bath tub" if excessive infiltration of groundwater into the excavation is noted. When the Application is considered in context, it is obvious that Petitioners overlook the discussion of the purpose of temporary groundwater well monitoring in the Application. "Detailed information pertaining to groundwater monitoring activities is discussed in ER Sections 6.1, 6.3, and 6.6." ER § 4.2.1.4 at 4-34. The groundwater monitoring wells will monitor water levels. ER § 6.3.2.5 at 6-43. If excessive dewatering is noted, groundwater pumping will be minimized. ER Table 4.6.1 at 4-93. Because Petitioners mischaracterize the role of groundwater monitoring in the Application, they have failed to meet the requirements of 10 C.F.R.§ 2.309(f)(1)(ii).

(ii) Dewatering From Water Use On Site Will Be Minimized

Contrary to Petitioners' mischaracterization of the Application, when considered in context, the Application states that: (1) on-site water use from dewatering during construction and operations will have SMALL impacts; and (2) most of the on-site water use during operations comes from the Gulf of Mexico, not dewatering. Petitioners' mischaracterization of on-site water use described in the Application provides no basis for their issue as required by 10 C.F.R. § 2.309(f)(1)(ii).

(A) On-Site Water Use From Dewatering During Construction And Operations Will Have SMALL Impacts

Petitioners state that on-site water use from dewatering will be 550,000 gallons per day during construction and 6 million gallons per day during operations. Petition at 42. The Application states that these groundwater withdrawals represent maximum usage. The Application states:

> The projected total maximum usage is 550,000 gpd and the projected average usage is 275,000 gpd. The projected groundwater usage for LNP operations (see ER Subsection 5.2.2.3) is anticipated to have a SMALL impact. The projected construction groundwater usage is projected to be less than half the operational amount. Therefore, groundwater impacts from construction activities are also anticipated to be SMALL.

ER § 4.2.1.4 at 4-35. The Application states that groundwater use will be minimal. Petitioners' mischaracterization of on-site water use described in the Application provides no basis for their issue as required by 10 C.F.R. § 2.309(f)(1)(ii).

(B) The Largest On-Site Water Use During Operations Comes From The Gulf of Mexico

The Petition characterizes the on-site water use during operations of 43.5 million gallons per day as astronomical.[50] Petition at 43. As the Petitioners correctly state (Petition at 41), this water use is salt water that comes from the Gulf of Mexico, not on-site dewatering. See e.g., ER § 2.3.2.1 at 2-99. Therefore, Petitioners are mischaracterizing the Application when they imply that this water use is related to dewatering. Petitioners' mischaracterization of on-site water use described in the Application provides no basis for their issue as required by 10 C.F.R. § 2.309(f)(1)(ii).

b. Contention 4D Fails To Identify With Specificity Any Material Omission From The Application

Contention 4D is a contention of omission ("The ER failed to address ..."). Petition at 40. As this response to Contention 4D makes clear, both from Petitioners' reference to certain sections of the Application and from the more fulsome discussion of the Application above, to place Petitioners' quoted sections in context, nothing could be further from the truth. Petitioners' Contention 4D fails to identify with supporting reasons any material omission from the Application. Because the Petitioners effectively concede the Application discusses the issue purported to be raised, and because the Application does address the direct, indirect and cumulative environmental impacts on flood plains, wetlands, special aquatic sites and waters of on-site mining and dewatering to construct and operate Levy as summarized by and referenced in Table 4.6-1 and 5.10-1 (providing references to specific text in the ER summarized in the Tables), Contention 4D cannot be a contention of omission and is not admissible in accordance with 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

[50] Petitioners also allege impacts from salt drift arising from this evaporation. Petition at 43. Salt drift is addressed in Progress's answer to Contention 4I, which notes that salt drift is discussed in the Application and that Petitioners do not dispute that salt drift will be less than that allowed by NRC guidance and hence will be a SMALL impact.

c. Contention 4D Fails To Provide Support For A Genuine Dispute On A Material Issue

Finally, Petitioners make a vague and unsupported allegation that on-site water use, dewatering and excavations would result in LARGE rather than SMALL impact to wetlands, flood plains, special aquatic sites and other waters throughout and beyond the site and vicinity of the proposed LNP project. Petition at 43. Indeed, the Petitioners' unsupported allegation has neither any specificity nor geographical limit because it alleges without qualification that the impacts extend "beyond the site." Id. Furthermore, NRC guidance states that LARGE impacts are those that "are clearly noticeable and are sufficient to destabilize important attributes of the resource." 10 C.F.R. Part 51, App. B, Table B-1 n.3. The Petitioners fail to identify with specificity what resource would be noticeably altered or what important attribute of the resources would be destabilized. Petitioners' conclusory statements that water use, dewatering and excavation impacts are LARGE lacks support and lacks specificity. Therefore, Contention 4D fails to meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(v) and (vi). If Petitioners do not agree with the analysis in the ER, then their contention must at least explain why. Palo Verde, CLI-91-12, 34 N.R.C. at 156. See Exelon Generation Co. (Early Site Permit for Clinton ESP Site), LBP-04-17, 60 N.R.C. 229, 240 (2004). Petitioners here are silent.

5. Contention 4E (Wetlands are Connected by Relict Sinkholes) Is Inadmissible

Contention 4E alleges: "Wetlands connected to the Floridan aquifer system - The ER failed to address adverse direct, indirect and cumulative environmental impacts of constructing the proposed LNP facility within wetlands that are connected to the underlying Floridan aquifer system via relict sinkholes." Petition at 44. Contention 4E lacks an adequate basis and its

allegations lack support for a genuine dispute on a material issue. 10 C.F.R. §§ 2.309(f)(1)(ii)(v) and (vi).

a. Contention 4E Lacks An Adequate Basis

Petitioners' sole support for Contention 4E is a geological case study by Bacchus and three references discussed in Contention 4D. Petition at 45.[51] While the case study does state that wetlands are connected to the Floridan aquifer system via relict sinkholes, it does not state the significance of this fact, nor in any way imply that this connection would cause impacts beyond the wetlands at the Levy site. In fact, the case study does not include any analysis concerning the environmental effects of constructing a nuclear plant on Floridan wetland or the aquifer system. It is not even clear whether this case study is relevant at all to Levy County. See Bacchus Exhibit E, Table 2 at 226. Similarly, the other three references in Contention 4D are generic and not clearly related to nuclear plants in general or Levy specifically. Neither these documents, nor the Bacchus Declaration, provide any information related to the purported connection between wetlands at Levy and the aquifer. Contention 4E, therefore, does not have an adequate basis. 10 C.F.R. § 2.309(f)(1)(ii).

b. Contention 4E Does Not Show That The Application Omits A Discussion Of Wetlands Impacts

Even if Contention 4E were considered to have a basis, its allegations lack support for a genuine dispute on a material issue. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi). Petitioners make vague and unsupported assertions that the ER omits discussion of adverse direct, indirect and

[51] To the extent that Petitioners also rely on the Bacchus Declaration, that Declaration merely relies on the Bacchus geologic case study and the three Contention 4D references as a basis for this Contention. Bacchus Declaration at ¶ 30.

cumulative environmental impacts on wetlands that are connected to the underlying Floridan aquifer system via relict sinkholes. Petition at 44-45. Specifically, Petitioners claim:

> The LNP ER failed to acknowledge that the pond-cypress (Taxodium ascendens) wetlands and those associated with other natural waters on the site and within the vicinity and region of the proposed LNP project are connected to each other and the underlying Floridan aquifer system through a network of relict sinkholes.

Petition at 44. Petitioners provide no support for their allegation that the wetlands on-site are connected to any of the waters off-site. The four references listed do not address the Levy site specifically. In fact there is no indication the references even discuss Levy County. See, e.g., Bacchus Exhibit E, Table 2 at 226.

Contrary to the unsupported assertions by Petitioners, the ER addresses wetlands, "relict sinkholes," and any environmental impacts associated with Levy arising from these features. With respect to wetlands on the Levy site, the Application states: "Approximately 73 ha. . . or 6 percent of the total LNP site acreage are classified as Wetland Forested Mixed . . . On the LNP site these systems are frequently found as inclusions in, or on the periphery of, cypress swamps." ER § 2.4.1.1.1.3 at 2-355. "Left undisturbed, these mixed forests eventually will become dominated by hardwoods." ER § 2.4.1.1.1.3 at 2-355 to 2-356. Sinkholes are addressed by the ER in Sections 2.2.2.6.2 and 2.6.1.4. Petitioners do not contradict the description of wetlands in the ER. ER § 2.4.1.1.5.1 at 2-365 to 2-366. Nor do Petitioners' unsupported allegations about "relict sinkholes" in Florida in general, address, let alone contradict, the analysis in the Application that Levy is located at a site where sinkholes are few. See e.g., ER § 2.6.1.4 at 2-618; FSAR § 2.5.0.1.2 at 2.5-3 to 2.5-4.

Also, as discussed below, Petitioners provide a list of surface waters in Florida (Petition at 45) that are discussed in the Application. Therefore, contrary to Petitioners' claims, they are not omitted. 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." Private Fuel Storage, LBP-98-7, N.R.C. at 180. Petitioners have the obligation to show that omissions from the Application are significant. See Grand Gulf ESP, CLI-05-4, 61 N.R.C. at 13. Petitioners have not shown that there are any omissions from the Application's discussion of wetlands or "relict sinkholes." Therefore, Contention 4E fails to meet the criteria in 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

c. Contention 4E Does Not Raise A Genuine Dispute With The Application Regarding Wetlands Impacts

If, despite the clear language of Petitioners' issue statement quoted above, Contention 4E were viewed as raising a dispute with the Application rather than a contention of omission, Contention 4E nonetheless fails to raise with specificity a genuine dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi). The Application identifies the wetlands and potential surface waters that may be affected by Levy. Petitioners do not cite, let alone contradict, the analysis in the Application. Petitioners do not provide adequate support that other waters listed in Contention 4E are relevant.

Petitioners provide a laundry list of waters in Florida, without support showing that these waters are connected to Levy. Specifically, without elaboration, Petitioners list:

> Levy Blue Spring and associated wetlands and uplands
> Withlacoochee River (OFW) and associated wetlands and uplands
> Waccasassa River (OFW) and associated wetlands and uplands

Waccasassa Bay (SHA) and associated wetlands and uplands
Gulf Hammock Wildlife Management Area
Big Bend Seagrasses Aquatic Preserve (SHA)
Waccasassa Bay Preserve State Park
Goethe State Forest
Big King Spring and associated wetlands and uplands
Little King Spring and associated wetlands and uplands
Turtle Creek and associated wetlands and uplands
Spring Run Creek and associated wetlands and uplands
Smith Creek and associated wetlands and uplands
Demory Creek and associated wetlands and uplands
Tomes Creek and associated wetlands and uplands
Ten Mile Creek and associated wetlands and uplands
Withlacoochee Bay (SHA) and associated wetlands and uplands

Petition at 45. These waters are identified in the Application, and their potential relationship to Levy is discussed. See, e.g., ER § 2.3 at 2-80 to 2-86; FSAR § 2.4.1 at 2.4-1 to 2.4-10 (and associated figures). Petitioners neither cite nor dispute this analysis in the Application. They, therefore, do not raise a specific genuine dispute. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

Petitioners assert that there is a connection between on-site wetlands and off-site waters through relict sinkholes. For example, the Petition states: "Adverse impacts beyond proposed site - The pond-cypress wetlands and those associated with other natural waters on the site and within the vicinity and region of the proposed LNP project are connected to each other and the underlying Floridan aquifer system through a network of relict sinkholes." Petition at 44-45. Petitioners, however, provide no support for such a connection. To the extent that Petitioners intend to rely on the Bacchus Declaration, that Declaration makes only conclusory assertions about the existence of a connection, with no discussion or factual support as to how the Levy site is connected through "relict sinkholes." Bacchus Declaration at ¶ 30. Neither the Petition nor the Bacchus Declaration cite, let alone dispute, the Application's analysis that sinkholes are not prevalent at the site. See, e.g., ER § 2.6.1.4 at 2-618; FSAR § 2.5.0.1.2 at 2.5-3 to 2.5-4. Petitioners do little more than claim that impacts to pond-cypress wetlands proposed by Levy

would result in adverse impacts beyond the Levy site. Petition at 45. This unsupported, conclusory assertion does not raise a genuine dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

In purported support of Contention 4E, Petitioners offer broad references to Bacchus's geological case study, and other documents previously cited in the Petition. Petition at 45. The Bacchus case study is not a report, and includes no technical expert analysis that is related, even remotely, to a nuclear power plant site. A petitioner cannot satisfy its burden to provide support for its contention by merely referencing a multi-page document without identifying with specificity, including analysis that it provides factual support for that contention. See American Centrifuge Plant, LBP-05-28, 62 N.R.C. at 597. In addition, there is no indication that any of these references relate to Levy or even Levy County. Furthermore, while Bacchus provides a description of her background as a hydroecologist, she does not identify expertise in geology. Bacchus Declaration at ¶¶ 1-6. While the Declaration identifies some exposure to a course in geology, she states her expertise is in ecology, not geology. Bacchus Declaration at ¶ 3. Her publications and experience relate to ecology. Bacchus Declaration, Att. A (listing publications and experience in ecology, not geology).

A Contention must offer a concise statement of either the alleged fact or expert opinions in support. 10 C.F.R. § 2.309(f)(1)(v). Petitioners offer neither. Contention 4E does not state any alleged facts to support the alleged connections through relict sinkholes; and Bacchus's statements cannot be expert opinion on geologic formations like relict sinkholes because she is not a geologist. Contention 4E, therefore, fails to provide support for a genuine dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

6. Contention 4F (Outstanding Florida Waters) Is Inadmissible

Petitioner's Contention 4F states: "Outstanding Florida Waters - The ER failed to address adverse direct, indirect and cumulative environmental impacts of constructing and operating the proposed LNP project on "Outstanding Florida Waters (OFW)." Petition at 45.[52] Petitioners' contention is inadmissible because it: (1) fails to provide a basis ; (2) fails to show any omission from the Application; and (3) fails to provide a concise statement of the expert opinions which support that a genuine dispute exists with the Application on a material issue of law or fact. 10 C.F.R. §§ 2.309(f)(1)(ii), (v) and (vi).

a. Contention 4F Fails To Provide An Adequate Basis

Petitioners contend, without any basis or support, that the ER fails to address Levy's construction or operating impacts on Outstanding Florida Waters. The entire "explanation of basis" in the Petition is nothing more than a rewording of the Contention. Petitioners' "statement of facts and opinion supporting the dispute and deficiencies within the scope of the proceeding" consist of the following:

> The adverse direct, indirect and cumulative environmental impacts of the mining/excavations, water use and other dewatering required for the proposed LNP project, as referenced above, will dewater the Withlacoochee and Waccasassa Rivers and associated wetlands and uplands. These OFWs and associated wetlands and uplands are aquatic and terrestrial ecosystems, as referenced in the LNP ER, including Table 4.6-1. By dewatering these OFWs and associated aquatic and terrestrial ecosystems, the proposed LNP project would result in "LARGE" and irreversible adverse impacts, rather than the "SMALL" impacts reported in the LNP ER.

[52] The last paragraph between Contentions 4F and 4G states that granting a COL to Progress would result in harm to water quality. Petition at 46. This statement appears to be misplaced, and perhaps was intended to apply to Contention 4G. If considered part of Contention 4F, it is a bald, unsupported assertion that does not raise a dispute with the Application because Contention 4F does not state with specificity an issue concerning water quality.

Petition at 46. This vague and unsupported paragraph does not explain any basis for an alleged omission from the Application. In fact, this paragraph identifies where in the Application the impacts on OFW are discussed. Accordingly, Petitioners have failed to provide adequate basis for this Contention. 10 C.F.R. § 2.309(f)(1)(ii).

b. Contention 4F Fails To Show That The Application Omits A Discussion Of Impacts On OFW

Petitioners' Contention 4F is inadmissible because it does not demonstrate that the Application omits discussion of impacts on OFW. To satisfy the burden of showing an omission, Petitioners must identify each failure and the supporting reasons for the Petitioners' belief. 10 C.F.R. § 2.309(f)(1)(vi). Contention 4F does not identify any omission. Instead, Petitioners merely identify where impacts on OFW are summarized in the Application. Although not mentioned in Contention 4F, to the extent that Petitioners intend to rely on the Bacchus Declaration, that Declaration provides no support because it also merely correctly identifies that the Application addresses impacts on OFW. Bacchus Declaration at ¶ 33.

The Application does, in fact, discuss impacts on OFW. The Application describes the Withlacoochee and Waccasassa Rivers. ER §§ 2.3.1.1.1 and 2.3.1.1.2 at 2-82 to 2-85. The Application also provides analysis to show that the impacts to these waters is SMALL. ER § 4.2.1.1 at 4-28 to 4-31. Because the Application addresses impacts on OFW, the Petitioners' allegation of omission fails to show that a genuine dispute exists with the Application on material issue of law or fact. 10 C.F.R. § 2.309(f)(1)(vi).

To the extent that, rather than asserting an omission, Petitioners are trying to raise a dispute with the ER, Contention 4F is inadmissible because Petitioners provide no supporting

reasons for the dispute and fail to provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position on the issues.

Petitioners mischaracterize the Application when alleging that dewatering of two rivers will occur. For the reasons discussed in Progress's answer to Contention 4D above, excavation for the Levy nuclear island will not result in non-mechanical dewatering as alleged by Petitioners. Petitioners do not cite, let alone dispute, the analysis in the Application of the impacts associated with mechanical dewatering, as discussed in Progress's answer to Contention 4D above. Therefore, the allegations concerning impacts to OFW arising from dewatering do not satisfy the requirements of 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

Contention 4F alleges that impacts from dewatering on OFW will be LARGE. As previously explained, Petitioners do not raise a genuine dispute that any impacts to OFW would arise due to dewatering. Even assuming that Petitioners have raised a genuine dispute, Petitioners provide no support for their claim that such impacts would be LARGE.

First, it is unclear what impacts Petitioners are asserting are LARGE. The assertion is vague and identifies nothing with specificity. Second, Petitioners fail to cite, much less controvert, the portions of the Application which address impacts to the OFW (or any other applicable portions of the Application), including specific ER references to the Withlacoochee and Waccasassa Rivers. Contention 4F does not dispute with any specificity the analysis in the Application that any impacts to OFW are expected to be SMALL. See ER § 4.2.1.1 at 4-28 to 4-31. Petitioners have an iron-clad duty to read the ER, describe the Applicant's position, and state with specificity their disagreement. See Millstone, CLI-01-24, 54 N.R.C. at 358. Instead, Petitioners make a bald, unsupported allegation that some vague and unspecified impact to OFW

will be LARGE, not SMALL. Petition at 46. Accordingly, Contention 4F does not contain the required factual or expert support and does not raise a genuine dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

7. Contention 4G (Alterations of Nutrient Concentrations) Is Inadmissible

Contention 4G alleges that Progress did not address adverse direct, indirect and cumulative environmental impacts of constructing and operating Levy on nutrient concentrations in wetlands, flood plains, special aquatic sites and other waters resulting from dewatering. Petition at 46-47. Contention 4G fails to state with specificity an issue of law or fact to be raised. Petitioners apparently are alleging that removing groundwater will somehow increase concentrations of nutrients in the environment – even if none are added – such that water quality standards will be exceeded. The alleged concern is specious and inconsistent with the law that Petitioners cite. Petitioners offer no proof that dewatering will increase concentrations of nutrients in the environment; nor is that claim credible.

Furthermore, even if Contention 4G were considered to present an issue to be controverted, the Contention lacks an adequate basis. And, even if Contention 4G were considered to have an adequate basis, Petitioners have failed to provide support to demonstrate a genuine dispute on a material issue. Contention 4G does not satisfy 10 C.F.R. §§ 2.309(f)(1)(i), (ii), (iv), (v), and (vi).

a. Contention 4G Is Vague And Fails To State An Issue Of Law Or Fact

Contention 4G is incomplete, incomprehensible, and vague while raising no issue of law or fact to be controverted. Dewatering as described in the Application cannot by itself raise

nutrient concentrations in impacted waters. Petitioners have neither provided support that dewatering leads to nutrient concentration, nor have they pointed to anything in the Application that they consider to be incorrect. Also, Petitioners' attempt to apply an effluent discharge standard to water withdrawals is inconsistent with the governing law. The purported support in the Petition provides no helpful clarification. Specifically:

- Petitioners state, "By dewatering the wetlands, flood plains, special aquatic sites and other waters throughout the site, vicinity and region of the proposed LNP project, all existing nutrient concentrations will increase relative to any water that remains, even in the absence of any new addition of nutrients." Petition at 47. This statement lacks any specificity as to what aspect of the Application entails extracting pure water from the environment leaving remaining water concentrated with nutrients. As a result, it does not raise an issue of law or fact.
- Petitioners further state, "Therefore, the dewatering caused by the proposed LNP project would violate Florida's narrative water quality standard for nutrients. See Rule 62-302.530(47)(b), Florida Administrative Code, because the dewatering would result in imbalances in natural populations of aquatic flora and fauna in the wetlands, flood plains, special aquatic sites and other waters listed above, as well as in others not listed above, throughout the proposed LNP site, vicinity and region." Petition at 47. This statement is little more than a regurgitation of the cited Florida regulation on discharges. Petitioners provide no specificity as to how extracting water can cause a violation of a discharge standard. As a result, they do not raise an issue of law or fact.

In Contention 4D, Petitioners also allege that non-mechanical dewatering can result in increased evaporation. Contention 4D's allegations about non-mechanical dewatering

mischaracterize the Application. A mischaracterization cannot raise an issue. Contention 4G is inadmissible because it does not state with specificity an issue of law or fact to be raised. 10 C.F.R. § 2.309(f)(1)(i).

b. Contention 4G Fails to State An Adequate Basis

Contention 4G appears to allege two bases for its assertion about nutrient concentrations:

- Petitioners allege that dewatering will lead to increasing existing nutrient concentrations, even in the absence of any new addition of nutrients; and
- Dewatering caused by Levy would violate Florida's narrative water quality standards for discharge of nutrients.

Neither of these allegations states a reason to believe that water withdrawals could increase nutrient concentrations.

According to the Florida standard cited by the Petitioners, in no case shall nutrient concentrations of a body of water be altered by a discharge so as to cause an imbalance in natural populations of aquatic flora or fauna. See Florida Administrative Code 62-302.530(47)(b). The nutrient limits referenced in the code are those limits to be considered in terms of adding nutrients to water. Petitioners have provided no proof that dewatering as described in the Application will increase nutrient concentrations.

In addition, the statute cited by Petitioners – Florida Administrative Code 62-302.530(47)(b) – does not provide a basis for Contention 4G. The cited section of the Code

regulates effluents (discharges from a man-made structure),[53] not dewatering (which is the subject of the Contention). It describes discharge limits of surface water – not standards applicable to groundwater. Water withdrawals and associated groundwater standards are covered elsewhere. See Section 373.016 of the Florida Code. Accordingly, Contention 4G is inadmissible because it does not provide an adequate basis in law or fact. 10 C.F.R. § 2.309(f)(1)(ii).

c. Contention 4G Fails To Show That A Genuine Dispute Exists With The Application On A Material Issue Of Law Or Fact And Is Void Of Support For Its Assertions

Contention 4G also is inadmissible because it: (1) does not directly controvert a position taken by Progress in the Application; and (2) does not provide support for its dispute with the ER. 10 C.F.R. §§ 2.309(f)(1)(vi) and (v).

To satisfy the burden to provide factual support, the basis for each contention must contain "references to the specific portions of the [ER]. . . ." 10 C.F.R. § 2.309(f)(1)(vi). Contention 4G alleges that dewatering/water use will cause an increase in nutrient concentration levels above Florida state standards. Petition at 47. The Petition, however, fails to cite any portion of the Application which, as explained below, addresses the impact dewatering will have on nutrient concentration levels. For example, ER Section 4.2.1.4 states that "[m]easures will be implemented, such as sedimentation traps or filtration, to ensure that erosion or siltation caused by the [minimal] dewatering will be negligible. . . [T]he effects of these activities will be confined to the construction period." ER at 34. As explained in the answer to Contention 4D, above, the ER analysis shows that impacts from dewatering are SMALL."

[53] Florida Administrative Code 62-302.300(12) & (17) identifies that the scope of Florida discharge standards apply to effluent from point sources. See also, 33 U.S.C. § 1312(a).

Petitioners fail to directly controvert these Sections of the ER, or any other applicable portion of the Application. Indeed, they fail to cite the ER at all. Petitioners have an iron-clad duty to read the ER, state in their contention Progress's position, and state their own opposing view. See Millstone, CLI-01-24, 54 N.R.C. at 358. Contention 4G also does not satisfy the requirement that a contention reference the specific portions of the ER that it is challenging. Therefore, Contention 4G is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

In addition, Contention 4G does not cite or reference any expert opinion or sources for its allegations. If the Petitioners do not agree with the analysis in the ER, then their contention must at least explain why. Palo Verde, CLI-91-12, 34 N.R.C. at 156. See Clinton ESP, LBP-04-17, 60 N.R.C. at 240 (2004). Moreover, even assuming that Petitioners intend to rely on the Bacchus Declaration, that Declaration does not provide any support for Contention 4G's vague allegations. The Bacchus Declaration makes the same unsubstantiated statement twice: first citing the Florida standard for narrative water quality and then quoting the Florida standard. Bacchus Declaration at ¶ 36. Unsubstantiated conclusions, even if stated by an expert, do not support a contention. USEC, Inc. (American Centrifuge Plant), CLI-06-10, 63 N.R.C. 451, 472 (2006). Instead of providing supporting reasons to dispute the ER or citing applicable sections of the ER to be disputed, Contention 4G includes two unsupported conclusory sentences which state that (1) increased nutrient concentrations will result from dewatering; and (2) these increased concentrations would violate Florida's narrative water quality standards for nutrients. Contention 4G fails to meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

8. Contention 4H (Dewatering Causes Wildfires) Is Inadmissible

Contention 4H alleges:

> Destructive wildfires as a new source of nutrients - The LNP ER failed to address adverse direct, indirect and cumulative environmental impacts of constructing and operating the proposed LNP project on destructive wildfires in wetlands, flood plains, special aquatic sites and other waters and destructive wildfires as a new source of nutrients to those wetlands, flood plains, special aquatic sites and other waters.

Petition at 48. Contention 4H is inadmissible because it: (1) fails to provide a basis, contrary to 10 C.F.R. § 2.309(f)(1)(ii); (2) fails to show any omission from the Application, contrary to 10 C.F.R. § 2.309(f)(1)(iv); and (3) lacks the required factual or expert support necessary to show that a genuine dispute exists with the Application on a material issue of law or fact, contrary to 10 C.F.R. §§ 2.309(f)(1)(iv) and (v).

a. Contention 4H Fails To Provide An Adequate Basis

Petitioners make a vague and unsupported allegation that the Application fails to address destructive wildfires caused by dewatering, particularly the impacts of such wildfires as a source of nutrients. Petitioners' basis for Contention 4H asserts: "The following reference is an example of peer-reviewed scientific publications supporting these conclusions: Bacchus, S. T. 2007. More inconvenient truths: Wildfires and wetlands, SWANCC and Rapanos. National Wetlands Newsletter 29(11):15-21" ("Wildfire Article"). Petition at 49. Although not mentioned in Contention 4H, to the extent Petitioners intend to rely on the Bacchus Declaration, that Declaration provides no additional basis for the Contention because it also only generally references the Wildfire Article. Bacchus Declaration at ¶ 39. A vague citation to a multi-page article for general support provides inadequate support for a contention. Seabrook, CLI-89-03, 29 N.R.C. 240-41; see also American Centrifuge Plant, LBP-05-28, 62 N.R.C. at 597.

The Wildfire Article does not set forth any basis for the alleged omission from the Application. In fact, the Wildfire Article is not related to nuclear power plants at all. It appears

to be focused on the wetlands permitting program of the U.S. Army Corps of Engineers. In addition, while the Wildfire Article mentions wildfires, it does not do so in the context of potential wildfires resulting from Levy. Wildfire Article at 16. It is not even clear how the Wildfire Article would relate to Levy County. See, e.g., Wildfire Article, Table 1 at 16. A general reference to an unrelated newsletter article does not provide an adequate basis for a Contention as required by 10 C.F.R. § 2.309(f)(1)(ii).

Moreover, Petitioners' assertion in Contention 4H that Levy involves excessive dewatering arises from their mischaracterization of the Application, as fully discussed in Progress's answer to Contention 4D. Such a mischaracterization of the Application cannot be a basis for a contention. Catawba, LBP-82-107A, 16 N.R.C. at 1804.

b. Contention 4H Fails To Show Support For Its Claim That The Application's Discussion Of Wildfire Impacts Is Insufficient

Contention 4H also is inadmissible because it does not establish supporting reasons why the Application should provide additional discussion of impacts from wildfires. To satisfy the burden of showing an omission, Petitioners must identify each failure and the supporting reasons for the Petitioners' belief. 10 C.F.R. § 2.309(f)(1)(vi). To the extent that Contention 4H is alleging omission, it fails to provide an adequate rationale as to why the Application should have included the allegedly omitted information. First, there is little rationale for Petitioners' belief that there is a connection between dewatering at Levy and wildfires because, as discussed in response to Contention 4D, minimal dewatering will occur at Levy. Second, the Application does address the potential for wildfires, stating that "all reasonable precautions will be

implemented to prevent accidental brush or forest fires." ER § 4.4.1.2 at 4-57.[54] For these reasons, Contention 4H does not meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(v) and (vi) for a contention of omission. That Contention, therefore, is inadmissible.

c. Contention 4H Fails To Show That A Genuine Dispute Exists With The Application On A Material Issue Of Law Or Fact

To the extent that, rather than asserting an omission, Petitioners are attempting to raise a dispute with the ER, as discussed below, Contention 4H fails to provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position on the issues, and fails to raise a genuine dispute with the Application. Contention 4H therefore fails to meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(v) and (vi), and is inadmissible.

Petitioners mischaracterize the Application when they allege that dewatering will occur. For the reasons discussed in Progress's answer to Contention 4D, excavation for the Levy nuclear island will not result in the non-mechanical dewatering that Petitioners claim. In addition, Petitioners do not cite, let alone dispute, the Application's analysis of the impacts associated with mechanical dewatering, as discussed in Progress's answer to Contention 4D. Therefore, Petitioners' allegations regarding increasing wildfires that arise purely as the result of dewatering do not satisfy 10 C.F.R. §§ 2.309(f)(1)(v) and (vi). Contention 4H, therefore, is inadmissible.

In addition, Contention 4H provides no justification for Petitioners' allegation that wildfires will increase if Levy is built. The Contention does not dispute with specificity the Application's analysis of precautions that will be taken against wildfires. ER § 4.4.1.2 at 4-57.

[54] Furthermore, the on-site fire fighting resources of Levy will allow for early detection facilitating earlier intervention, which can be expected to result in the decreased severity of wildfires. See, generally, FSAR § 9.5 and Appendix 9A.

Petitioners also provide no rationale for their assertion that wildfires will result in nutrient additions. As to nutrients, Petitioners state:

> As the trees and organic soils are consumed by the destructive wildfires, nutrients are released into the air and water. This new source of nutrients, combined with water reductions in the wetlands, flood plains, special aquatic sites and other waters from the mining/excavations, water use and other dewatering associated with the proposed LNP project, will result in increased nutrient concentrations and subsequent imbalances in natural populations of aquatic flora and fauna.

Petition at 48-49. First, Petitioners' unsupported assertion that an increased nutrient concentration will result from Levy does not raise a genuine dispute. Petitioners do not cite, let alone dispute, the Application's analysis that the purported risk of wildfires is minimized. As explained in Progress's answer to Contention 4H, wildfire risk is minimal. Therefore, assertions of wildfires caused by dewatering do not address, let alone, dispute, the Application's analysis. Second, Petitioners' assertion regarding imbalances in aquatic flora and fauna lacks specificity. The Application discusses the potential impacts on the aquatic ecosystem from construction (ER § 4.3.2) and operations (ER §§ 5.2.1 and 5.2.2). Petitioners, however, fail to cite, let alone dispute, these portions of the Application. Petitioners have not met their iron-clad duty to read the ER, describe the Applicant's position, and state with specificity their disagreement. See Millstone, CLI-01-24, 54 N.R.C. at 358. Instead, Petitioners make a bald, unsupported allegation about a vague and unspecified impact resulting from presupposed wildfires producing nutrient releases. Contention 4H, therefore, is inadmissible because it does not set forth a genuine dispute with the Application as required by 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

9. Contention 4I (Saltwater Drift) Is Inadmissible

Contention 4I alleges that:

> Salt drift from cooling towers as a water quality contaminant - The LNP ER failed to address adverse direct, indirect and cumulative environmental impacts of constructing and operating the proposed LNP project, with cooling towers that would use coastal waters, at an inland location in and surrounded by freshwater wetlands, flood plains, special aquatic sites and other waters that would be adversely affected by dewatering from the construction and operation of the LNP project if it is licensed.

Petition at 49.[55] Contention 4I is inadmissible because it (1) fails to show any omission from the Application, contrary to 10 C.F.R §§ 2.309(f)(1)(v) and (vi); (2) fails to provide facts or expert opinions to show that a genuine dispute exists with the Application on a material issue of law or fact, contrary to 10 C.F.R §§ 2.309(f)(1)(v) and (vi); (3) raises concerns both outside the scope and immaterial to the findings the NRC must make, contrary to 10 C.F.R §§ 2.309(f)(1)(iii) and (iv); and (4) fails to provide a basis, contrary to 10 C.F.R § 2.309(f)(1)(ii).

a. Contention 4I Fails To Support Petitioners' Claims That The Application Omits Discussion Of Salt Drift

Petitioners' Contention 4I is inadmissible because it does not demonstrate that the Application omits discussion of salt drift. To satisfy the burden to show an omission, Petitioners must identify each failure and the supporting reasons for the Petitioners' belief. 10 C.F.R. § 2.309(f)(1)(vi). Contention 4I does not identify any dispute relating to an omission from the Application. Rather, Petitioners correctly identify where salt drift is discussed in the Application. Although not mentioned in Contention 4I, to the extent that Petitioners intend to rely on the Declaration of Dr. Bacchus, that Declaration provides no support for a contention of

[55] Contention 4I concludes by stating that granting a COL to Progress to construct and operate Levy would result in irreparable harm to the quality of the nation's air resources from direct, indirect and cumulative impacts, by releasing stored carbon, thus increasing global climate disruption and sea-level rise. Petition at 52. This statement appears to be misplaced and perhaps was meant to apply to Contention 4J. If considered part of Contention 4I, it is a bald, unsupported assertion that does not raise a dispute with the Application because the Contention does not identify an issue concerning the release of stored carbon.

omission. The Declaration, like the Petition, correctly identifies that the Application addresses salt drift. Bacchus Declaration at ¶ 42.

Petitioners also fail to show that a genuine dispute exists with the Application on a material issue of law or fact. Petitioners claim that the Application fails to address impacts of saltwater drift. Petitioners are incorrect. The Application states:

> [a] very small fraction of the water circulating through the LNP1 and LNP2 cooling towers will be carried into the cooling tower plumes as small water droplets. . . . Because modern cooling towers have almost no drift losses, this is not considered to be a critical design parameter. Site wind velocities and direction have been considered in designing the mechanical draft cooling towers and their orientation on the site to minimize any recirculation of air and vapor exiting the towers and to provide adequate cooling capacity should any recirculation occur.
>
> Water droplets emitted from the cooling towers (as cooling tower "drift") will contain the same concentration of dissolved and suspended solids as the water within the cooling tower basin that is circulated through the towers. The dissolved and suspended solid concentrations in the cooling tower basins will be controlled through use of the makeup and blowdown water lines from the CFBC.

ER § 5.3.3.1.3 at 5-38. With respect to the increased threat of inland water quality and contamination that would occur from new sources of saltwater contaminants via salt-drift deposition, the ER concludes: "[i]mpacts on vegetation attributable to salt drift emissions from the proposed cooling tower plumes at the LNP site are expected to be SMALL, and increases in soil salinity are anticipated to be minimal. No mitigation is required." ER § 5.3.3.2.1 at 5-41.

These Sections of the ER also address the increased threat of inland water quality contamination that would occur from new sources of saltwater contaminants via salt-drift. The Application also states that solid deposition projected from cooling towers, even if all were salt, would be within the NRC guidelines (NUREG-1555) for no impact. ER § 5.3.3.2.1 at 5-40.

Petitioners fail to directly controvert any of these sections of the ER, or any other applicable portion of the Application. Petitioners have a duty to read the ER, state in their contention Progress's position, and state their own opposing view. See Millstone, CLI-01-24, 54 N.R.C. at 358. Petitioners dispute neither (a) that salt drift from Levy will be within the limits of NRC guidance; nor (b) that the NRC guidance is incorrect in some way. If the Petitioners do not agree with the analysis in the ER, then their contention must at least explain why. Palo Verde, CLI-91-12, 34 N.R.C. at 156. See Clinton ESP, LBP-04-17, 60 N.R.C. at 240. Contention 4I does not meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

b. Contention 4I Fails To Show Support That A Genuine Dispute Exists With The Application On A Material Issue Of Law Or Fact

To the extent that, rather than asserting an omission, Petitioners are trying to raise a dispute with the ER, Petitioners provide no supporting reasons for the dispute and fail to provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position on the issues. Petitioners cite the Application, but never state how or why the information cited is wrong. Specifically, Petitioners accurately cite the Application at ER Section 10.2.1.2, stating: "It is expected that normal releases of contaminants into the environment from the LNP will have negligible effects on surface and groundwater uses and will be in compliance with an approved NPDES permit issue by the Florida Department of Environmental Protection." Petition at 50. Petitioners do not provide any specific information disputing that discussion.

Petitioners include various quotes from the ER to make the following statement: "Although 'salt drift from cooling towers' may constitute 'normal releases of contaminants into the environment' for a nuclear facility, such facilities in Florida 'normally' are located on the coast." Id. Petitioners do not explain the significance of their statement that nuclear facilities in

Florida are normally located on the coast, and do not provide any rationale for limiting their statement to what is normal in Florida. No rationale for such a narrow pool of comparison is justified because nuclear facilities in neighboring states Georgia and Alabama are not on the coast. See NRC: Find NRC License Facilities by NRC Region or State, (http://www.nrc.gov/info-finder/region-state/index.html). In fact, as discussed above, drift is considered in the design of all cooling towers - those that use salt water and those that do not. See Compilation of Air Pollution Factors, EPA Report AP-42, § 13.4 (1995) at 13.4-3 (www.epa.gov/ttn/chief/ap42/ch13/index.html). Accordingly, Contention 4I does not provide support to demonstrate a genuine dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

c. Contention 4I Raises An Issue Both Outside The Scope And Immaterial To The Findings That The NRC Must Make

As a fundamental requirement, a petitioner must demonstrate that the issue raised in a contention addresses matters within the scope of the proceeding and that are material to the findings the Commission must make. 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv). Licensing boards "are delegates of the Commission" and, as such, they may "exercise only those powers which the Commission has given." Marble Hill, ALAB-316, 3 N.R.C. at 170; accord Trojan, ALAB-534, 9 N.R.C. at 289-90 & n.6. Accordingly, it is well established that a contention is not cognizable unless it is material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. Marble Hill, ALAB-316, 3 N.R.C. at 170-71; see also Zion, ALAB-616, 12 N.R.C. at 426-27; Carroll County, ALAB-601, 12 N.R.C. at 24.

Petitioners apparently believe that there is some connection between the environmental impacts of air emissions of salt drift and the State water discharge permitting process. Contention 4I alleges that the State NPDES permit application review process would be fatally flawed if it ignored the catastrophic adverse impacts to water quality throughout the site, vicinity and region of the proposed LNP's aerial discharge of large volumes of saline water. See Petition at 51; Bacchus Declaration at ¶ 44 (assuming that Petitioners intend to rely on this Declaration). First, water discharge permitting is an issue outside the scope of the NRC proceeding. CWA § 511(c)(2). Only the impacts from the discharge need be considered by the NRC as part of its environmental review. Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), CLI-07-16, 65 N.R.C. 371, 377 (2007). Second, Petitioners completely disregard the fact that impacts from salt drift are discussed in the Application, as discussed above. Third, whether water discharge permits should consider salt drift is immaterial to the NRC's decision. The NPDES permit application review process is a state program authorized by the EPA.[56] Petitioners provide no rationale as to why the water discharge permit program should include saltwater drift from cooling towers.[57] For these reasons, Contention 4I raises an issue that is both outside the scope of the proceeding and immaterial to the findings the NRC must make. 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv).

d. Contention 4I Fails To Provide An Adequate Basis

Petitioners contend that the ER fails to address the impacts of saltwater drift on inland water quality and the increased threat of inland water quality contamination that would occur from new sources of saltwater contaminants via salt-drift deposition. Contention 4I urges that

[56] Fla. Stat. § 403.0885 (2002).

[57] As salt drift is an air emission and is considered in the air permitting program, a rationale for including it in the water discharge program is not patent.

salt drift be regulated as a water quality contaminate. Petition at 50. In fact, salt drift is regulated as an air emission. See Compilation of Air Pollution Factors, EPA Report AP-42, § 13.4 (1995) at 13.4-3. (www.epa.gov/ttn/chief/ap42/ch13/index.html).

10. Contention 4J (Carbon Release From Premature Tree Death) Is Inadmissible

Contention 4J alleges that Progress fails to analyze in its Application adverse air quality impacts allegedly resulting from tree removal. This Contention is inadmissible because it lacks factual or expert support for its assertions, and because it fails to raise a genuine dispute with the Applicant on a material issue of law or fact. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

Specifically, in Contention 4J, Petitioners claim that "[t]he LNP ER failed to address adverse direct, indirect and cumulative environmental impacts to the nation's air resources resulting from the premature death of countless inland trees throughout the site, vicinity and region of the proposed LNP project…" Petition at 52. Contention 4J also alleges that Progress will cause a "release of stored carbon" from premature death of trees as a result of:

(i) dewatering of the site, vicinity and region of the proposed LNP project and the resultant destructive wildfires;

(ii) cooling-tower salt-drift contaminants discharged in freshwater wetlands, flood plains, special aquatic sites and other waters, including aquatic and terrestrial ecosystems;

(iii) filling and other construction within the flood zone for the proposed LNP project; and,

(iv) cutting, herbicide application and other means of prematurely killing trees in the transmission/utility corridors and other Levy areas in conjunction with the proposed construction and operation of Levy.

Petition at 52-53.

These vague and unsupported allegations do not provide the support necessary to raise a genuine dispute with the Application on a material issue. 10 C.F.R §§ 2.309 (f)(1)(v) and (vi).

a. Contention 4J Lacks Factual Or Expert Support

Contention 4J lacks factual or expert support for its assertions and conclusions concerning the significance of the release of stored carbon due to the removal of trees and forest growth. In Contention 4J, Petitioners baldy assert that "prematurely killing trees…release[s] stored carbon," and then, without elaboration, argue that the ER should contain an analysis of carbon released from cleared trees and growth. Petition at 52, 55. However, 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. Private Fuel Storage, LBP-98-7, 47 N.R.C. at 180. Petitioners also have the obligation to show that omissions from the Application are significant. See Grand Gulf ESP, CLI-05-4, 61 N.R.C. at 13. Petitioners, however, have not proffered any support for their argument that an analysis of carbon released by clearing trees and its impact on global warming is appropriate or significant with respect to the Application, or that any significant impacts have not been disclosed in the ER. Accordingly, this Contention fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v).

In support of Contention 4J, Petitioners first cite an internet article for the assertion that "[t]rees represent a significant storage of carbon and are moderators of greenhouse gases."

Petition at 53.[58] At the outset, this article does not support the crux of the Petitioners' claim – that the clearing of trees on the Levy site is "tantamount to significant releases of greenhouse gases." Petition at 53. The Petitioners' Exhibit addresses science's ability to quantify the amount of implied carbon dioxide that forests can keep out of the atmosphere via the storage of carbon. The article does not suggest that the death of trees can in any way cause a significant release of greenhouse gases. A petitioner cannot satisfy its burden to provide support for its contention by merely referencing a document without including analysis showing that it provides factual support for that contention. See American Centrifuge Plant, LBP-05-28, 62 N.R.C. at 597.

Furthermore, the web page cited in Contention 4J is not a report, but rather a journalistic adaptation of materials provided by scientists who have determined how much carbon is stored annually in upper Midwest and Great Lakes region forests. The article is not relevant to this proceeding, as it includes no technical expert analysis that is related, even generally, to nuclear power or the environment in the Levy vicinity. For example, the article states that "upper Midwest forests covering an estimated 40,000 square miles store an average of 1,300 pounds of carbon per acre per year." Bacchus Exhibit G at 1; see also Petition at 54. Comparatively, the Levy site rests in the center of a 3,105 acre plot in Florida. ER § 2.1.[59] The findings discussed in the article are in no way relevant to the Levy project. Again, the Petitioners cannot escape their burden to provide support for Contention 4J by merely referencing the article without

[58] Petitioners' Exhibit G is identical to the citation at page 53 of the Petition. See "Scientists Point To Forests For Carbon Storage Solutions," Science Daily, Sept. 15, 2008, http://www.sciencedaily.com /releases/2008/09/080908185330.htm.

[59] According to the Petitioners' Exhibit G, "the age and species of trees in forests also affect carbon storage capacity." Bacchus Exhibit G at 2. However, the age and species of trees in the Levy vicinity differ from those in upper Michigan. Upper Michigan's forest population consists largely of Maple/Beech/Birch forest types and, to a lesser extent, Aspen/Birch. Comparatively, pine flatwoods associated with the tree plantations and, to a lesser extent, pond Cyprus, are the predominant vegetative community in the Levy region. Compare Michigan's Forest Resources, United States Department of Agriculture, Forest Service (1996) and ER § 2.4.1.1.1.

including any analysis showing that it provides some factual support for the contention. American Centrifuge Plant, LBP-05-28, 62 N.R.C. at 597.

Contention 4J also cites the testimony of Dr. John Van Leer for the assertion that the tree clearing as part of the Levy project would contribute to global warming which, in turn, causes a rise in sea-level which then may impact Florida.[60] Aside from the tenuous connection between clearing trees at the Levy site and a gradual rise in sea-level, the deposition of Dr. Van Leer simply is not relevant to this proceeding. Dr. Van Leer testified that a Miami-Dade County task force projects a 1.5 foot rise in sea-level in the next 50 years. When asked "what happens when sea level rises a foot and a half, three feet, what parts of Florida does that threaten, if any?" Dr. Van Leer replies, "[i]t is going to inundate the southern [part]…." Bacchus Exhibit H at 14. Dr. Van Leer goes on to say that as a result of climate change "[w]e are in a situation where South Florida is in grave risk from sea level rise." Id. at 19. The fact that a rise in sea-level may impact south Florida in fifty years is not germane to the Application. The Exhibit fails to support the assertions and conclusions of Contention 4J. The Petitioners cannot satisfy their burden to provide support for their Contention by merely referencing a document without including analysis showing that it provides factual support for that contention. See American Centrifuge Plant LBP-05-28, 62 N.R.C. at 597. Accordingly, this Contention fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(v).

b. Contention 4J Fails To Show That A Genuine Dispute Exists With The Applicant On A Material Issue of Law Or Fact

(i) Petitioners Fail To Support The Basis Of Contention 4J

[60] Bacchus Exhibit H.

The Petitioners' explanation of the basis in Contention 4J alleges that Progress will cause a "release of stored carbon" as a result of "premature death" of trees caused by several means. Petition at 52. The Application addresses each of the asserted bases, yet the Petitioners fail to reference, let alone dispute, the applicable sections of the Application as required by 10 C.F.R. § 2.309(f)(1)(vi).

First, Petitioners incorrectly assert that the Levy project will kill trees as a result of dewatering of the site, vicinity and region of the proposed LNP project and the resultant destructive wildfires. This assertion is baseless. As explained in Progress's answer to Contention 4D, Petitioners' assertion of impacts from dewatering arise from mischaracterizing the Application.

Petitioners' second assertion states that cooling-tower salt-drift contaminants discharged in freshwater wetlands, flood plains, special aquatic sites and other waters, including aquatic and terrestrial ecosystems, will kill trees. This assertion is baseless. As explained in Progress's answer to Contention 4I, Petitioners' assertion concerning salt drift impact lacks adequate basis and does not contradict the analysis in the Application that salt drift impacts are SMALL.

Petitioners' third assertion claims that filling and other construction within the flood zone for the proposed LNP project will kill vegetation. Progress addresses construction impacts on vegetation at length in ER Section 4.1. For example, Progress plans to clear certain wetlands on the Levy site and associated corridors as part of construction and preconstruction activity. See ER at 4-12. As a result, Progress expects permanent impacts to wetlands. However, the affected wetland impacts will be offset by mitigation through Florida's Regional Off-Site Mitigation Area

("ROMA") Plan including on-site mitigation opportunities to the extent possible. See ER at 4-35.

Petitioners' fourth assertion raises issues regarding intentional vegetation clearing in the transmission/utility corridors and other Levy areas as a result of construction and operation of Levy. Progress addresses that issue in multiple locations throughout the ER.[61] In fact, "most of the subject property, 2455 ac. will remain undeveloped following construction of the LNP. Approximately 650 ac. or about 21 percent will be cleared out of a total 3105 acres, with the balance of the Levy site remaining undisturbed as vegetated buffer." ER at 4-39. The former use for the proposed 3,105 acre Levy site was a tree plantation where the vegetation on all 3,105 acres were routinely harvested.[62] Using a relatively small part of the site for Levy and preserving the surrounding forest land as a buffer should produce a net *decrease* in tree clearing overall.

With regard to all four assertions, Contention 4J is inadmissible because Petitioners repeatedly fail to provide any support for those assertions or dispute the applicable sections of the Application. Accordingly, Petitioners have not satisfied their "ironclad obligation" to read the Application. 54 Fed. Reg. at 33,170. And, they have made bald assertions that are inadmissible. Private Fuel Storage, LBP-98-7, 47 N.R.C. at 180.

(ii) Petitioners Fail To Dispute Any Applicable Portion Of The Application In Content 4J

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[61] See, e.g., ER at 2-35, 4-11, 4-12, 4-30 to 4-33, 4-35, 4-39, 5-7 to 5-8, 5-94, and 5-153.

[62] See ER at 2-354, Section 2.4.1.1.1.1 (description of tree plantation operations); See also ER at 2-353, Section 2.4.1.1 (Pine plantations currently operate to the east and south of the Levy site.); See also ER at 2-358, Section 2.4.1.1.2 ("Pine plantations are often managed to exclude vegetative strata and species that provide habitat for a variety of wildlife species. With the short rotation scale characteristic of pulpwood operations, for example, trees are harvested before reaching their maximum growth, thereby excluding species such as cavity-dwelling birds that use mature trees. A closed canopy in mid-growth planted pine stands can block sunlight and restrict the growth of grasses and forbs that support species such as white-tailed deer, bobwhites, cottontails, and wild turkeys.") (citations omitted)

The Petition makes vague, non-specific assertions regarding carbon emissions that allegedly will result from the premature death of trees due to the construction and operation of Levy. Even if those assertions were assumed (for the sake of argument) to be valid, Petitioners fail to dispute the Application's analysis regarding how Levy will reduce carbon emissions in Florida.

The ER addresses construction and operation emissions and their environmental impact as required by the ESRP. The ESRP states that an ER should include a discussion of gaseous emissions (see, e.g., ER Section 5.8.1.2). In doing so, however, the ESRP calls for an assessment of the direct physical impacts of *construction-related activities and plant operation on the community*.[63] There is no requirement to attempt to address the more tenuous potential affects on global warming as a result of unproven carbon dioxide emissions from trees after they have been cleared. A proper assessment considers odors, vehicle exhaust, dust, and other non-radiological emissions *within the context of applicable air quality standards for gaseous pollutants* (based on consultation with Federal, State, regional, and local agencies).[64]

The Application addresses construction emissions and their environmental impacts. Construction related emissions of carbon dioxide will come from two sources, construction equipment exhaust and, if permitted by local authorities, open burning of cleared vegetation. The ER states that: "Construction activities can be expected to generate...vehicle and construction equipment-related exhaust emissions. … Construction equipment emissions will primarily come from diesel-powered heavy equipment used and traffic caused by construction workers accessing the site." ER § 4.4.1.2 at 4-55.

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[63] See ESRP at 5.8.1 (emphasis added).

[64] For example, the ESRP cites 29 C.F.R. § 1910, "Occupational and Health Standards," with respect to noise, dust, and air pollution, and 40 C.F.R. §§ 50-90 as related to National Primary and Secondary Air Quality.

> Emissions from on-site construction equipment including cranes, trucks, earthmoving equipment, compressors, pile drivers, and other diesel – and gasoline-powered equipment will occur…. These emissions are expected to be consistent with emissions from other large construction projects of this size, and there should be no significant impacts on air quality at off-site locations during the construction period.

ER at 4-56. The ER goes on to say that "[f]uel-burning construction equipment will be maintained in proper mechanical order to minimize emissions." ER at 4-56. In regards to emissions from open burning of cleared vegetation, the ER says:

> As part of the site development, vegetation and forested areas will be cleared from the necessary portions of the project site that will be developed. The size of the developed area (including material and equipment laydown areas) is expected to be in the range of 20 percent of the overall site area (approximately 242.8 ha [600 ac.]). Cleared material will either be processed for beneficial reuse or burned on-site. Any open burning associated with land clearing will be conducted in accordance with Florida Regulations, specifically Chapter 62-256 Open Burning, of the [Florida Administrative Code]. Open burning would only be conducted after the appropriate notifications and approvals are obtained from the [Florida Department of Environmental Protection], as required by [Florida Statute].

ER at 55-56. The ER goes on to say that all "[a]pplicable air pollution control regulations with regard to open burning and the operation of fueled vehicles will be followed." Finally, ER Section 4.4.1.2 says "[a] variety of control measures will be implemented during the construction period to minimize air emissions and their potential impact on the surrounding environment." ER at 4-56. In sum, the Application concludes that "[a]ir quality impacts on the surrounding area attributable to the construction of the LNP site are anticipated to be SMALL." ER at 4-57.

With regard to operations, the Application contains the information described in the ESRP. Table 3.6-1 in ER Section 3.6.3.1.4 (Annual Emissions) lists the annual emissions from the intermittent use of diesel generators and the diesel-driven fire pumps for the two Levy units,

while Table 3.6-2 lists the annual hydrocarbon emissions from the associated diesel fuel oil storage tanks for the Levy units.[65] ER Section 3.6.3.1.4 further states that:

> *No source of gaseous emissions other than the diesel generators and the diesel-driven fire pumps is expected for the LNP site.* Because air emissions from non-radiological sources are relatively small and are already addressed in NUREG-1555, exceedance of any air emissions standards (such as federal, state, and tribal regional standards) is not anticipated.

ER at 3-78 (emphasis added). In addition to the ER Section 3.6.3.1.4 discussion of Annual Emissions as part of the Plant Description, the ER addresses operation emissions and their environmental impacts. For example, Chapter 10 of the ER addresses the environmental consequences of the proposed action:

> When the LNP is in operation, atmospheric emissions other than water vapor will be minimal. . . . Air emissions from LNP during normal operation of the facility are not expected to have a significant or measurable impact on local or regional meteorological conditions; therefore, there will be no irreversible atmospheric or meteorological commitments.

ER at 10-35 to 10-36. Chapter 10 also contains the Benefit-Cost Analysis:

> Given concerns in Florida and the rest of the south about climate change and carbon emissions, the LNP will serves an important need by reducing carbon emissions in the state.

ER at 10-63. Table 10.4-1 (Sheet 2 of 16) compares carbon emissions from the proposed reactors at five different potential sites.[66] The table explicitly states: "Nuclear: No Carbon Emissions" - for proposed reactors at each of the five sites. ER at 10-77. Petitioners neither address nor dispute the fact that Levy will produce essentially no carbon emissions for future electricity production.

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[65] ER at 3-77 to 3-78.

[66] The five potential sites included (1) Proposed Levy Site; (2) Crystal River Site; (3) Dixie County Site; (4) Highlands County Site; and (5) Putnam County Site.

The ER directly addresses carbon emissions resulting from construction and operating activities. Petitioners fail to directly controvert any applicable portion of the Application. Petitioners have a duty to read the environmental report, state in their contention Progress's position, and Petitioners' opposing view. See Millstone, CLI-01-24, 54 N.R.C. at 358. Instead, Petitioners merely allege that the review of environmental impacts is incomplete until there is an analysis of the "adverse direct, indirect, and cumulative environmental impacts to the nation's air resources" as a result of tree clearing. Petition at 52. Claiming that something ought to be studied is not a valid basis for a contention. Petitioners do not meet their duty in Contention 4J to reference the specific portions of the ER. 10 C.F.R. § 2.309(f)(1)(vi).

11. Contention 4K (Wildfires and Particulate Matter) Is Inadmissible

Petitioners' Contention 4K alleges: "Additional air quality degradation from destructive wildfires – The LNP ER failed to address adverse direct, indirect and cumulative environmental impacts of constructing and operating the proposed LNP project on the release of particulate matter (PM) from destructive wildfires in wetlands, flood plains, special aquatic sites and other waters." Petition at 56. Contention 4K is inadmissible because it: (1) fails to provide a basis; (2) fails to show any omission from the Application; and (3) fails to provide a concise statement of the facts or expert opinions which support that a genuine dispute exists with the Application on a material issue of law or fact. 10 C.F.R.§§ 2.309(f)(1)(ii), (v) and (vi).

a. Contention 4K Fails To Provide An Adequate Basis

Petitioners make a vague and unsupported allegation that the Application fails to address the release of particulate matter from destructive wildfires. The Petitioners' explanation of basis is little more than a rewording of the Contention. Petitioners state that, if wildfires occur, trees and organic soils would be converted into airborne particulate matter and deposited into the

surrounding waters, "resulting in water quality degradation, in addition to air quality degradation." Petition at 57; See Bacchus Exhibit E and the Wildfires Article. Although not mentioned in Contention 4F, to the extent that Petitioners intend to rely on the Declaration of Dr. Bacchus, that Declaration provides no additional basis because it also only generally references the Wildfire Article. Bacchus Declaration at ¶ 54. A vague citation to a multi-page article for general support provides an inadequate basis for a contention. American Centrifuge Plant, LBP-05-28, 62 N.R.C. at 597. These vague general references do not set forth a basis for an alleged omission from the Application. As discussed in Progress's answer to Contention 4D, Petitioners assert Bacchus Exhibit E as a basis because they mischaracterize the Application to allege that non-mechanical dewatering will occur. Such a mischaracterization cannot be the basis for a contention. Catawba, LBP-82-107A, 16 N.R.C. at 1804. Also, as discussed in Progress's answer to Contention 4H, the Wildfire Article is not specifically related to activities proposed at Levy. Furthermore, the Wildfire Article does not explicitly discuss impacts from particulate matter emissions from wildfires. A general reference to an unrelated newsletter article does not provide an adequate basis for a contention as required by 10 C.F.R. § 2.309(f)(1)(ii).

b. Contention 4K Fails To Show That Particulate Matter Emissions Should Have Been Discussed In The Application

Petitioners' Contention 4K is inadmissible because it does not show why the Application should discuss particulate matter emissions from wildfires. To satisfy the burden to show an omission, Petitioners must identify each failure and the supporting reasons for the Petitioners' belief. 10 C.F.R. § 2.309(f)(1)(vi). To the extent that Contention 4K is alleging omission, it lacks an adequate rationale. First, as discussed in Progress's answer to Contention 4H, there is little rationale for Petitioners' belief that the construction or operation of Levy will result in an

increase in wildfires in the local area. Petitioners do not contradict the analysis in the ER; nor do they provide any reason to believe that the ER analysis is incorrect. Second, Petitioners provide no rationale for alleging that the impacts from particulate matter emissions will be significant. As discussed above, neither Bacchus Exhibit E nor the Wildfire Article address impacts from particulate matter emissions. Petitioners provide no reason, let alone a credible one, to warrant further inquiry into the impacts of particulate matter emission due to wildfires, even assuming construction and operation of Levy would lead to increased wildfires (which it will not). Contention 4K does not meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(v) and (vi) for a contention of omission.

c. Contention 4K Fails To Show That A Genuine Dispute Exists With The Application On A Material Issue Of Law Or Fact

To the extent that, rather than asserting an omission, Petitioners are trying to raise a dispute with the Application, Contention 4K is inadmissible because Petitioners provide no supporting reasons for the dispute and fail to provide a concise statement of the alleged facts or expert opinions which support the Petitioner' position on the issues. Contention 4K thereby fails to meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

For the reasons discussed in Progress's answer to Contention 4H, Petitioners do not raise a genuine dispute with the Application when they alleged that constructing and operating Levy will result in increased wildfires. Petitioners do not cite, let alone dispute, the analysis in the Application discussed in Progress's answer to Contention 4H. Therefore, the Petitioners allegations concerning increased wildfires arising from dewatering do not raise a dispute with the Application regarding particulate matter emissions from wildfires or their purported impacts. As explained above, neither of the references cited in Contention 4K discusses impacts from

particulate matter emissions due to wildfires. Accordingly, Petitioners have not satisfied 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

Petitioners contend that a significant amount of particulate matter ultimately will be deposited into the waters surrounding Levy, resulting in water quality and air quality degradation. Petition at 57. Petitioners do not show how their general conclusory concerns that wildfires and particulate matter emissions will result in water and air quality degradation relate to any action associated with Levy. Contention 4K does not dispute with specificity the analysis in the Application that impacts from air emissions, including consideration of any subsequent deposition into water, will be SMALL. ER § 4.4.1.2 at 4-55 to 4-57; ER §§ 5.3.3.1.1, 5.3.3.2, 5.3.4.1, 5.5.1.3, 5.7.1.8, 5.8.1.2. Petitioners provide no rationale for their vague assertion concerning irreparable harm to land and water. Petition at 57.[67] Petitioners have an iron-clad duty to read the Application, describe the Applicant's position, and state with specificity their disagreement. See Millstone, CLI-01-24, 54 N.R.C. at 358. Instead, Petitioners make a bald, unsupported allegation about some vague and unspecified impact presupposed from particulate matter release. Contention 4K does not set forth the support required to raise a genuine dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

12. Contention 4L (Construction Impacts) Is Inadmissible

Petitioner's Contention 4L alleges:

> Irreparable harm to public lands and waters and private property not owned by PEF - The LNP ER failed to address the adverse direct, indirect and cumulative environmental impacts, as described above, on public preserves, parks, forests, wildlife management areas, state sovereign lands, waters of the state and

[67] Petitioners' allegations about impacts to public lands and waters are addressed in Progress's answer to Contention 4L.

> US and private property not owned by PEF from constructing and operating the proposed LNP project.

Petition at 58.[68] Contention 4L is inadmissible because it: (1) fails to provide a basis; (2) fails to show any omission from the Application; and (3) fails to provide a concise statement of the expert opinions which support that a genuine dispute exists with the Application on a material issue of law or fact. 10 C.F.R. §§ 2.309(f)(1)(ii), (v), and (vi).

a. Contention 4L Fails To Provide An Adequate Basis

In Contention 4L, Petitioners make a vague and unsupported allegation that the Application fails to address irreparable harm to property and water not owned by the Applicant. As the sole basis, Petitioners apparently rely on the vague and unsupported impacts discussed in Contentions 4A through 4K. Contention 4L states: "Based on the adverse impacts described above, all of the environmental impact categories addressed in Table 4.6-1 (ER at 4-90 to 4-97) should have been recorded as 'LARGE.'" Petition at 59. As discussed in Progress's answers to Contentions 4A through 4K, the allegations of impacts are vague and unsupported and provide an inadequate basis to admit a contention.

Petitioners do not explain with specificity their allegations that impacts are omitted. Mere reference to Contentions 4A through 4K provides no basis for a dispute with the detailed analysis in the Application (summarized below) that the impacts are SMALL. Although not mentioned in Contention 4L, to the extent that Petitioners intend to rely on the Bacchus Declaration, that Declaration provides no additional basis because, like Contention 4L, it only generally references

[68] Between Contentions 4L and 4M, the Petition has a paragraph alleging that Levy would result in irreparable harm and jeopardize survival and recovery of federally listed species, from adverse modification of critical habitat and unpermitted taking due to failure to consider adverse direct, indirect and cumulative impacts. Petition at 60. This statement appears to be misplaced and is discussed in Progress's answer to Contention 4M. If this paragraph is considered part of Contention 4L, it is a bald, unsupported assertion that does not raise a dispute with the Application because Contention 4L does not identify a federally listed species impact.

vague impacts fully rebutted in Progress's answers to Contentions 4A through 4K. Bacchus Declaration at ¶¶ 56-58. Because Petitioners provide an inadequate basis for alleging that the analyses of impacts in the Application are erroneous, there is no basis for their allegation that a "zone of environmental impact" has not been identified. Petition at 58. Furthermore, Petitioners provide no basis for what such a vague zone entails; and, as explained in Progress's answer to Contention 4N[1], the Application provides an exhaustive description of the affected environment. Conclusory exhortations that some vague impacts, of assumed large magnitude, will occur in some unspecified zone, even if made by an expert, do not provide an adequate basis for a contention. 10 C.F.R. § 2.309(f)(1)(ii).

b. Contention 4L Fails To Show That The Application Should Have Discussed A "Zone Of Environmental Impact"

Petitioners' Contention 4L is inadmissible because it does not demonstrate that the Application should discuss Petitioners' vague allegation about an unspecified "zone of environmental impact." Petition at 58. To satisfy the burden to show an omission, Petitioners must identify each failure and the supporting reasons for the Petitioners' belief. 10 C.F.R. § 2.309(f)(1)(vi). To the extent that Contention 4L is alleging omission, it lacks any supporting reasons for the asserted omission.

First, whatever a "zone of environmental impact" is, Petitioners apparently concede that it only needs to be addressed if impacts are LARGE. Petition at 58. Petitioners do not raise a genuine dispute with the Application regarding the Application's analysis of impacts as SMALL, and Petitioners provide no rationale for alleging that all impacts will be LARGE. Therefore, a "zone of environmental impact" need not be discussed.

Second, Petitioners incorrectly allege that the Application fails to address impacts to property in Levy, Citrus, Marion, and Alachua counties. Petition at 59. In fact, the Application addresses land use not only in Levy, Citrus, Marion, and Alachua counties but also Dixie, Gilchrist, Hernando, Lake, Pasco, Putnam, and Sumter Counties. ER § 2.2.3 at 2-35. In addition, Petitioners incorrectly claim that the Application fails to address impacts to areas including, but not limited to, the following public preserves, parks, forests, wildlife management areas, state sovereign lands, waters of the state and waters of the US:

> Goethe State Forest
> Levy Blue Spring and associated wetlands and uplands
> Withlacoochee River (OFW) and associated wetlands and uplands
> Waccasassa River (OFW) and associated wetlands and uplands
> Waccasassa Bay (SHA) and associated wetlands and uplands
> Gulf Hammock Wildlife Management Area
> Big Bend Seagrasses Aquatic Preserve (SHA)
> Waccasassa Bay Preserve State Park
> Big King Spring and associated wetlands and uplands
> Little King Spring and associated wetlands and uplands
> Turtle Creek and associated wetlands and uplands
> Spring Run Creek and associated wetlands and uplands
> Smith Creek and associated wetlands and uplands
> Demory Creek and associated wetlands and uplands
> Tomes Creek and associated wetlands and uplands
> Ten Mile Creek and associated wetlands and uplands
> Withlacoochee Bay (SHA) and associated wetlands and uplands
> Crystal River Preserve State Park
> Florida Springs Coastal Greenway

Petition at 59-60. Contrary to Petitioners' implication, the Application does address these areas, including impacts to those areas where applicable. These areas are described in ER § 2.2, Tables 2.2-3 and 2.2-22, and associated figures. As discussed further in Progress's answer to Contention 4N[1] below, the Application provides an exhaustive description of the affected environment. In fact, while the plain language of Contention 4L asserts that the Application omits discussion of impacts, the Petition accurately states where the Application summarizes the

impacts of construction.[69] Because it is internally inconsistent and lacks factual or expert support, Contention 4L is not admissible as a contention of omission.

c. Contention 4L Fails To Show That A Genuine Dispute Exists With The Application On A Material Issue Of Law Or Fact

To the extent that, and contrary to the plain language of the Contention 4L issue statement quoted above, rather than asserting an omission, Petitioners are trying to raise a dispute with the Application, Contention 4L is inadmissible because Petitioners provide no supporting reasons for the dispute and fail to provide a concise statement of the alleged facts or expert opinions which support the Petitioners' position on the issues. 10 C.F.R. §§ 2.309(f)(1)(vi) and (v).

To satisfy the burden to provide factual support, the basis for each contention must contain "references to the specific portions of the [ER]. . . ." 10 C.F.R. § 2.309(f)(1)(vi). Petitioners contend that the LNP ER does not discuss impacts on surrounding areas or appropriately define a zone of impact. Petitioners overlook numerous sections of the Application which do exactly that. Specifically, the Application contains an extensive discussion of the impacts. ER §§ 4.1, 4.2.2, 4.4, 4.7.1, 4.7.2, 5.1, 5.1.1, 5.1.2, 5.2 (especially 5.2.2.2), 5.3.3, 5.3.4.2, 5.5.1, 5.6, 5.6.3, 5.8.1, 5.11.1, 10.1.2.1, 10.2.1.1 and Tables 4.6-1 (summary with references to the text sections summarized), 5.10-1 (summary with references to the text sections summarized), 10.1-1, and 10.1-2.

Furthermore, Petitioners have failed to identify with specificity the reasons for their alleged dispute. As discussed above, the forest, parks, wetlands, and uplands listed in

[69] In addition, although not discussed by Petitioners, the impacts from operation of Levy are summarized in ER Table 5.10-1.

Contention 4L are all described within the Application. The impacts in the affected environment are summarized in the Application Sections cited above, where applicable. Petitioners also cite ER Table 4.6-1, but do not cite the text in Chapter 4 describing the construction impacts summarized by the Table. Petitioners do not cite the summary of operations impacts in ER Table 5.10-1, let alone the text in Chapter 5 describing the operations impacts summarized by the Table. Furthermore, the NRC guidance states that LARGE impacts are those that "are clearly noticeable and are sufficient to destabilize important attributes of the resource." 10 C.F.R. Part 51, App. B, Table B-1 n.3. The Petitioners fail to identify with specificity what resource would be noticeably altered or what important attribute of the resources would be destabilized. Accordingly, Petitioners' conclusory statement that all impacts are LARGE lacks support and lacks specificity. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

Petitioners offer no support for their allegations that adverse impacts are irreparable and incapable of being mitigated. Petition at 59. The Petition does not state with specificity why the mitigation actions summarized in ER Tables 4.6-1 and 5.10-1 are inadequate. Contention 4L, therefore, fails to meet the requirements of 10 C.F.R. §§ 2.309(f)(1)(vi) and (v).

13. Contention 4M (Failure to Address Adverse Environmental Impacts on Federally Listed Species) Is Inadmissible[70]

Contention 4M is a contention of omission that alleges that the "ER failed to address the adverse direct, indirect and cumulative environmental impacts…on the survival and recovery of

[70] It appears that the last full sentence in Contention 4M ("Granting a combined license (col) to Progress Energy Florida (PEF) to construct and operate proposed levy county units 1 and 2 (LNP) would result in IRREVERSIBLE AND irretrievable commitments of resources and the inability to mitigate adverse environmental impacts DUE TO FAILURE TO CONSIDER ADVERSE DIRECT, INDIRECT AND CUMULATIVE IMPACTS") is intended to begin Contention 4N and was inadvertently included in Contention M because of a formatting error. Petition at 63. Accordingly, the assertion contained within this statement will be addressed more fully in Progress's response to Contention 4N. To the extent that this sentence was intentionally included within Contention 4M, it is a vague and bald assertion which does not provide support to demonstrate that Contention M raises a genuine dispute with the Application on a material issue of law or fact.

federally listed species." Petition at 61. The Contention is inadmissible because it does not "show that a genuine dispute exists with the [A]pplication" on a material issue of law or fact and it does not provide "a concise statement of the alleged facts or expert opinion which support" the claims made, contrary to the requirements of 10 C.F.R. §§ 2.309(f)(1)(iv), (v) and (vi).

a. Contention 4M Is Inadmissible Because It Does Not Raise A Genuine Dispute With The Application

Contention 4M's allegations about the identification of a zone of impact on federally listed species and the initiation of consultations with the U.S. Fish and Wildlife Service fail to raise a dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi). The Petition claims that the ER does not "identify the zone of environmental impact from the proposed LNP project on federally listed species." Petition at 61. This claim, however, does not raise a genuine dispute with the Application because the Contention does not allege that the Application is required to identify a zone of impact on federally listed species. When asserting a contention of omission, a petitioner must show that the purported omissions are relevant because the application was required to address the issue. See Grand Gulf ESP, CLI-05-04, 61 N.R.C. at 13.

The Petitioners in this case have not shown, or even alleged, that the Application is required to identify a zone of impact on federally listed species. They cannot do so, because the Application is not required to identify such a zone. Before issuing any Incidental Take Permit, the U.S. Fish and Wildlife Service must "consider the anticipated duration and geographic scope of the applicant's planned activities, including the amount of listed species habitat that is involved and the degree to which listed species and their habitats are affected." 50 C.F.R. § 17.22(b)(2)(ii). Therefore, if any Incidental Take Permit will be required for the construction or

operation of Levy, Progress will need to identify the area to be impacted to allow the U.S. Fish and Wildlife Service to process its permit application.

The fact that Progress will need to identify the impacted area in order to obtain an Incidental Take Permit is irrelevant, however, to whether it is required in the Application. In its ER, an applicant is only required to "list all Federal permits, licenses, approvals and other entitlements which must be obtained in connection with the proposed action and shall describe the status of compliance with these requirements." 10 C.F.R. § 51.45(d). The ER is not required to include each and every piece of information that will be necessary to obtain the listed permits. For these reasons, the Contention's claim that the ER does not identify a zone of impact on federally listed species does not raise a genuine dispute with the Application.

The Petition also alleges "[v]iolations of Sections 7 and 9 of the Endangered Species Act." Petition at 63. It claims that:

> consultations with the U.S. Fish and Wildlife Service should be initiated for the species references [sic] above, pursuant to the Endangered Species Act for the site, vicinity and zone of impact. Such consultations cannot be initiated until the entire zone of impact from the proposed LNP project has been determined for these habitats. In the absence of those consultations, the adverse direct, indirect and cumulative impacts of the proposed LNP project would result in the unlawful taking of federally endangered and threatened species, in violation of Sections 7 and 9 of the Endangered Species Act.

Id. This unsupported accusation fails to raise a genuine dispute with the Application because it overlooks or ignores information provided in the Application. The ER acknowledges that an Incidental Take Permit from the U.S. Fish and Wildlife Service may be required in connection with the construction and operation of Levy, and it commits Progress to conduct any and all consultations necessary to "determine key issues important to the reviewing agencies and specific permit content requirements." ER at 1-6 and 1-10 (Table 1.2-1).

Furthermore, the ER expressly states that "[c]onsultation with federal and state agencies including the USFWS [U.S. Fish and Wildlife Service]…concerning the potential presence of protected species is currently being conducted as part of federal and state permitting processes." ER at 4-42. Petitioners are required to review the Application in its entirety and cannot raise a dispute with the Application by misstating or ignoring any information contained therein. Because the Contention ignores or misstates the content of the Application, it should be rejected. See, e.g., Harris, LBP-82-119A, 16 N.R.C. at 2076.

Contention 4M also claims that "public lands and waters listed above, within the zone of impact for the proposed LNP project, support federally listed species and/or habitat critical to survival and recovery, including, but not limited to: Eastern indigo (threatened), Florida scrub jay (threatened), Green turtle (endangered), Manatee (endangered), Red-cockaded (woodpecker), Wood stork (endangered)." Petition at 61. Like the allegations regarding consultation with the U.S. Fish and Wildlife Service, this statement does not show an actual dispute with the Application.

Each of the species named, as well as others, are explicitly identified and discussed in the Application. For example, the Application notes that "several protected species are known to occur in the vicinity of the site" because, although the Florida Natural Areas Inventory Occurrence Report for the Levy site "identifies no documented occurrences of protected species on the LNP site, it identified the site as having the potential to provide for several protected species." ER at 2-361. The ER includes discussions of (i) the Eastern indigo snake in Section 2.4.1.2.2.2.4 (ER at 2-371) and Section 2.4.1.1.3.2.1 (ER at 2-361) (noting that the "indigo snake was not observed on the LNP site during pedestrian surveys; although its presence is likely"); (ii) the Florida scrub jay in Section 2.4.1.2.2.2.4 (ER at 2-372) (stating that five "individual scrub

jays were observed and one individual scrub jay was heard calling within the transmission line right-of-way"); (iii) the green turtle in Section 2.4.2.3.6.1.4 (ER at 2-392) (noting that the "Gulf coast of Citrus and Levy counties, immediately adjacent to the LNP site, are known to be important to young green turtles although no nesting sites within either of the counties has been confirmed"); (iv) the manatee in Section 2.4.2.3.6.1.1 (ER at 2-389 to 2-390) (stating that manatees "were observed on several occasions at multiple locations within the LNP site vicinity"); (v) the red-cockaded woodpecker in Section 2.4.1.1.3.2.5 (ER at 2-362 to 2-363) (discussing the woodpecker's status listed as an endangered species by the U.S. Fish and Wildlife Service and a threatened species by the Florida Fish and Wildlife Conservation Commission, and noting that the "species is not known to nest on the LNP site and is considered unlikely to do so because of the absence of its preferred nesting habitat [open, mature longleaf pine flatwoods]"); and (vi) the wood stork in Section 2.4.1.1.3.2.7 (ER at 2-363) (stating that although "storks have been observed feeding in on-site ditches and wetlands," no "known nesting colonies have been observed on the LNP site, based on field surveys and according to the Florida Waterbird Colony database; nor is it likely that colonies will become established due to the lack of open water habitat"). Table 5.4-13 also includes a chart listing the important species identified near the Levy site. ER at 5-69 to 5-70.

As 10 C.F.R. § 2.309(f)(1)(vi) mandates, to demonstrate a genuine dispute with the Application the Contention must "include references to specific portions of the application…that the petitioner disputes and the supporting reasons for each dispute." Petitioners do not dispute or contradict any of the information contained in the sections of the ER described above. As a result, the claims that such species are federally listed and are found on lands and waters in proximity to the Levy site fails to raise a genuine dispute with the Application.

In addition, the Petition's description of the habitats in which wood storks, red cockaded woodpeckers, and green turtles are found does not raise a genuine dispute with the Application because it does not refute or contradict any of the information contained therein. The Petition asserts that wood storks "rely on natural depressional wetlands such as pond-cypress domes and sloughs and wet prairies for both foraging and nesting." Petition at 62. This statement concurs with the Application, which provides that wood storks "nest colonially in inundated forested wetlands." ER at 2-363. Where the Application states that the red cockaded woodpeckers' "preferred habitat in northern Florida is open, mature longleaf pine flatwoods," the Petition expresses agreement, noting that "[s]uccessful nesting and reproduction of red cockaded woodpeckers require older growth stands of live native pine trees." ER at 2-362 and Petition at 62.

Similarly, while the Petition contends that "[g]reen turtles feed in seagrass beds in coastal areas," the Application acknowledges that green sea turtles are found in Florida's coastal waters and "forage[] primarily on seagrasses." Petition at 63; See ER at 2-392. The ER also notes that consideration of the green sea turtle is important because of "its feeding in waters near the LNP discharge." ER at 5-69 (Table 5.4-13). Because the statements in Contention 4M concerning the habitats of the red cockaded woodpecker, the wood stork, and the green sea turtle agree with, rather than contradict, the Application, they do not demonstrate a genuine dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi).

b. Contention 4M Fails To Provide Adequate Support To Show That A Genuine Dispute Exists With The Application On A Material Issue

Adequate support to sustain Contention 4M is not provided in the Petition. As a result, the Petition fails to demonstrate that a genuine dispute exists with the Application on a material issue of law or fact. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

First, the Petition asserts that "the LNP ER should have concluded there were 'LARGE' adverse impacts on numerous federally listed species." Petition 61. Petitioners provide absolutely no facts or expert opinion to substantiate this claim. Instead, the allegation amounts to a bald assertion of the type the Commission has found insufficient to support a contention. Private Fuel Storage, LBP-98-7, 47 N.R.C. at 180.

In fact, the Application includes an extensive discussion of the potential impacts on federally listed (as well as other) species. See, e.g., ER Chapters 2, 4, 5, and 10. In the ER, Progress uses the significance levels of SMALL, MODERATE, and LARGE, "developed using the Council on Environmental Quality guidelines set forth in the footnotes to Table B-1 of Title 10 of the CFR Part 51, Subpart A, Appendix B," to estimate the likely degree of impacts on various species. ER at 4-105 and 5-171. For example, in Section 4.3.1.1.2, Progress's discussion of the impacts to important species from the construction of the plant site concludes that construction of Levy "is not expected to adversely affect the regional population of any protected plant or animal species. Native habitats on the LNP property have been significantly altered through silviculture operations, and mobile listed species are likely to preferentially use less disturbed habitats on adjacent conservation lands. Impacts on important species are expected to be SMALL." ER at 4-42. The Petitioners fail to address, let alone dispute, any of the analyses included in the ER regarding the extent of possible environmental effects on

federally listed species. The Petition, therefore, does not raise a genuine dispute with the Application.

Additionally, Petitioners have not provided any support for their allegation that the "adverse impacts on numerous federally listed species" will be LARGE. Petition at 61. According to the Commission's "three-level standard of significance levels for each element," LARGE impacts are where "[e]nvironmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource." ER at 4-87; See also 10 C.F.R. Part 51, Subpart A, Appendix B. Here, while Petitioners have baldly asserted that the ER should have concluded that there would be LARGE impacts, they have not provided any support for this claim. The Petition does not identify any noticeable effects or any resource whose important attributes may be destabilized. The Petition, therefore, has not provided any reasoning or facts to support its baseless and blunt assertions. 10 C.F.R. § 2.309(f)(1)(v).

Moreover the sentence in Contention 4M stating that "[i]rreparable harm to the natural hydroperiod in Florida ultimately results in irreparable harm to habitat critical for the survival and recovery of species, such as wood storks, red cockaded woodpeckers and Eastern indigo snakes" does not raise a genuine dispute with the Application. Petition at 62. It does not contradict any information contained in the ER or other Application documents. Its relevance is also not clear because Petitioners have not shown that any "irreparable harm" will result to the "natural hydroperiod" in Florida because of the construction or operation of Levy.

Likewise, the Petition's reference to the "South Florida Multi Species Recovery Plan" does not provide sufficient support for the Contention. Petition at 62. A "petitioner may not simply incorporate massive documents by reference as the basis for a statement of his

contentions." Seabrook, CLI-89-03, 29 N.R.C. at 240-41. Instead, "petitioners are expected to clearly identify the matters on which they intend to rely with reference to a specific point." Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), LBP-04-15, 60 N.R.C. 81, 89 & n.26 (2004). The South Florida Multi Species Recovery Plan cited by Petitioners is in excess of 2,000 pages and includes extensive descriptions of a variety of species found in Florida. That Plan does not analyze the effects upon the three species named in the Contention from the construction or operation of a nuclear generating plant like Levy. Contention 4M does not specify upon what precisely Petitioners intend to rely in this lengthy document. As such, the manuscript does not provide adequate support to sustain the admissibility of Contention 4M. 10 C.F.R. § 2.309(f)(1)(v). To the extent that the Petitioners intend to cite the document for the simple proposition that wood storks, red cockaded woodpeckers, and Eastern indigo snakes are found in Florida, as explained fully above, this statement fails to raise a genuine dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi).

In addition, Contention 4M's assertions that Levy's environmental impacts would result in the irreversible destruction of depressional wetlands, stands of natural pine, and areas of seagrass beds, which could be used as habitats or food sources by three protected species, fail to provide sufficient support to demonstrate a genuine dispute with the Application on a material issue. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi). The Petition claims that "adverse direct, indirect and cumulative impacts of the proposed LNP project would result in irreversible destruction of significantly more than ten acres of natural depressional wetlands which could be used by wood storks for foraging and nesting." Petition at 62. As a basis for this claim, the Petition references Bacchus Exhibit E. That document does not provide any basis for the assertion made, however, because – while it discusses the destructive effects that mining (groundwater pumping) can have

on surrounding wetlands – it does not discuss or have any application to the construction or operation of a nuclear generating plant like Levy. See Bacchus Exhibit E at 222. Accordingly, it does not provide a basis or support for the allegation that one impact of Levy will be the irreversible destruction of more than ten acres of depressional wetlands.

Moreover, the allegation that the construction and operation of Levy will deprive the wood stork of a necessary habitat for foraging and nesting is insufficient to support Contention 4M because it does not address any of the information and analyses presented in the Application regarding the impacts to wetlands and the likely resulting impacts on wood storks. The Application acknowledges that the construction of Levy will cause "direct loss" of "forested wetland communities," but notes that (1) the terrestrial ecosystems on the Levy site have already been degraded through decades of silviculture operations; and (2) the noise and expected disturbance during the construction of Levy "is expected to cause most mobile wildlife [such as the wood stork] to avoid the LNP site during active construction periods, and either to return after construction is complete, or migrate to adjacent natural lands." ER at 4-39 and 4-40.

In addition, the Application concludes that wood storks "are occasionally observed feeding in on-site wetlands. These birds are transient visitors to the LNP, usually during periods of high water, and they are not known to nest on-site. Very little of the open water habitat favored by these species currently exists on-site, and it is possible that construction of the stormwater ponds will attract more of these birds to the area." ER at 4-42. Petitioners fail to give any treatment to this material contained in the Application. If they disagree with the analysis presented in the ER, Petitioners' contention must, at a minimum, explain their reasons for such disagreement. Palo Verde, CLI-91-12, 34 N.R.C. at 156. See Early Site Permit for Clinton ESP Site, LBP-04-17, 60 N.R.C. at 232. Here, Petitioners have not provided any

explanation of why the analysis contained in the Application, which suggests that the construction of Levy may in fact eventually lead to an increase in the amount of open water habitat favored by wood storks for foraging and nesting, is supposedly deficient. As a result, Petitioners have not met their duty in Contention 4M to provide supporting reasons for an alleged dispute concerning wood storks. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

Much like the allegation concerning wood storks, the assertion that the "impacts of the proposed LNP project would result in irreversible destruction of significant stands of natural pine that could be used by red cockaded woodpeckers for nesting," does not support a genuine and material dispute with the Application. Petition at 63. The Petition again cites to Bacchus Exhibit E as support for its claim. And, once again, that document does not provide any basis for the assertion made. In this case, Bacchus Exhibit E does not even mention the red cockaded woodpecker. Moreover, because the document does not in any way address the impacts on stands of natural pine from the construction or operation of a nuclear generating plant like Levy, it cannot serve as a basis to support the claims made in Contention 4M.

Furthermore, the claim that Levy will lead to the destruction of significant stands of natural pine that could otherwise be used by red cockaded woodpeckers for nesting fails to support Contention 4M because it does not consider or address the Application. Petitioners are required to review the entire Application and its supporting documents. The Application includes numerous discussions of the red-cockaded woodpecker and the amount of natural pine existing on the Levy site. For example, Table 5.4-13 notes that the red-cockaded woodpecker "[r]esides in the [nearby] Goethe State Forest; it does not reside on the LNP site." ER at 5-69. The ER further states that the woodpecker "is not known to occur on the LNP site, and is not

expected to occur because of the absence of preferred habitat. Therefore, construction of the LNP is not expected to adversely affect red-cockaded woodpecker populations." ER at 4-42.

With regard to "significant stands of natural pine" that the Petition alleges will be irreversibly destroyed by the construction of Levy, the Application explains that land on the Levy site is currently used as a tree farm. As a result, not many stands of natural pine currently exist on the site. See, e.g., ER at 5-94 (noting that the wildlife habitat on the Levy site "has been altered significantly from its natural state for planted pine, pastureland, utilities, and residential use"); ER at 4-40 (noting that the ecosystems "on-site have been degraded through decades of silviculture operations," including the "[c]onversion from a diverse natural system to planted pine" which reduced "the habitats available to wildlife"); and ER at 2-357 to 2-358 ("Nearly all of the upland area on the LNP site that is capable of supporting planted pine is either planted in pine (Tree Plantations, Code 440) or has been recently cleared of pine; very little natural pine forest remains on the LNP site…Natural pine flatwoods cover a little over 1 ha (3 ac.) or 0.1 percent of the LNP site"). Contention 4M fails to dispute or contradict any of the information or analyses concerning the absence of the red cockaded woodpecker or lack of stands of natural pine at the Levy site contained in the Application. As a result, it fails to provide the support necessary to sustain the Contention. A contention that does not directly controvert a position taken in the license application is subject to dismissal. See Comanche Peak, LBP-92-37, 36 N.R.C. at 384.

Contention 4M's claim regarding the green turtles likewise fails to provide adequate support. The Petition asserts that the "impacts of the proposed LNP project would result in irreversible destruction of significant areas of seagrass beds that could be used by green turtles for survival and recovery," and cites to Bacchus Exhibit E. Petition at 63. Once again, Bacchus

Exhibit E cannot provide a basis for the claim. That document does not address – or even mention – seagrass beds or green turtles. It also does not address or consider the possible environmental effects from the construction or operation of a nuclear generating plant like Levy.

Furthermore, the allegations regarding the destruction of seagrass beds and the impact on green turtles raise immaterial issues and fail to show a genuine dispute with the Application, because they ignore information provided in the Application. 10 C.F.R. §§ 2.309(f)(1)(iv) and (vi). Levy will "withdraw cooling water from the CFBC [Cross Florida Barge Canal]" and the cooling "tower blowdown" will be discharged "into the CREC [Crystal River Energy Complex] discharge canal and ultimately into the Gulf of Mexico." ER at 10-33. Therefore, the construction of Levy should not require the destruction of the seagrass beds which the Petition alleges could be used by the green sea turtle for survival and recovery. In the list of various ecological communities that will be lost or altered by construction on the Levy site, the ER does not include seagrass beds. See ER at 4-39 and 10-46 to 10-47. The Application does note, however, that green sea turtles feed in waters near the Levy discharge. See ER at 5-69. The Contention again fails to address – let alone contradict – this pertinent information provided in the Application.

The Application's analysis concludes that the operation and construction of Levy is "anticipated to have a minimal effect on aquatic life, and therefore, no irreversible ecological commitment." ER at 10-35. Petitioners do not provide any explanation for their disagreement with this conclusion. Because they fail to address the information contained in the Application regarding the likely impact to seagrass beds and the green sea turtle, Petitioners fail to provide sufficient support for Contention 4M to demonstrate an actual dispute with the Application on a material issue. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

14. Contention 4N[1] (Mitigation of Environmental Harm) Is Inadmissible

Petitioner's Contention 4N[1] is a contention of omission.[71] It alleges:

> The LNP ER's failure to address the adverse direct, indirect and cumulative environmental impacts, as described above, would result in the irreversible and irretrievable commitments of resources and inability to mitigate adverse environmental impacts if the proposed LNP project is constructed and operated as proposed.

Petition at 64. As set forth below, Contention 4N[1] is inadmissible because it (1) fails to state with specificity an issue of law or fact to be raised or controverted; (2) lacks an adequate basis; and (3) fails to show support that a genuine dispute exists with the Application on a material issue of law or fact. 10 C.F.R. §§ 2.309(f)(1)(i), (ii), (v) and (vi).

a. Contention N[1] Fails To State With Specificity An Issue Of Law Or Fact To Be Raised Or Controverted

In the "Explanation of basis" for this Contention, Petitioners make statements regarding a "zone of environmental impact." Petition at 64. The Petition adds that, without a determination of such a zone, "bona fide mitigation" of the adverse environmental impacts cannot occur. Id. These statement fails to state with any specificity an issue of law or fact. 10 C.F.R. § 2.309(f)(1)(i).

Petitioners make only a vague and unsupported allegation that the Application omits some unspecified information. According to Petitioners, without that information, the "zone of environmental impacts" cannot be determined. Petitioners, however, have not stated with specificity what information is omitted, how that information would relate to establishing what "zone" needs to be determined, or where that zone would be located. Petitioners' bald assertion

[71] The Petition labels two contentions as 4N. For clarity, this answer will refer to the first Contention labeled 4N (Petition at 64-65) as 4N[1].

that "bona fide mitigation" cannot occur likewise is impermissibly vague. Because Petitioners fail to state with specificity what zone they believe is omitted or how that relates to mitigation, Contention 4N[1] is inadmissible as impermissibly vague. 10 C.F.R. § 2.309(f)(1)(i).

b. Contention 4N[1] Lacks An Adequate Explanation Of The Basis For The Contention

As a purported basis for its vague allegation, the Petition states:

> Irreversible and irretrievable commitments of resources and inability to mitigate adverse environmental impacts - constructing and operating the proposed LNP project would result in irreversible and irretrievable commitments of resources throughout the site, vicinity and region of the proposed LNP project. Environmental harm described above, that would occur from constructing and operating the proposed LNP project cannot be repaired or mitigated.

Petition at 64-65. This statement of basis essentially repeats the substance of the allegation. Petitioners do not discuss, let alone identify, what the "zone of environmental impact" would be. Petitioners do not state or reference any documents or expert opinion. Nor is such support likely to exist, because, as discussed below, the Application contains an extensive discussion of the affected environment, the planned mitigation measures, and an assessment of potential irreversible and irretrievable commitments of resources associated with Levy. Accordingly, Contention 4N[1] fails to provide adequate basis. 10 C.F.R. § 2.309(f)(1)(ii).

c. Contention 4N[1] Fails To Show Support That A Genuine Dispute Exists With The Application On A Material Issue Of Law Or Fact

Contention 4N[1] is also inadmissible because it fails to directly controvert a position taken by Progress in the Application. To satisfy the burden to provide factual support, the basis for each contention must contain "references to the specific portions of the [ER]. . . ." 10 C.F.R. § 2.309(f)(1)(vi). Contention 4N[1] alleges that the ER did not address the adverse direct, indirect

and cumulative environmental impacts that would result in the irreversible and irretrievable commitments of resources and the inability to mitigate adverse environmental impacts. Petition at 64. This entire Contention is nothing more than a bald, unsupported assertion that does not raise a dispute with the Application because it fails to provide support for the assertion that mitigation cannot occur.

The Petition does not raise a dispute with the numerous places in the Application that discuss mitigation and the affected environment. And, to the extent that the Contention is alleging omission, it is incorrect. The impacted environment is described in ER Chapters 4 and 5; the ER discusses impacts from construction to Land (ER Section 4.1), Water (ER Section 4.2), Ecology (ER Section 4.3), Socioeconomics (ER Section 4.4), and Cumulative (ER Section 4.7). The ER also discusses operational impacts to Land (ER Section 5.1), Water (ER Section 5.2), Radiological Impacts (ER Section 5.4), Ecology (ER Sections 5.6.1 and 5.6.2), Socioeconomics (ER Section 5.8), and Cumulative Impacts (ER Section 5.11). Petitioners do not cite, let alone dispute, the description of the impacted environment in the ER. In addition, mitigation measures for construction impacts are described in ER Section 4.6, and mitigation measures for operating impacts are described in ER Section 5.10. Petitioners fail to cite any of these Sections, let alone dispute these descriptions of mitigation in the ER. Irreversible and irretrievable impacts are also described in the ER. See, e.g., ER § 10.2. These extensive descriptions are wholly ignored, being neither cited to nor disputed by the Petition. Petitioners have a duty to read the ER, state in their contention Progress's position, and state their own opposing view. See Millstone, CLI-01-24, 54 N.R.C. at 358. Petitioners did not meet their ironclad obligation to do so.

In addition to not referencing or disputing specific portions of the ER, Petitioners also failed to provide support for their assertions. The basis for each contention must contain

"specific sources and documents on which the petitioner intends to rely to support its position on the issue." 10 C.F.R. § 2.309(f)(1)(v). Petitioners do not reference the Bacchus Declaration in Contention 4N[1]; however, the three paragraphs that make up the Contention can be found word for word in that Declaration at ¶¶ 67-69. However, such unsubstantiated conclusions, even if stated by an expert, do not support a contention. American Centrifuge Plant, CLI-06-10, 63 N.R.C. at 472.

15. Contention 4N[2] (Failure to Consider Compliance with 40 C.F.R. §230) Is Inadmissible

Contention 4N[2] alleges: "Proposed LNP is inconsistent with 40 CFR § 230 – The LNP ER failed to address the inconsistencies of the proposed LNP project with 40 CFR § 230." Petition at 67.[72] Contention 4N[2] is inadmissible because: (1) it does not state an issue of law or fact to be raised or controverted; (2) it lacks an adequate basis; (3) it is not within the scope of this proceeding; and (4) it fails to show any omission of information required or supporting reasons that a genuine dispute exists with the Application. 10 C.F.R. §§ 2.309(f)(1)(i), (ii), (iii), (iv), (v) and (vi).

a. Contention 4N[2] Does Not State An Issue Of Law Or Fact That Can Be Adjudicated

Petitioners contend that the proposed LNP project is inconsistent with 40 C.F.R. § 230. Petition at 67. Those regulations set forth guidelines for federal or state programs for specification of disposal sites for dredged or fill material in navigable water. 40 C.F.R. §§ 230.2(a) and (b). The Application is for the construction of a nuclear power plant, not a federal or state program regulating disposal sites for dredged or fill material. Petitioners have not

[72] The Petition labels two contentions as 4N. For clarity, this Answer refers to the second Contention labeled 4N (Petition at 67-71) as 4N[2].

articulated an issue of law or fact that can be adjudicated. Contention 4N[2] thereby fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(i).

b. Contention 4N[2] Lacks An Adequate Basis

Even if Contention 4N[2] were found to state an issue of law or fact to be adjudicated, it lacks an adequate basis. Petitioners provide a rambling narrative of purported issues with the Application concerning compliance with 40 C.F.R. § 230.10. Petition at 67-71. However, Petitioners fail to articulate any basis or reason why the Application should comply with 40 C.F.R. § 230.10. These regulations are guidelines for Federal or State programs under the Clean Water Act ("CWA") (33 U.S.C. § 1344). 40 C.F.R. § 230.1. Because the guidelines cited by Petitioners are not requirements applicable to this Application, Contention 4N[2] fails to provide adequate basis. 10 C.F.R. § 2.309(f)(1)(ii).

c. Contention 4N[2] Raises An Issue Outside The Scope Of This Proceeding

As a fundamental requirement, a petitioner must demonstrate that the issue raised in a contention addresses matters within the scope of the proceeding. 10 C.F.R. § 2.309(f)(1)(iii). Licensing boards "are delegates of the Commission" and, as such, they may "exercise only those powers which the Commission has given." Marble Hill, ALAB-316, 3 N.R.C. at 170; accord Trojan, ALAB-534, 9 N.R.C. at 289-90 & n.6. Accordingly, it is well established that a contention is not cognizable unless it is material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. Marble Hill, ALAB-316, 3 N.R.C. at 170-71; see also Zion, ALAB-616, 12 N.R.C. at 426-27; Carroll County, ALAB-601, 12 N.R.C. at 24.

The wetlands permit program is administered by the U.S. Army Corps of Engineers ("USACE") and U.S. Environmental Protection Agency ("EPA"). 40 C.F.R. § 230.1 These federal agencies share regulatory responsibility for all discharges of dredged material in waters of the United States under Section 404 of the Clean Water Act ("CWA"). See generally, 33 C.F.R. Part 323; 40 C.F.R. Part 232. Petitioners provide no basis for expanding the scope of this proceeding to include complying with USACE and EPA guidelines set forth in 40 C.F.R. § 230.10. In fact, the Commission only requires that the status of environmental permitting be included in the Application. 10 C.F.R. § 51.45(d). The Application identifies that a wetlands permit will be needed. See ER Table 1.2-1 at 1-9. One purpose of the guidelines has been fulfilled (40 C.F.R. § 230.10(a)(4)), because the USACE is participating as a cooperating agency in the preparation of the NRC EIS for Levy. 73 Fed. Reg. 63,517 (Oct. 24, 2008). However, the Petitioners are incorrect in alleging that the NRC has the responsibility to do more arising from the guidelines of 40 C.F.R. § 230.10. The NRC requirement that applicants report the status of environmental permitting does not extend the NRC's scope to cover the granting of such permits. See Nuclear Management Company, LLC, (Palisades Nuclear Plant), LPB-06-10, 63 N.R.C. 314, 362 (2006) ("although an applicant is required by 10 C.F.R. 51.45(d) to 'list all federal permits, licenses, approvals and other entitlements which must be obtained in connection with the proposed action,' … the adequacy of any such permit is not within the Commission's jurisdiction"). Therefore, compliance with the guidelines for wetlands permitting is not within the NRC's jurisdiction or the scope of this proceeding. Because Contention $4N^2$ raises an issue outside the scope of the proceeding, it fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii).

d. Contention 4N^2 Lacks The Required Support To Demonstrate That A Genuine Dispute Exists With The Application On A Material Issue Of Law Or Fact

The specific impacts alleged in Contention 4N^2 are not material, not supported, and do not demonstrate any omission of required information from the Application. Consequently, Contention 4N^2 fails to meet the requirements of 10 C.F.R. §§2.309(f)(iv), (v), and (vi). In support of the alleged omission from the Application, Petitioners provide a rambling narrative of what they deem to be issues in the Application regarding compliance with 40 C.F.R. § 230.10. Petition at 67-71. Because the wetlands permit would be issued pursuant to 33 C.F.R. Part 323, Petitioners do not demonstrate that compliance with the guidelines of 40 C.F.R. § 230.10 is material to the NRC's decision on the Application. 10 C.F.R. §2.309(f)(iv).

Furthermore, Petitioners provide no rationale to support their assertion that the Application omits any required discussion of wetlands. In fact, the Application provides a discussion of wetlands impacts associated with Levy. ER § 4.2.1.5 at 4-35 to 4-36. The Application states that a wetlands permit will be obtained. ER § 4.6.3 at 4-88. Therefore, to the extent that a discussion of wetlands permitting is required in the Application, the Application provides it, and Petitioners are incorrect in asserting that the Application omits any required discussion of wetlands. Furthermore, Petitioners do not cite, let alone dispute with specificity, the ER analysis cited above. Because Contention 4N^2 lacks the necessary support to show that a genuine dispute exists with the Application on a material issue of law or fact, it fails to satisfy 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

16. Contention 4O (Energy Alternatives) Is Inadmissible

Contention 4O makes three distinct claims: (1) that the Application fails to address the energy alternative of solar power installed on residential and/or commercial rooftops; (2) that

Progress's energy alternatives evaluation of solar power is inadequate; and, (3) that the Application fails to address revenue decoupling. Petition at 65. For clarity, in the discussion below, Progress addresses Contention 4O as if it were made up of three sub-issues, addressing first the general arguments applicable to all three sub-issues.

Contention 4O is inadmissible for multiple reasons. Contention 4O: (1) lacks factual or expert support for its assertions and conclusions; (2) fails to provide sufficient information to show that a genuine dispute exists with Progress on a material issue of law of fact; and (3) fails to address matters within the scope of the proceeding that are material to the findings the Commission must make. 10 C.F.R. §§ 2.309(f)(1)(iii), (iv), (v), and (vi).

a. Contention 4O Generally Lacks Factual Or Expert Support

Contention 4O lacks factual or expert support for its assertions and conclusions concerning Progress's energy alternative analysis. 10 C.F.R. § 2.309(f)(1)(v). Petitioners concede that the Application addresses solar power, yet baldly assert that the alternative was "summarily dismissed." Petition at 65. Petitioners, however, provide no factual or expert support indicating why Petitioners believe the analysis is insufficient.

Petitioners demand that Progress consider residential and commercial rooftop solar panels in lieu of the Levy project. Again, Petitioners offer no evidence that such an alternative is viable. As discussed further in Progress's response to Contention 11, Petitioners cannot simply proclaim that an energy alternative is a workable alternative to Levy without providing some evidence that the alternative is able to generate the baseload power that is necessary to accomplish the purpose of Progress's Application. Summer, LBP-09-02, slip op. at 22-26, citing Vt. Yankee Nuclear Power Corp., 435 U.S. at 551.

Petitioners provide three Exhibits in an attempt to support Contention 4O. First, Petitioners' cite to Exhibits I-1 and I-2 as examples of ongoing rooftop solar programs in Florida and California, respectively. Neither article, however, supports the assertion that rooftop solar panels are a workable alternative to the 2200 MWe of baseload output to be supplied by Levy. Second, Petitioners cite to what seems to be a podcast transcript of an interview with Dr. Joe Romm. The 3-page transcript is not a technical report, does not discuss Dr. Romm's expertise or credentials, and fails to discuss a topic relevant to this proceeding, as further discussed below. Given the Petitioners' failure to cite any supporting documentation, Contention 4O is inadmissible pursuant to 10 C.F.R. § 2.309(f)(1)(v).

b. Contention 4O Sub-Issue 1 – Energy Alternatives Analysis Is Insufficient

(i) Contention 4O Sub-issue 1 Fails To Show That A Genuine Dispute Exists With The Applicant On A Material Issue Of Law Or Fact

In addition to its failure to provide any support for its dispute with the Application, Contention 4O Sub-issue 1 fails to state an admissible contention because it does not directly controvert a position taken by Progress in the Application. Thus, Contention 4O fails to meet the requirements of 10 C.F.R. § 2.309(f)(vi).

To satisfy the burden to provide factual support, the basis for each contention must contain "references to the specific portions of the [ER]…." 10 C.F.R. § 2.309(f)(1)(vi). Contention 4O alleges that ER Section 9.2.2.4 is deficient and that Progress "summarily dismissed" the solar power alternative as "too large to construct at the [Levy] site." Petition at 65. Petitioners, however, fail to cite to the numerous additional reasons why Progress concluded that solar power was non-competitive with a nuclear power generating facility at the Levy site.

ER Section 9.2.2.4, in conjunction with Progress's stated reliance on the NRC Generic Environmental Impact Statement,[73] provides a complete analysis of the use of solar power. Progress rules out solar power as a viable alternative to a nuclear power facility at the Levy site because:

1. Both concentrating and PV cell technologies are much too large to construct at the Levy site. See ER at 9-13.

2. Concentrating solar power generating facilities only perform efficiently in high-intensity sunlight locations, specifically the arid and semi-arid regions of the world. This does not include Florida. See ER at 9-14.

3. Concentrating solar power technologies are still in the demonstration phase of development and cannot be considered competitive with nuclear based generation. Id.

4. The cost to produce electricity with PV cell technology greatly exceeds the costs of power from a nuclear power generating facility. See ER at 9-15.

5. PV cell generation cannot meet the Levy baseload capacity. See ER at 9-16.

Petitioners fail to directly controvert these portions of the ER or any other section of the Application applicable to Contention 4O. Petitioners have the duty to read the ER, state in their contention Progress's position, and state their own opposing view. See Millstone, CLI-01-24, 54 N.R.C. at 358. Instead, Petitioners merely allege that Progress "summarily dismissed" solar power as "too large to construct at the [Levy] site" and that the ER is insufficient. If Petitioners do not agree with the analysis in the ER, then their contention must at least explain why. Palo Verde, CLI-91-12, 34 N.R.C. at 156; see Clinton ESP, LBP-04-17, 60 N.R.C. at 240. Petitioners did not meet their duty in Contention 4O to reference the specific portions of the ER that they are challenging. 10 C.F.R. § 2.309(f)(1)(vi).

[73] Generic Environmental Impact Statement for License Renewal of Nuclear Plants, NUREG 1437 (May 1996).

c. Contention 4O Sub-Issue 2 – Energy Alternatives Analysis Fails to Consider Rooftop Solar Power

(i) Contention 4O Sub-Issue 2 Fails To Show That A Genuine Dispute Exists With The Applicant On A Material Issue Of Law Or Fact

Petitioners offer a generalized assertion that the ER fails to consider the energy alternative of solar power installed on residential and/or commercial rooftops. This assertion is inadmissible because it fails to provide sufficient information, including expert testimony or legal authority in support of its belief, to show that a genuine dispute exists on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi).

The ER addresses solar power as an alternative to a nuclear generation plant at the Levy site. The Application rejects solar power as non-competitive, in part, because of its inability to provide baseload electricity generation. As discussed further in Progress's response to Contention 11, the Application was premised on the installation of a facility that would serve as a baseload resource, and any feasible alternative would also need to be able to generate equivalent baseload power. The ER analyzes photovoltaic ("PV") cell solar technologies. PV cell technologies are not suitable alternatives to nuclear baseload for reasons relating primarily to size and lack of suitability as a baseload generation source. See ER at 9-13 to 9-16. Solar power – whether at the Levy site or on the rooftops of commercial and residential buildings – is not an appropriate alternative to baseload generation. As such, an analysis of PV cells on building rooftops as an energy alternative was not warranted and would be immaterial to the Commission's issuance of a COL.

The analysis in ER Section 9.2.2.4 reveals a sufficient basis for concluding that solar power is not a reasonable alternative. If the Petitioners believe that the analysis in the ER is

insufficient or fails to contain information, the Petitioners must identify each failure and the supporting reasons for its belief. 10 C.F.R. § 2.309(f)(1)(vi). Petitioners provide no analysis or support whatsoever indicating how its option of solar power on rooftops instead of at the Levy site is somehow feasible as an energy alternative to baseload capacity.[74] Therefore, Petitioners fail to demonstrate a genuine dispute exists on a material issue of fact or law pursuant to 10 C.F.R. § 2.309(f)(1)(vi).

d. Contention 4O Sub-Issue 3 - Decoupling As An Energy Alternative Is Beyond The Scope Of This Proceeding and Fails To Raise An Issue That Is Material To The Decision That The NRC Must Make

Petitioners' Contention 4O must be rejected because it is outside the scope of this proceeding and therefore fails to address matters that are material to the findings the NRC must make. 10 C.F.R §§ 2.309(f)(1)(iii) and (iv). Petitioners assert that the ER is deficient because it does not address decoupling Progress's profits from its electricity sales as an energy alternative. Decoupling, Petitioners claim, "would have a far smaller 'footprint' – zone of impact – than constructing and operating" Levy. Petitioners also assert that decoupling has no environmental impacts. Petition at 67.[75]

Revenue decoupling is a state regulatory matter that is not relevant to this proceeding and is, therefore, inadmissible. The FPSC has taken up the issue of revenue decoupling, pursuant to

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[74] What Petitioners' offer is simply impractical and is implicitly considered in the ER. Rooftop solar production relies on PV cell solar power generation. The ER addresses PV cell solar power. See ER at 9-13. Replacing 2200 MWe of baseload capacity with PV cell solar power generation would require a footprint of approximately 28,600 ha (71,500 ac.). Id. What the Petitioners consider a viable energy alternative is the installation of 71,500 ac. worth of PV cells on rooftops. This option is not only "much too large to construct at the [Levy] site" (Petition at 65), it is also much too large to construct piece by piece on privately owned residential and commercial building rooftops, even assuming (without basis) that PV solar cells would supply baseload power.

[75] As discussed in Progress's answer to Contention 4N[1], Petitioners' description of what would be a "zone of environmental impact" is vague and unsupported.

Florida law, and found that revenue decoupling is unnecessary in Florida.[76] Petitioners do not explain how revenue decoupling is material to the licensing determinations to be made by the NRC in this proceeding. It is well established that a contention is not cognizable unless it is material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. See Marble Hill, ALAB-316, 3 N.R.C. at 170-71. Revenue decoupling is an issue to be addressed by the State of Florida and outside the scope of this proceeding. 10 C.F.R. § 2.309(f)(1)(iii). Furthermore, whether Florida decouples utility rates and profits is a state economic matter and not material to the environmental findings the NRC must make here. 10 C.F.R. § 2.309(f)(1)(iv).

As support for Sub-Issue 3, Petitioners cite a 3-page transcript documenting an interview between Dr. Romm and an unknown Gellerman. See Bacchus Exhibit J. In this document, Dr. Romm generally describes decoupling. Nothing in this document considers the findings of the FPSC or addresses why decoupling in Florida is material to the environmental findings the NRC must make in this case. Furthermore, Petitioners' cited support acknowledges that revenue decoupling is a state issue: "a few smart states like California and Maryland have rewritten utility regulations to decouple utility profits from the sale of electricity…" Bacchus Exhibit J at 1. As set forth throughout this answer, the basis for each contention must contain "specific source and documents for which the petitioner intends to rely to support its position on the issue." 10 C.F.R § 2.309(f)(1)(v). An irrelevant document cannot provide adequate basis for a contention.

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[76] See Report to the Legislature on Utility Revenue Decoupling, Florida Public Service Commission (Dec. 2008) ("Florida is already paving a path toward the objectives of decoupling without incurring the cost and difficulties associated with design, implementation and maintenance of a specific decoupling mechanism.")

E. Contention 5 (SAMA Analysis Omits CREC) Is inadmissible

Contention 5 alleges: "Proximity of Proposed Site to Crystal River Nuclear Power Station Not Assessed in SAMA Analysis." Petition at 72. Contention 5 is inadmissible because it: (1) lacks an adequate basis; (2) is not within the scope of this proceeding; and (3) fails to show any omission of information required or support that a genuine dispute exists with the Application on a material issue of law or fact. 10 C.F.R. §§ 2.309(f)(1)(ii), (iii), (iv), (v) and (vi).

1. Contention 5 Lacks An Adequate Basis

Contention 5 lacks an adequate basis. Petitioners make an unsubstantiated assertion that Levy is "proximate" to the Crystal River Nuclear Power Station. In fact, Levy is 9.6 miles from the Crystal River Energy Complex ("CREC"), where Crystal River Unit 3 is located. FSAR § 2.1.1.1 at 2.1-1. Without providing any basis beyond Petitioners' mischaracterization of Levy's location relative to CREC, Petitioners claim that an accident at the nuclear unit at CREC "should be analyzed." Petition at 72. The mere exhortation that something ought to be studied, without more, provides no basis for a contention. Rancho Seco, LBP-93-23, 38 N.R.C. at 246.

Petitioners provide no facts, technical support, or NRC guidance (or indeed any reason at all) that a study of mitigation alternatives at Levy need consider a severe accident at Crystal River Unit 3. Nor is the need for such a study intuitively obvious.[77] Furthermore, Petitioners attempt to raise a vague concern about non-specific Levy control room procedures not being sufficient in some unidentified way because of some unidentified radiological emergency that arises from CREC rather than an AP1000 design reactor. Petition at 72. In these two rambling sentences, Petitioners appear to be concerned about Levy control room operations, not the analysis of mitigation alternatives in the Application. Control room operator training and

[77] It is unclear how any alternative implemented at Levy could mitigate the severity of an accident at a facility almost ten miles away.

procedures are described in FSAR Chapter 13 and Petitioners do not cite, let alone identify with specificity, any deficiency in FSAR Chapter 13. Whatever Petitioners intend by these two sentences, they cannot provide a basis for Contention 5 because they do not identify any relevance to the SAMA analysis of ER Chapter 7. Because Petitioners mischaracterize the Application, provide no rationale for their purported issue, and discuss operator training unrelated to SAMA analysis, this contention fails to provide adequate basis and does not meet the requirements of 10 C.F.R. § 2.309(f)(1)(ii).

2. Contention 5 Raises An Issue Outside The Scope Of The NRC Proceeding

As a fundamental requirement, a petitioner must demonstrate that the issue raised in a contention addresses matters within the scope of the proceeding. 10 C.F.R. § 2.309(f)(1)(iii). Licensing boards "are delegates of the Commission" and, as such, they may "exercise only those powers which the Commission has given [them]." Marble Hill, ALAB-316, 3 N.R.C. at 170; accord Trojan,ALAB-534, 9 N.R.C. at 289-90 & n.6. Accordingly, it is well established that a contention is not cognizable unless it is material to a matter that falls within the scope of the proceeding for which the licensing board has been delegated jurisdiction as set forth in the Commission's Notice of Opportunity for Hearing. Marble Hill, ALAB-316, 3 N.R.C. at 170-71; see also Zion, ALAB-616, 12 at 426-27; Carroll County, ALAB-601, 12 N.R.C. at 24.

This proceeding is limited to Levy. 73 Fed. Reg. 74,532. (Dec. 8, 2008). If an alternative relating to mitigating an accident at Crystal River Unit 3 should be adjudicated at all, it should be adjudicated in a proceeding related to Crystal River Unit 3. Simply put, this proceeding relates to the Application for Levy, and an alternative that would mitigate accidents at Crystal River 3 (recognizing that Petitioners do not allege what such an alternative could be)

relates to Crystal River Unit 3, not Levy. Because Contention 5 raises an issue outside the scope of this proceeding, it fails to meet the requirements of 10 C.F.R. § 2.309(f)(1)(iii).

3. Contention 5 Fails To Demonstrate That A Genuine Dispute Exists With The Application On A Material Issue Of Law Or Fact

The allegations in Contention 5 mischaracterize the Application, are not material, not supported, and do not demonstrate that the Application omits any required information. Consequently, Contention 5 fails to meet the requirements of 10 C.F.R. §§ 2.309(f)(iv), (v), and (vi). In purported support of their baseless allegation that a study of mitigation alternatives at Levy need consider a severe accident at Crystal River Unit 3, Petitioners provide only a rambling, unsupported and inaccurate paragraph. Petition at 72.

Petitioners do not demonstrate that any analysis of an accident at Crystal River Unit 3 is material to the NRC decision, as required by 10 C.F.R. § 2.309(f)(iv). Other than baldly alleging that it is a "striking omission" from the Application, Petitioners provide no rationale, cite no rule, regulation, or guidance that requires the Commission in this proceeding regarding Levy to consider an accident at Crystal River Unit 3. In fact, NRC guidance states that a study of hazardous facilities within five miles of the project is adequate. Reg. Guide 1.206, § C.I.2.2. FSAR Chapter 2 of the Application discusses industrial facilities within five miles of Levy. FSAR § 2.2 at 2.2-1 to 2.2-4. Because, as Petitioners do not dispute, CREC is 9.6 miles from Levy, its omission from the Application is not "striking." Petitioners do not identify any special significance to CREC that warrants consideration with regard to Levy. In fact, Petitioners do not cite, let alone dispute, the analysis in FSAR Chapter 2.

Petitioners also incorrectly allege that the PRA was performed using Revision 15 of the AP1000 DCD. In fact, contrary to Petitioners' bald allegation, as discussed in Progress's answer

to Contention 1 above, the PRA in the Application is based on both Revision 15 and Revision 16. Furthermore, a site-specific PRA was performed. See e.g., ER §§ 7.2.3, 7.3.4. Petitioners eschew their iron-clad obligation to review the Application and identify any disputes with specificity. In addition, it is not clear why the Revision of the AP1000 used for the PRA in the Application is material. As explained in Progress's answer to Contention 1, Commission policy, regulation, and case law demonstrate that the Application can be reviewed as submitted. If a future change is needed to the Application due to a revision to the AP1000 DCD, an issue can be raised at that time. Furthermore, Petitioners do not cite, let alone dispute with specificity, the analyses in ER Chapter 7 or FSAR Chapter 19, nor do they explain how an accident at CREC would be considered in these analyses. Because Contention 5 fails to raise a genuine dispute with the Application on a material issue of law or fact, it fails to satisfy 10 C.F.R. §§ 2.309(f)(1)(iv), (v) and (vi).

F. Contention 6 (Waste Confidence and High-Level Waste) Is Inadmissible

Petitioners submit Contention 6 in two parts – 6A and 6B (collectively, "Contention 6"). Both 6A and 6B are inadmissible for multiple reasons.

Petitioners seek to admit Contention 6A on the basis that:

> The Environmental Report for the Levy County units 1 and 2 COLA is deficient because it fails to discuss the environmental implications of the lack of options for permanent disposal of the irradiated (i.e, "spent") fuel that will be generated by the proposed new reactors if built and operated.

Petition at 73. Petitioners seek to admit Contention 6B on the basis that the Waste Confidence Rule should be reconsidered by the Commission because of a purported increased threat of a terrorist attack. Petition at 83-85. Contention 6 is inadmissible because it: (1) impermissibly challenges the NRC's Waste Confidence Rule (10 C.F.R. § 51.23); (2) is outside the scope of the

proceeding because it involves the subject of the Commission's Waste Confidence Decision Update; (3) impermissibly challenges Table S-3 of 10 C.F.R. § 51.51; and (4) contains no request for waiver of the Waste Confidence Rule nor demonstrates that such a waiver is appropriate under 10 C.F.R. § 2.335(b). Accordingly, Contention 6 must be rejected.

1. Contention 6 Impermissibly Challenges The Commission's Waste Confidence Rule

The NRC's Waste Confidence Rule makes a generic finding that a geologic repository will be available beyond the operating life of any reactor to dispose of its spent nuclear fuel (10 C.F.R. § 51.23(a)), and hence bars this Contention. The Waste Confidence Rule provides in pertinent part:

> (a) The Commission has made a generic determination that, if necessary, spent fuel generated in *any reactor* can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite independent fuel storage installations. Further, the Commission believes that there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of *any reactor* to dispose of the commercial high-level waste and spent fuel originating in such reactor and generated up to that time.
>
> (b) Accordingly, . . . within the scope of the generic determination in paragraph (a) of this section, *no discussion of any environmental impact of spent fuel storage in reactor facility storage pools or independent spent fuel storage installations (ISFSI) for the period following the term of the . . . reactor combined license . . . for which application is made, is required* in any environmental report, environmental impact statement, environmental assessment, or other analysis prepared in connection with the . . . issuance . . . of a combined license for a nuclear power reactor under parts 52 and 54 of this chapter. . . .

10 C.F.R. § 51.23(a) and (b) (emphases added).

Contention 6 is an impermissible attack on the Commission's regulations. See 10 C.F.R. § 2.335; Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), Entergy Nuclear Generation Co., and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-07-3, 65 N.R.C. 13, 17-18 & n.15 (2007); Millstone, CLI-01-24, 54 N.R.C. at 364; see also Dominion Nuclear North Anna, LLC (Early Site Permit for the North Anna ESP Site), LBP-04-18, 60 N.R.C. 253, 268-70 (2004) (holding an essentially identical set of contentions inadmissible as an impermissible challenge to the NRC's regulations).

As the Licensing Board explained in the North Anna ESP proceeding in holding a similar contention inadmissible:

> The matters the Petitioners seek to raise have been generically addressed by the Commission through the Waste Confidence Rule, the plain language of which states:
>
> > [T]he Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of *any* reactor to dispose of the commercial high level waste and spent fuel originating in such reactor and generated up to that time.
>
> 10 C.F.R. § 51.23(a) (emphasis added);

North Anna ESP, LBP-04-18, 60 N.R.C. at 269. Contention 6 directly challenges the Commission's Waste Confidence Rule in 10 C.F.R. § 51.23(a) and, therefore, must be rejected.

a. The Waste Confidence Rule Applies To "New Plants"

Petitioners assert (in Contention 6A) that Progress cannot rely on NRC's Waste Confidence Decision (49 Fed. Reg. 34,658 (Aug. 31, 1984), as amended, 55 Fed. Reg. 38,474

(Sept. 18, 1990)), upon which 10 C.F.R. § 51.23 is based, "because it applies only to plants which are currently operating, not new plants." Petition at 75. Petitioners are incorrect. 10 C.F.R. § 51.23 expressly applies to new plants. It states:

> The Commission has made a generic determination that, if necessary, spent fuel generated in *any reactor* can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite independent spent fuel storage installations. Further, the Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of *any reactor* to dispose of the commercial high-level waste and spent fuel originating in such reactor and generated up to that time.

10 C.F.R. § 51.23(a) (emphasis added). Thus, the Commission has clearly stated that it has confidence that waste generated by "any reactor" will be safely managed.[78]

The regulatory history of the Waste Confidence Rule also confirms that it is intended to cover new reactors. The NRC amended the Waste Confidence Rule in 2007 to make it clear that it applies to combined license applications. See 72 Fed. Reg. at 49,429; 10 C.F.R. § 51.23(b) (explicitly referring to combined license applications). The NRC's action can only mean that the Waste Confidence Rule applies to any new reactor licensed under 10 C.F.R. Part 52. Moreover, when the NRC promulgated 10 C.F.R. § 51.23(a), it explained: "in licensing actions involving (a) the storage of spent fuel *in new or existing facilities*, or (b) the expansion of storage capacity

[78] Petitioners also argue that Minnesota v. NRC, 602 F.2d 412, 416-17 (D.C. Cir. 1979) provides support for their argument that the ER is "fatally flawed" because it "does not contain any discussion of the environmental implications of the lack of options for permanent disposal of the irradiated fuel to be generated by Levy County units 1 and 2." Petition at 73. However, the citation is inapposite. In Minnesota v. NRC, the Court of Appeals for the D.C. Circuit did not reverse the NRC's determination that the amendments should be issued. Minnesota, 602 F.2d. at 418. The Court held that the petitioners were not entitled to an adjudicatory proceeding on issues related to the disposal of spent fuel and that the NRC "could properly consider the complex issue of nuclear waste disposal in a 'generic' proceeding such as a rulemaking, and then apply its determinations in subsequent adjudicatory proceedings." Id. at 416. The NRC has done exactly that with respect to 10 C.F.R. § 51.23(a).

at existing facilities, the NRC will continue to require consideration of reasonably foreseeable safety and environmental impacts of spent fuel storage only for the period of the license applied for." 49 Fed. Reg. 34,688, 34,689 (Aug. 31, 1984) (emphasis added).

Petitioners argue that "as amended in 1999,"[79] the second finding of the Waste Confidence Decision "clearly . . . applies to any *existing* reactor, including reactors whose licenses are revised or renewed." Petition at 75-76 (emphasis added). Contrary to Petitioners' statement, the second finding does not refer to and is in no way limited to "existing reactors." Rather, like the Waste Confidence Rule itself, the second finding applies to "any reactor." Further, the record for the 1990 revision of the second finding clearly considers and includes new reactors. In the 1990 revision, the Commission addressed relevant issues that had arisen since its original Waste Confidence Decision in 1984. 55 Fed. Reg. at 38,500. The Commission identified one of those issues as:

> Is there sufficient uncertainty in total spent fuel projections (e.g., from extension-of-life license amendments, renewal of operating licenses for an additional 20 to 30 years, *or a new generation of reactor designs*) that this Waste Confidence review should consider the institutional uncertainties arising from having to restart a second repository program?

55 Fed. Reg. at 38,501 (emphasis added). The Commission's response addressed new reactors (as well as the impact of renewing licenses for existing reactors):

> Assuming for the sake of establishing a conservative upper bound that the Commission does grant 30-year license renewals, the total operating life of some reactors would be 70 years, so that the spent fuel initially generated in them would have to be stored for about

[79] Petitioners are mistaken in describing the second finding of the Waste Confidence Decision as having been amended in 1999. Petition at 75. The original Waste Confidence Decision (49 Fed. Reg. 34,658 (Aug. 31, 1984)) was amended in 1990 (55 Fed. Reg. 38,474 (Sept. 18, 1990)). In 1999, the Commission decided that a comprehensive evaluation of the Waste Confidence Decision was unnecessary, that experience and developments since 1990 confirmed the 1990 findings, and that no modification to those findings was necessary. 64 Fed. Reg. 68,005 (Dec. 6, 1999).

> 100 years if a repository were not available until 30 years after the expiration of their last OLs.
>
> Even under the conservative bounding assumption of 30-year license renewals for all reactors, however, if a repository were available within the first quarter of the twenty-first century, the oldest spent fuel could be shipped off the sites of all currently operating reactors well before the spent fuel initially generated in them reached beyond the age of 100 years. Thus, a second repository, or additional capacity at the first, would be needed only to accommodate the additional quantity of spent fuel generated during the later years of these reactors' operating lives. The availability of a second repository would permit spent fuel to be shipped offsite well within 30 years after expiration of these reactors' OLs. *The same would be true of the spent fuel discharged from any new generation of reactor designs.*
>
> In sum, although some uncertainty in total spent fuel projections does arise from such developments as utilities' planning renewal of OLs for an additional 20 to 30 years, the Commission believes that this Waste Confidence review need not at this time consider the institutional uncertainties arising from having to restart a second repository program. Even if work on the second repository program is not begun until 2010 as contemplated under current law, there is sufficient assurance that a second repository will be available in a timeframe that would not constrain the removal of spent fuel from *any reactor* within 30 years of its licensed life for operation.

55 Fed. Reg. at 38,503-04 (emphases added). Thus, the Commission fully considered the possibility of additional spent nuclear fuel generation stemming from *both* the renewal of existing licenses and the licensing of new reactors. North Anna ESP, LBP-04-18, 60 N.R.C. at 269 & n.6.

b. The NRC Has Not "Backtracked" From Its Waste Confidence Decision

Petitioners contend (in Contention 6A) that the Commission has "backtracked" from its original Waste Confidence Decision and no longer has confidence that more than one repository will open. See Petition at 75-76. However, the record of the 1990 Waste Confidence review

also demonstrates that this is not the case. As quoted above, the Commission stated that "there is sufficient assurance that a second repository will be available in a timeframe that would not constrain the removal of spent fuel from any reactor within 30 years of its licensed life for operation." 55 Fed. Reg. at 38,504.

Likewise, Petitioners' concern about the limitation on the capacity of the first repository (Petition at 77-83) is irrelevant. The Commission considered this limitation in its 1990 review and concluded:

> The Commission believes that if the need for an additional repository is established, Congress will provide the needed institutional support and funding, as it has for the first repository.

55 Fed. Reg. at 38,502.

Petitioners also argue, without any support, that "[t]he Commission gives no indication that it has confidence that repository space can be found for spent fuel and other high-level radioactive waste from new reactors licensed after December 1999." Petition at 76. However, the Commission has indicated such confidence. In the Commission's 1999 Status Report on the Review of the Waste Confidence Decision (64 Fed. Reg. 68,005 (1999)), it reaffirms, without qualification, its 1990 findings. Referring to the ongoing repository development and spent fuel storage activities, the Commission stated:

> These considerations *confirm and strengthen* the Commission's 1990 findings and lead the Commission to conclude that no significant and unexpected events have occurred – no major shifts in national policy, no major unexpected institutional developments, no unexpected technical information – that would cast doubt on the Commission's Waste Confidence findings or warrant a detailed reevaluation at this time.

64 Fed. Reg. at 68,007 (emphasis added). The Commission not only decided not to review its 1990 Waste Confidence findings in 1999, it found that events since then had only served to strengthen the 1990 findings, which expressly include consideration of new reactors.

2. Contention 6 Is Inadmissible Because It Involves The Subject Of The Commission's Waste Confidence Decision Update

Petitioners assert that the Commission's decision to "re-open" the Waste Confidence Decision "shows that there is no regulatory certainty regarding the high-level radioactive waste dilemma." Petition at 76. In its Federal Register notice regarding Waste Confidence Decision Update, the Commission stated that it:

> . . . has decided to again undertake a review of its Waste Confidence findings as part of an effort to enhance the efficiency of combined operating license proceedings for applications for nuclear power plants anticipated in the near future.

73 Fed. Reg. 59,551 (Oct. 9, 2008). Contrary to Petitioners' assertion, the fact that the Commission is undertaking a general update to its Waste Confidence Decision also places both parts of Contention 6 beyond the scope of this proceeding. It is well established that licensing boards "should not accept in individual license proceedings contentions which are (or are about to become) the subject of general rulemaking by the Commission." Oconee, CLI-99-11, 49 N.R.C. at 345 (1999), quoting Douglas Point, ALAB–218, 8 A.E.C. at 85. The Commission is updating the Waste Confidence Decision, and Petitioners' concerns with the Waste Confidence Decision are appropriately raised in comments to the NRC regarding the Waste Confidence Decision, not in this proceeding.[80]

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[80] Furthermore, there is no "regulatory uncertainty" created by the updating of the Waste Confidence Decision. The Commission has further stated that it proposes revising only the second and fourth findings of the Waste Confidence Decision to state:

> Finding 2: The Commission finds reasonable assurance that sufficient mined geologic repository capacity can reasonably be expected to be available within 50–60 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of *any reactor* to

3. Contention 6 Impermissibly Challenges Table S-3 Of 10 C.F.R. § 51.51

To the extent that Petitioners challenge the environmental impacts of the management of high-level radioactive waste (see, e.g., Petition at 73), Contention 6 is also an impermissible attack on Table S-3 of 10 C.F.R. § 51.51. Commission regulations require that a COL ER use the values in Table S-3 as the basis for assessing the environmental impacts of the management of high-level waste. See 10 C.F.R. § 51.51(a). Table S-3 provides that high-level waste will be disposed of through deep burial and at a federal repository. In accordance with 10 C.F.R. § 51.51, Section 5.7 of Progress's ER uses Table S-3 as the basis for the discussion of the environmental impacts of high-level waste. ER Table 5.7-1 (Sheet 4).[81]

Petitioners collaterally attack Table S-3 by alleging that "significant radioactivity releases from the Yucca Mountain repository would . . . occur over time," (Petition at 73-75)[82] and questioning whether high-level radioactive waste from Levy would be disposed of through a deep burial repository. Id. at 77-83. This Contention is, therefore, outside the scope of the proceeding because, absent a waiver, "no rule or regulation of the Commission . . . is subject to attack by way of discovery, proof, argument, or others means in any adjudicatory proceeding."

> dispose of the commercial high-level radioactive waste and spent fuel originating in such reactor and generated up to that time.
>
> Finding 4: The Commission finds reasonable assurance that, if necessary, spent fuel generated in *any reactor* can be stored safely without significant environmental impacts for at least 60 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor in a combination of storage in its spent fuel storage basin and either onsite or offsite independent spent fuel storage installations.

73 Fed. Reg. at 59,551 (emphasis added).

[81] Petitioners also fail to meet the requirements of 10 C.F.R. § 2.309(f)(1)(vi) with respect to Contention 6 because they fail to controvert this portion of the ER.

[82] This aspect of Contention 6 is also beyond the scope of any NRC proceeding because it is a challenge to a proposed U.S. Environmental Protection Agency rule: "40 CFR Part 197: Public Health and Environmental Radiation Protection Standards for Yucca Mountain, Nevada : Proposed Rule." 73 Fed. Reg. 61,256 (Oct. 15, 2008). The rulemaking of another agency is beyond the scope of this proceeding.

10 C.F.R. § 2.335(a). As discussed in Section IV.F.5, below, Petitioners have provided no basis for such a waiver or exception.

4. Contention 6 Is Inadmissible Because Malevolent Attacks Are Beyond The Scope Of NEPA

Petitioners assert (in Contention 6B) that "under NEPA it is also appropriate to consider whether the Commission continues to have a basis for expressing confidence that stored irradiated nuclear fuel and other high-level radioactive waste is safe from terrorist attacks" (Petition at 85), and asks the Commission to reconsider this policy. Id. at 86. Petitioners provide no basis for the Commission so doing, much less any basis for it so doing *in this COL proceeding*. Longstanding Commission precedent holds that terrorist attacks are not to be considered as part of the NEPA analysis required for Commission licensing actions. See Private Fuel Storage, CLI-02-25, 56 N.R.C. 340; Duke Cogema Stone & Webster, (Savannah River Mixed Oxide Fuel Fabrication Facility), CLI-02-24, 56 N.R.C. 335 (2002); Pacific Gas & Elec. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-03-1, 57 N.R.C. 1 (2003).

Following the Ninth Circuit's decision in Mothers for Peace,[83] the Commission "reiterate[d] [its] longstanding view that NEPA demands no terrorism inquiry." AmerGen Energy Company, LLC (Oyster Creek Nuclear Generating Station), CLI-07-08, 65 N.R.C. 124, 126 (2007). The Commission held that it will follow the Mothers for Peace decision only in those cases arising in the Ninth Circuit, but that it will continue to adhere to prior precedent in all other cases. Id. at 128-29. The Commission held:

[83] San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016 (9th Cir. 2006) (reversing CLI-03-1, 57 N.R.C. 1 (2003)), cert. denied sub nom. Pacific Gas & Elec. Co. v. San Luis Obispo Mothers for Peace,127 S.Ct. 1124 (2007).

> The 'environmental' effect caused by third-party miscreants 'is … simply too far removed from the natural or expected consequences of agency action to require a study under NEPA."' [Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-26, 56 N.R.C 358, 365 (2002), (quoting Private Fuel Storage, CLI-02-25, 56 N.R.C. at 349)]. "[T]he claimed impact is too attenuated to find the proposed federal action to be the 'proximate cause' of that impact." Private Fuel Storage, CLI-02-25, 56 N.R.C. at 349, citing Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 772-75 (1983). See also Department of Transportation v. Public Citizen, 541 U.S. 752, 767 (2004).

Id. at 129. The Commission further held:

> Our prior precedents are consistent with Supreme Court NEPA doctrine. In two major decisions - Metropolitan Edison Co. v. People Against Nuclear Energy (1983) and Department of Transportation v. Public Citizen (2004) - the Court has said that a "reasonably close causal relationship" between federal agency action and environmental consequences is necessary to trigger NEPA; the Court analogized NEPA's causation requirement to the tort law concept of "proximate cause."
>
> . . . the Supreme Court has held, unconditionally, that the test is "required." The Ninth Circuit's view notwithstanding, there simply is no "proximate cause" link between an NRC licensing action, such as (in this case) renewing an operating license, and any altered risk of terrorist attack. Instead, the level of risk depends upon political, social, and economic factors *external* to the NRC licensing process. It is not sensible to hold an NRC licensing decision, rather than terrorists themselves, the "proximate cause" of an attack on an NRC-licensed facility.

Id. at 129-30 (footnotes omitted) (emphasis in original).

The Commission has recently denied two petitions for rulemaking ("PRM"), one filed by the Attorney General of the Commonwealth of Massachusetts and the other filed by the Attorney General for the State of California, presenting nearly identical issues and requests for rulemaking concerning the environmental impacts of the high-density storage of spent nuclear fuel in spent fuel pools ("SFPs"). 73 Fed. Reg. 46,204 (Aug. 8, 2008). In that denial, the Commission

addressed whether a terrorist attack on a SFP is "reasonably foreseeable" and requires NEPA review during a license renewal. Id. at 46,210-11. In that context, the Commission stated:

> the NRC has determined that the environmental impacts of such a terrorist attack would not be significant, because the probability of a successful terrorist attack (i.e., one that causes an SFP zirconium fire, which results in the release of a large amount of radioactive material into the environment) is very low and therefore, within the category of remote and speculative matters.

Id. at 46,211. The Commission noted that even if NEPA required the Commission to consider the impacts of a terrorist attack:

> . . . the NRC findings would remain unchanged. As previously described, the NRC has required, and nuclear power plant licensees have implemented, various security and mitigation measures that, along with the robust nature of SFPs, make the probability of a successful terrorist attack (i.e., one that causes an SFP zirconium fire, which results in the release of a large amount of radioactive material into the environment) very low. As such, a successful terrorist attack is within the category of remote and speculative matters for NEPA considerations; it is not ''reasonably foreseeable.'' Thus, on this basis, the NRC finds that the environmental impacts of renewing a nuclear power plant license, in regard to a terrorist attack on an SFP, are not significant.

Id. The Commission's consistent holding that NEPA review of terrorist attacks is not required, and even if it were, such attacks are remote and speculative, requires the Board to reject Contention 6.

5. Petitioners Have Not Requested Nor Provided Any Basis For Waiving The Waste Confidence Rule In This Proceeding

A litigant in a 10 C.F.R. Part 2 adjudicatory proceeding may request that a Commission rule or regulation "be waived or an exception made for the particular proceeding." 10 C.F.R. § 2.335(b). The only ground for waiver or exception of a rule or regulation is that "special circumstances with respect to the subject matter of the particular proceeding are such that the

application of the rule or regulation . . . would not serve the purposes for which the rule or regulation was adopted." Id. Further, the Commission's regulations require that any request for such waiver or exception "be accompanied by an affidavit that identifies . . . the subject matter of the proceeding as to which application of the rule or regulation . . . would not serve the purposes for which the rule or regulation was adopted." Id. "The affidavit must state with particularity the special circumstances alleged to justify the waiver or exception requested." Id.

Petitioners have not requested a waiver, nor complied with these provisions. However, even if Petitioners' request (in Contention 6B) to "reconsider" the Waste Confidence Rule is treated as a request for a waiver, Petitioners have still failed to demonstrate the existence of special circumstances required under the Commission's rules. Nowhere do Petitioners state any special circumstances relating to the Levy facility that would justify waiving the Waste Confidence Rule in this proceeding. The only purported basis for reconsideration provided by Petitioners is the alleged "terrorist threat to irradiated nuclear fuel and high-level radioactive waste." Petition at 84. However, there are no special circumstances alleged with respect to Levy. And, as discussed in Section IV.G.4, supra, the environmental effect of terrorist attacks is an issue that is outside the scope of NRC environmental reviews and cannot, therefore, be a basis for waiver. Moreover, the other claims raised in Contention 6 (e.g., insufficient capacity in repository (Petition at 77-80); undetermined opening date for Yucca Mountain (Petition at 80-81); availability of second repository (Petition at 82-83), are not special circumstances alleged with respect to Levy and also cannot be a basis for waiver of the rule.

Contention 6 and its supporting bases raise matters that are not within the scope of the proceeding and impermissibly seek to challenge Commission regulatory requirements. See 10 C.F.R. §§ 2.309(f)(1)(iii), 2.335; Vermont Yankee and Pilgrim, CLI-07-3, 65 N.R.C. at 17-18 &

n.15; Millstone, CLI-01-24, 54 N.R.C. at 364. Petitioners have not made the showing of "special circumstances" required under 10 C.F.R. § 2.335(b). These matters, therefore, must be addressed through Commission rulemaking. See North Anna ESP, LBP-04-18, 60 N.R.C. at 269-270. Accordingly, Contention 6 is inadmissible.

G. Contentions 7 and 8 (Low-Level Radioactive Waste) Are Inadmissible

Petitioners propose two contentions related to low-level radioactive waste. Petitioners seek to admit Contention 7 on the basis that:

> Progress Energy Florida's (PEF) application to build and operate Levy County Nuclear Station Units 1 & 2 violates the National Environmental Policy Act by failing to address the environmental impacts of the waste that it will generate in the absence of licensed disposal facilities or capability to isolate the radioactive waste from the environment. PEF's environmental report does not address the environmental, environmental justice, health, safety, security or economic consequences that will result from lack of permanent disposal for the radioactive wastes generated.

Petition at 87. Contention 7 is premised upon Contention 8, which states:

> A substantial omission in Progress Energy Florida's (PEF) COL application to build and operate Levy County Nuclear Station Units 1 & 2 is the failure to address the absence of access to a licensed disposal facilities [sic] or capability to isolate the radioactive waste from the environment. PEF's FSAR does not address an alternative plan or the safety, radiological and health, security or economic consequences that will result from lack of permanent disposal for the radioactive wastes generated.

Petition at 93-94.

The Commission has recently provided guidance regarding similar contentions involving low-level radioactive waste storage. See Tennessee Valley Authority (Bellefonte Nuclear Power Plants, Units 3 and 4), CLI-09-03, 69 N.R.C. ___ (Feb. 17, 2009). In Bellefonte, the Commission reversed the Licensing Board's admission of a proposed "contention of omission"

regarding an applicant's alleged failure to offer a viable plan for how to dispose of low-level radioactive waste generated in the course of operations, closure and post closure of Bellefonte 3 and 4. Id., slip op. at 2. In the underlying Board proceeding, Tennessee Valley Authority (Bellefonte Nuclear Power Plant Units 3 and 4), LBP-08-16, 68 N.R.C. __ , slip op. at 57 (Sept. 12, 2008), the Licensing Board had concluded that the contention raised both safety and environmental issues, and therefore assigned it two designations – FSAR-D for the safety issue described above, and NEPA-G for the related environmental issue of whether TVA had assessed the potential environmental impacts of keeping such waste onsite. Id., slip op. at 57-59. The Commission reversed the admission of both FSAR-D (which is similar to Contention 8 in this proceeding) and NEPA-G (which is similar to Contention 7 in this proceeding). As discussed below, for the reasons set forth by the Commission in its decision in Bellefonte with respect to FSAR-D and NEPA-G, Contentions 7 and 8 are both inadmissible.

Moreover, both Contentions 7 and 8 are similar to a single proposed contention in Virginia Electric & Power Company d/b/a Dominion Virginia Power and Old Dominion Electric Cooperative (Combined License Application for North Anna Unit 3), LBP-08-15, 68 N.R.C. __ (Aug. 15, 2008). In both North Anna and Bellefonte, the licensing boards concluded that the disposal of greater than Class C ("GTCC") radioactive waste (referenced in both Contentions 7 and 8) is not directly affected by the partial closure of the Barnwell disposal facility because the disposal of GTCC waste is the responsibility of the federal government. See 42 U.S.C. § 2021c(b)(1)(D); see also North Anna, LBP-08-15, slip op. at 21 n.86; Bellefonte, LBP-08-16, slip op. at 58. Both licensing boards also found that that the issue of whether an applicant might someday require a permit under 10 C.F.R. Part 61 for a disposal facility is "too speculative" and is not "material to the findings the NRC must make to support the action that is involved in" the

COL proceeding. North Anna, LBP-08-15, slip op. at 26; Bellefonte, LBP-08-16, slip op. at 58. For the same reasons, those aspects of both proposed Contention 7 and Contention 8 are inadmissible in this proceeding.

Petitioners' Contentions 7 and 8 are interrelated and, as set forth by Petitioners, involve aspects of safety and environmental impact that overlap. Because Contention 7, the ostensible environmental impact issue, is premised on the existence of a safety issue as alleged in Contention 8, the inadmissibility of Contention 8 is addressed first below and the additional inadmissible aspects of Contention 7 are then addressed. With respect to both Contention 7 and Contention 8, Petitioners: (1) seek to impermissibly attack Commission regulations; (2) fail to request a waiver or provide grounds for the seeking of a waiver of a Commission regulation; (3) allege "omissions" although the FSAR or the ER addresses the issues alleged to be omitted; and (4) fail to comply with the Commission's pleading requirements for admissible contentions. Neither Contention 7 nor Contention 8, therefore, should be admitted, consistent with the Commission's decision in Bellefonte.

1. Contention 8 Is Inadmissible

Petitioners assert that the Application is deficient because (1) it fails to address the absence of access to licensed disposal facilities or the capability to isolate the radioactive waste from the environment; and (2) Progress's FSAR does not address an alternative plan or the safety, radiological and health, security or economic consequences that will result from lack of permanent disposal for the radioactive wastes generated. Petition at 93-94. In support of this assertion, Petitioners state that, although the Westinghouse Process Control Program ("PCP") in Revision 16 of the Westinghouse DCD is incorporated into the FSAR by reference, "the

description ultimately assumes off-site disposal of so-called 'low-level' waste will be available." Petition at 95. Petitioners further assert that:

> The COL, ER and FSAR indicate that thousands of curies in "low-level" radioactive waste will be generated from operation of Levy County Nuclear Station Units 1 & 2 but none provide analysis of the safety and security of Class B, C and Greater than C wastes that will accumulate at the site in absence of final disposal.

Id. Contention 8 should be dismissed because it is premised on an erroneous interpretation of the applicable statutory and regulatory provisions and impermissibly challenges Commission regulations, contrary to 10 C.F.R. § 2.309(f)(1)(iii).

a. Contention 8 Is Inadmissible Because 10 C.F.R. Part 61 Is Not An Appropriate Regulatory Basis For An Admissible Contention In This Proceeding

In Bellefonte, the Commission reversed a Licensing Board's admission of a safety contention similar to Contention 8 because, as in Progress's case, the only regulatory ground on which the safety portion of the Bellefonte contention was based in the petition to intervene was 10 C.F.R. Part 61. The Commission in Bellefonte held that 10 C.F.R. Part 61 was:

> . . . inapplicable here because it applies only to land disposal facilities that *receive* waste from others, not to onsite facilities such as Bellefonte where the licensee intends to *store* its own low-level radioactive waste.

Bellefonte, CLI-09-03, slip op. at 5-6 (emphasis in original) (footnote omitted). In this proceeding, Petitioners do not provide any regulatory basis for Contention 8 other than the references to 10 C.F.R. Part 61 made with respect to Contention 7 and incorporated into the discussion of Contention 8. Accordingly, consistent with the Commission's decision in Bellefonte, the Board should reject Contention 8 as inadmissible.

NRC guidance documents also contradict Petitioners' unsupported claim that the Application should be required to address the "safety and security issues of extended onsite storage . . . ." Petition at 90. NRC guidance documents recognize that it is appropriate to retain flexible interim storage procedures until disposal sites are developed or otherwise become available. For example, Section 11.4 of NUREG-0800, Standard Review Plan ("SRP") for the Review of Safety Analysis Reports for Nuclear Power Plants, provides that a facility need not be initially designed to store waste for its entire operational life:

> In considering expanded storage capacity, licensees should consider the design and construction of additional volume reduction facilities (e.g., trash compactors, shredders, incinerators, etc.), as necessary, and then process wastes that may have been stored during their construction. Regional State low-level waste compacts and unaffiliated States may establish new or additional low-level waste disposal sites in the future under 10 CFR Part 61 or equivalent State regulations.

NUREG-0800, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants, Rev. 3, at 11.4-26 (Mar. 2007) ("NUREG-0800" or "SRP").

Section 11.4 of the SRP also endorses the guidance provided in NRC Generic Letter 81-38, Storage of Low-Level Radioactive Wastes at Power Reactor Sites (Nov. 10, 1981). NUREG-0800 at 11.4-26. Generic Letter 81-38 states: "it is important that the NRC not take deliberate action that would hinder the establishment of additional disposal capacity by the states and yet, consistent with NRC regulatory safety requirements, permit necessary operational flexibility by its licensees." Generic Letter 81-38 at 1. These NRC guidance documents are entitled to considerable weight. See, e.g., Long Island Lighting Co. (Shoreham Nuclear Power Station, Unit 1), ALAB-900, 28 N.R.C. 275, 290 (1988); Consumers Power Co. (Big Rock Point Nuclear Plant), ALAB-725, 17 N.R.C. 562, 568 (1983).

b. Contention 8 Is Inadmissible Because It Does Not Raise A Genuine Issue

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. See Millstone, LBP-04-15, 60 N.R.C. at 95-96. Petitioners incorrectly assert that there is no "analysis of the safety and security of Class B, C and Greater than C wastes that will accumulate in absence of final disposal." Petition at 95. As discussed below and in Section IV.G.2.b, infra, the Application addresses both handling low-level radioactive waste onsite and the environmental impacts of storing such waste.

Section 11.4.6 of the FSAR states that the Levy Process Control Program ("PCP") describes the administrative and operational controls used for the solidification of liquid or wet solid waste and the dewatering of wet solid waste. The PCP provides:

> . . . the necessary controls such that the final disposal waste product meets applicable federal regulations (10 CFR Parts 20, 50, 61, 71, and 49 CFR Part 173), state regulations, and disposal site waste form requirements for burial at a low level waste (LLW) disposal site that is licensed in accordance with 10 CFR Part 61.

FSAR at 11.4-1. The Levy PCP will follow NEI 07-10, "Generic FSAR Template Guidance for Process Control Program." Id. The PCP ensures that doses to workers and members of the public are within regulatory limits both during on-site storage and incident to eventual decommissioning and disposal. Therefore, there is no "omission" with respect to the safety aspects of the PCP.

c. Contention 8 Fails To Meet The Pleading Requirements For An Admissible Contention

Petitioners also fail to meet the pleading requirements for an admissible contention.

First, Petitioners do not provide a concise statement of the facts or expert opinions which support the Petitioners' position on the issue and on which the Petitioners intend to rely at hearing, together with references to the specific sources and documents on which the Petitioner intends to rely to support its position on the issue. 10 C.F.R. § 2.309(f)(1)(v).

Second, Contention 8 (and Contention 7) assumes that no off-site disposal facility will ever be available, or will not be available for a long period of time. Petition at 89 ("No explanation is offered for how the applicant will meet this [offsite disposal] plan in the absence of a licensed disposal site"). Petitioners do not offer a reference, source, or expert opinion to support this assumption, which is the basis for the Contention.[84] 10 C.F.R. § 2.309(f)(i)(v). 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, LBP-98-7, 47 N.R.C. at 180 (citing Georgia Tech Research Reactor, LBP-95-6, 41 N.R.C. at 305). Petitioners have failed to provide support for their assertion that no facility will be available. Moreover, Petitioners' alleged omission rests on the incorrect premise that the lack of a licensed disposal site for Class B and C wastes means that the waste will remain onsite indefinitely. Petition at 90. Under 10 C.F.R. Part 20, a power reactor licensee could transfer the material to another licensee that is licensed to accept and treat waste prior to disposal. 10 C.F.R. § 20.2001. The waste treatment facility would then be responsible for eventual waste disposal. Thus, Class B and C wastes may still be removed from the Levy site.

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[84] Although Petitioners do not reference or cite to it, Petitioners have included a Declaration, purportedly from Ms. Diane D'Arrigo, containing statements concerning low-level radioactive waste. Ms. D'Arrigo asserts, contrary to the Commission's decision in Bellefonte, that "[s]erious consideration must be given to meeting the NRC criteria for nuclear waste disposal at 10 CFR 61 or Florida's compatible Agreement State regulations." D'Arrigo Declaration at 3. Ms. D'Arrigo provides no support for the assertion that no disposal facility will ever be available. Ms. D'Arrigo also refers only to 10 C.F.R. Part 61. Her Declaration, therefore, cannot be construed to provide any basis for a waiver of 10 C.F.R. Part 20 (or Table S-3 of 10 C.F.R. § 51.51, as discussed in Section IV.G.2.a, as required by 10 C.F.R. § 2.335 because it never identifies any regulation that Ms. D'Arrigo believes should be waived or provides any basis for waiving any regulation.

2. Contention 7 Is Inadmissible

a. Contention 7 Is An Impermissible Attack On Table S-3

Petitioners concede that Contention 7 raises a challenge to a Commission rule by challenging Table S-3 of 10 C.F.R. § 51.51. Petition at 87 n.30. This impermissible attack on Table S-3 renders Contention 7 inadmissible. The Commission, in Bellefonte, held that such a contention is inadmissible:

> Contention NEPA-G constitutes a collateral attack upon Table S-3. Absent a waiver, parties are prohibited from collaterally attacking our regulations in an adjudication. Intervenors did not seek such a waiver. Therefore, under our rules, the Board should not have admitted the contention.

Bellefonte, CLI-09-03, slip op. at 9 (footnotes omitted). Like the petitioner in Bellefonte, Petitioners have not sought a waiver in this proceeding. Accordingly, Contention 8 is inadmissible.

Moreover, the Petition cannot be construed to seek a waiver because it does not meet the criteria for properly challenging a rule under the provisions of 10 C.F.R. § 2.335. 10 C.F.R § 2.335 states that:

> (1) A party to an adjudicatory proceeding may petition for a rule waiver or exception;
>
> (2) Special circumstances with respect to the subject matter of the particular proceeding are such that the application of the rule would not serve the purposes for which it was adopted;
>
> (3) The petition must be accompanied by an affidavit that identifies the specific aspect or aspects of the subject matter of the proceeding as to which the application of the rule would not serve the purposes for which the rule was adopted; and
>
> (4) The affidavit must state with particularity the special circumstances alleged to justify the waiver or exception requested.

In addition to failing to seek a waiver, the Petitioners have not demonstrated that any special circumstances exist with the Application, or that Table S-3 would not serve the purposes for which it was adopted. Petitioners assert that there is "new and significant information." Petition at 87 n.30. Petitioners, however, do not specify what the alleged new and significant information is, or how that information creates special circumstances in this proceeding but not in other proceedings. Accordingly, the Board must reject Contention 7.

b. The Environmental Effects Of The Storage Of Low-Level Radioactive Waste Are Evaluated In The ER

Section 3.5 of the ER states that, during normal operation, the radioactive waste management and effluent control systems are designed to minimize releases from active reactor operations to values As Low As Reasonably Achievable ("ALARA"). The Levy radioactive waste systems have been evaluated against the requirements of 10 C.F.R. Part 20, Appendix B, and 10 C.F.R. Part 50, Appendix I, and are capable of meeting the design objectives of 10 C.F.R. Part 20 and 10 C.F.R. Part 50, Appendix I.

The radioactive waste treatment systems also are described in considerable detail. ER Section 3.5.1 describes the Liquid Radioactive Waste Management System that controls, collects, processes, handles, stores, and disposes of liquid radioactive waste generated as the result of normal operation, including anticipated operational occurrences. ER Section 3.5.3 describes the Solid Waste Management System, which collects, treats and stores the solid radioactive wastes produced throughout the plant. The Solid Waste Management System stores the solid radioactive wastes both before and after processing. The Solid Waste Management System is located in the auxiliary and radwaste buildings. Processing and packaging of wastes are performed by mobile systems in the auxiliary building rail car bay and in the mobile systems

facility part of the radwaste building. The packaged waste is stored in the auxiliary and radwaste buildings. Thus, the Application clearly describes the handling and storage of low level waste onsite.

ER Section 3.5 also provides the estimated radioactivity of plant waste (see, e.g., Tables 3.5-4, 3.5-6, 3.5-7, 3.5-9), which is used for the analyses of radiological environmental impact during normal operation. Information concerning the radiological environmental impact during normal operation is presented in, among other places, ER Sections 5.4, 5.5, 5.7.1.10, and 5.7.1.11. The information presented in the ER demonstrates that the radioactive waste treatment systems keep doses to the public ALARA and within the dose limits for individual members of the public as specified in 10 C.F.R. § 20.1301. Petitioners do not contest or controvert these Sections of the Application.

The Commission's regulations have previously addressed the health impacts associated with on-site storage of low-level radioactive waste within the limits established in 10 C.F.R. Part 20. In promulgating the occupational and dose limits in Part 20, the NRC concluded that doses associated with the limits would have small health and environmental impacts. Standards for Protection Against Radiation; Republication, 51 Fed. Reg. 1,092, 1,120 (Jan. 9, 1986); see also Pacific Gas & Elec. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-26, 68 N.R.C. ___, slip op. at 10-11 (Oct. 23, 2008). Therefore, because the expected doses at Levy will be within the limits in 10 C.F.R. Part 20, the environmental and health impacts of on-site storage of low-level radioactive waste have been assessed. Petitioners are seeking to challenge the existing limits in 10 C.F.R. Part 20. Accordingly, Contention 7 is an impermissible challenge to existing NRC regulations. 10 C.F.R. § 2.335.

In addition, ER Section 5.4.5 evaluates the environmental impact from the anticipated occupational dose and states:

> a conservative estimate for the LNP is expected to be less than the recent PWR average collective [total effective dose equivalent] dose per reactor of 81 person-rem. The average annual dose of less than 0.2 rem per nuclear plant worker at operating BWRs and PWRs is well within the limits of 10 CFR 20. The exposure impacts are considered to be SMALL and pose a risk that is comparable to the risks associated with other industrial occupations.

ER at 5-54. Thus, there is no omission. The ER evaluated the environmental impact of on-site waste storage (regardless of duration).

c. Contention 7 Fails To Meet The Commission's Pleading Requirements

Petitioners' Contention 7 also is inadmissible because it fails to substantially call into question the conclusions in the ER and FSAR regarding storage of waste at the site. A petitioner must provide sufficient information to demonstrate a genuine dispute with the applicant on a material issue, as required by 10 C.F.R. § 2.309(f)(1)(vi). Petitioners merely quote portions of the FSAR and ER that indicate that waste will be packaged for shipping offsite for disposal. See, e.g., Petition at 88. Petitioners do not allege that any portion of the Application contains an incorrect assessment of doses or that the processes and programs described in the Application fail to protect public health and safety. Petitioners do not present any references to documents or other sources that would indicate any genuine material dispute.

For the foregoing reasons, neither Contention 7 nor Contention 8 are within the scope of this proceeding, and Petitioners fail to satisfy the requirements for waiver of the Commission regulations that Contention 7 and Contention 8 attack. Moreover, to the extent that each

Contention alleges any omissions from the FSAR or the ER, no such omission exists and Petitioners fail to demonstrate that a genuine, material dispute exists.

H. Contention 9 (Omission of Solar-Thermal Option) Is Inadmissible

In Contention 9, Petitioners claim that the "Solar Power" Section of the ER[85] should have considered solar domestic water heaters as an alternative to Levy, because that technology has "the potential to displace baseload" and "could significantly reduce the need for power production." Petition at 97-98. Petitioners add that "[a]dopting a more expensive alternative energy source such as nuclear will be detrimental to the economic well being of ratepayers," and will "burden[]" Petitioners with the "potential for radiological consequences of accidents and events" at Levy. Id. at 98. As set forth below, Contention 9: (1) fails to raise a material dispute with the Application; (2) lacks the required factual or expert support; and (3) raises matters that are outside the scope of this proceeding. 10 C.F.R. §§ 2.309(f)(1)(iv), (v), and (vi).

1. Petitioners' Claim That The ER Omits Consideration Of Solar Thermal Water Heaters Does Not Raise A Material Dispute With The Application

As set forth above, Contention 9 claims that the ER improperly failed to consider solar thermal water heaters as an alternative to Levy. Petition at 97. This claim fails to raise a material dispute with the Application.

Petitioners' claim that the "environment [sic] report has an omission in 9.2.2.3 [sic], Solar Power" is a misplaced attack on the ER. Petition at 97. Consistent with the ESRP, Progress included in Section 9.2.2 of the ER an evaluation of alternatives that require new generating capacity. See ESRP at 9.2.2-1. Such alternatives include "sources of energy that

[85] Petitioners cite to ER Section "9.2.2.3," which Progress assumes was intended to be a cite to ER Section 9.2.2.4, Solar Power.

could reasonably be expected to meet the demand from both a load and economic standpoint for additional generating capacity determined for the proposed project." Id.

Solar domestic water heaters are not sources of generating capacity. Therefore, Progress does not analyze that technology in ER Section 9.2.2. Solar domestic water heaters, however, have the potential to reduce baseload demand. Therefore, an analysis of solar domestic water heaters is appropriate for Chapter 8 of the ER, which describes the evaluation of the need for power and discusses the demand for electricity. Progress included in ER Chapter 8 its discussion of solar domestic water heaters. Petitioners' assertion that the ER failed to consider solar domestic water heaters, therefore, is incorrect. In advancing Contention 9 as a contention of omission, Petitioners have not met their "ironclad obligation" to examine all documentation (such as ER Chapter 8) relating to the Application. See Catawba, ALAB-687, 16 N.R.C. at 468.

In ER Chapter 8, Progress addresses solar domestic water heaters:

> [Progress] launched an innovative solar-energy initiative that offers customers rebates and incentives to install a solar-thermal water heater. Customers can save up to 85 percent on the hot-water portion of their electric bill, which equates to a savings of $200 to $300 annually for the average family.

ER at 8-76. Despite this and numerous other renewable energy initiatives described in the ER, the ER's need for power analysis concludes that Levy is necessary. As discussed in Progress's response to Contention 3, the FPSC's need determination reached the same conclusion. According to the FPSC's Final Order: "based on the record, we find there are no renewable energy sources and technologies or conservation measures reasonably available for PEF that

might mitigate the need for Levy Units 1 and 2." FPSC Final Order at 18. The "record" that the FPSC is referring to included testimony regarding solar water heaters.[86]

Moreover, as the Board in the Summer COL proceeding recently found, under U.S. Supreme Court precedent, "an applicant is not required to examine all possible alternatives, but only those that can reasonably accomplish [the applicant's] elected purpose." Summer, LBP-09-02, slip op. at 25, citing Vt. Yankee Nuclear Power Corp., 435 U.S. at 551. Progress's elected purpose here is to generate baseload capacity. Accordingly, Chapter 9 of the ER analyzed the following alternatives to baseload generation from Levy: wind, geothermal, hydropower, solar power (concentrating solar power systems and photovoltaic cells), wood waste (and other biomass), municipal solid waste, energy crops, petroleum liquids, fuel cells, coal, natural gas, integrated gasification combined cycle, and various combinations of the above. ER at 9-6 to 9-7; See ER at 9-9 – 9-32. Progress, therefore, extensively studied a very expansive set of generation alternatives. Id. at 9-9 – 9-32. Nothing in Petitioners' discussion of Contention 9 provides any support for concluding – contrary to ER Chapter 8 and the FPSC's Final Order – that solar thermal hot water heaters also should have been specifically analyzed in Chapter 9 of the ER as a reasonable alternative to Levy's baseload generation.

Accordingly, Contention 9 fails to raise a genuine issue of material dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi).

2. Petitioners Fail To Adequately Support Contention 9

[86] In its discussion of renewable energy alternatives, the Final Order notes that, when asked at hearing if solar thermal water heaters could defer the need for Levy, a witness for Progress testified that "use of solar water heaters would have a very minimal impact on PEF's requirements." FPSC Final Order at 17-18.

In their discussion of Contention 9, Petitioners claim that "solar thermal water heating is a major source of reduction in power consumption, averaging 20% of an all electric home's energy use and therefore could significantly reduce the need for power production." Petition at 97-98. As "support" for these claims, Petitioners "incorporate[] by reference the information on Energy Efficiency provided in contention 10." Id. at 97. Petitioners also state that "[e]vidence for the factual basis of this contention can be found in numerous studies;[87] including a comprehensive report by the American Council for an Energy Efficient Economy" ("ACEEE"). Id. at 98. Nothing in Contention 10 or the ACEEE report provides expert or factual support justifying Contention 9's admission.

As an initial matter, merely referring to the ACEEE report, without citing any specific page in the report or discussing the "evidence" that it supposedly contains, does not provide an adequate basis for admitting a contention. See Calvert Cliffs, CLI-98-25, 48 N.R.C. at 348. Although it is not at all clear, Petitioners may be intending in Contention 9 to "incorporate by reference" Contention 10's claim that the ACEEE report's summary shows that "30% of Florida's energy needs could be met by conservation and renewable resources in 2023." Petition at 99. That summary, however, does not support Contention 9's claim that solar thermal water heaters could provide an alternative to Levy's baseload generation and therefore should have been analyzed in Chapter 9 of the ER.

The ACEEE report lists eleven energy efficiency and renewable energy policies that the ACEEE recommends that Florida should consider adopting to reduce electricity demand. ACEEE Report at 15. The report's summary section states:

[87] Although Petitioners claim there are "numerous studies" that provide factual basis for Contention 9, Petitioners list only one. And, as discussed below, the study Petitioners identify does not support the Contention.

> [e]nergy efficiency resource policies can offset the majority of projected load growth in the state over the next 15 years. Expanded development of renewable energy resources in the state would further reduce future needs for conventional generation. *Combined, these policies can meet nearly 30% of projected needs for electricity in 2023*.

ACEE Report at viii-ix (emphasis added). The summary relies on the report's analysis that Florida could meet 30% of projected needs in fifteen years "[*i*]*f all the [eleven] recommended policies were implemented*." ACEEE Report at 15 (emphasis added). Thus, even if factually accurate, at most this report concludes that 30% of Florida's needs in 2023 could be met by renewables and energy efficiency if Florida implemented *eleven* specific policies.[88] It clearly does not support Petitioners' assertion in Contention 9 that solar thermal hot water heaters should have been considered as an alternative to 2200 MWe of baseload generation in the 2016-2017 timeframe, or to any meaningful portion thereof.

When determining whether a contention is admissible, licensing boards are to "carefully examine[]" documents that are provided by petitioners to support a contention to determine whether they "supply an adequate basis for the contention." See, e.g., North Anna ESP, LBP-04-18, 60 N.R.C. at 265. As set forth above, even a cursory examination of the ACEEE report demonstrates that it does not provide an adequate basis for Contention 9.[89]

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[88] These eleven policies are: Utility-Sector Energy Efficiency Policies and Programs; Appliance and Equipment Standards; Building Energy Codes; Advanced Building Program; Improved CHIP Policies; Industrial Competitiveness Initiative; State and Municipal Buildings Program; Short-Term Public Education and Rate Incentives; Expanded Research, Development, and Demonstration Efforts; Renewable Portfolio Standard; Onsite Renewables Program.

[89] Progress notes that the ACEEE report is attached to a Declaration of Carter M. Quillen. The Quillen Declaration itself, however, is never cited in the Petition. In any event, nothing in that Declaration supports Petitioners' specific claim that solar thermal hot water heaters in particular should be analyzed in Chapter 9 as an alternative to Levy. Quillen vaguely claims that Progress has "failed to properly and objectively consider the full spectrum of alternative energy technology resources in Florida …" but never even mentions solar thermal hot water heaters. Quillen Declaration at 2. In addition, Quillen does not offer any opinion regarding the relevant issue, whether solar thermal hot water heaters are capable of replacing Levy's baseload generation and, therefore, should have been analyzed in the generation alternatives section of the Application. Accordingly, to the extent

Contention 9 also cites a "case study" which Petitioners claim shows that a group of Lakeland Electric customers who participated in a pilot program "were able to replace 8.3% of their energy consumption by installing thermal solar water heaters on their homes." Petition at 98. From the information contained in the case study, however, it is not clear how Petitioners reached the conclusion that 8.3% of the participants' energy consumption was replaced by solar thermal water heaters. In addition, even if accurate, the fact that customers in one pilot program in one Florida municipality were able to replace 8.3% of their power with solar water heaters clearly does not support a claim that such water heaters could displace the need for 2200MWe of baseload generation. As noted previously, the need for power determination in ER Chapter 8, and the FPSC's finding of need, took into consideration efficiencies, conservation, and demand-side management, including solar water heaters.

Accordingly, the Board should reject Contention 9 because the Petitioners have provided no factual or expert support for the claim that solar thermal water heaters should have been analyzed in Chapter 9 of the ER as a viable generation alternative to Levy. 10 C.F.R. § 2.309(f)(1)(v).

3. Petitioners' Claims Regarding The Cost Of Levy And The Economic Well-Being Of Ratepayers Are Not Properly Supported And Are Beyond The Scope Of This Proceeding

In Contention 9, Petitioners also claim that "[a]dopting a more expensive alternative energy source such as nuclear will be detrimental to the economic well being of ratepayers." Petition at 98. Petitioners, however, provide no support for their assertion that Levy is a "more

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that Petitioners intended to rely on this uncited Declaration, it fails to provide adequate support for Contention 9. See American Centrifuge Plant, LBP-05-28, 62 N.R.C. at 597 (expert opinions must indicate the existence of adequate support for the contention).

expensive alternative" than solar thermal hot water heaters.[90] Such bald, unsupported assertions cannot form the basis of an admissible contention. Private Fuel Storage, LBP-98-7, 47 N.R.C. at 180.

In addition, as Progress's response to Contention 3 explains, since the ER concludes that there is no environmentally preferable alternative to Levy, the cost of Levy as compared with other alternative energy sources is not relevant in this proceeding. Furthermore, as also set forth in Progress's Contention 3 response, the FPSC, and not the NRC, is responsible for protecting the "economic well being of ratepayers" in Florida. Accordingly, Petitioners' claims regarding (a) costs of Levy (as compared to solar thermal water heaters); and (b) "ratepayer well-being" do not support admission of Contention 9 because they are not properly supported and raise issues beyond the scope of this proceeding. 10 C.F.R. §§ 2.309(f)(1)(iv) and (v).

In addition, Contention 9's discussion of the costs of Levy and the economic well-being of ratepayers do not address the relevant question – whether solar thermal water heaters could provide the baseload power to be generated by Levy and, therefore, should be analyzed in Chapter 9 of the ER as a generation alternative to Levy. Accordingly, that discussion does not provide the required support for Contention 9. 10 C.F.R. § 2.309(f)(1)(v).

4. Petitioners' Claims Regarding The Radiological Consequences Of Levy Fail To Raise A Material Dispute With The Application

In Contention 9, Petitioners claim that "[a]dopting a … alternative energy source such as nuclear" burdens the Petitioners with "the potential for radiological consequences of accidents

[90] Indeed, Progress's witness during the FPSC need determination hearing testified that solar thermal hot water heaters would be "eight times more expensive than the Levy Units." See FPSC Final Order at 17-18.

and events." Petition at 98. To the extent that Petitioners are attempting here to raise safety or environmental issues related to radiation, such claims are inadmissible.

As discussed throughout this Answer, the Commission's pleading standards require a petitioner to read the pertinent portions of the Application and supporting documents, state the applicant's position and the petitioner's opposing view, and explain why it has a disagreement with the applicant. 54 Fed. Reg. at 33,170; Millstone, CLI-01-24, 54 N.R.C. at 358. ER Chapter 7 of the Application addresses the "Environmental Impacts of Postulated Accidents Involving Radioactive Materials," while FSAR Chapter 15 contains the "Accident Analyses." Petitioners have completely failed to even cite, much less dispute, anything in the Application's analysis of the radiological consequences of accidents. In addition, Petitioners provide no factual or expert support for their idle speculation that operation of Levy has potential adverse radiological consequences. As a result, Petitioners' statements regarding radiological consequences of potential accidents or events at Levy do not justify admission of Contention 9 because they raise no material dispute with the Application and are not supported by facts or an expert report. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

In addition, Contention 9's discussion of radiological impacts does not address the relevant question – whether solar thermal water heaters could provide the baseload power to be generated by Levy and, therefore, should be analyzed in the ER as a generation alternative to Levy. Accordingly, that discussion does not provide the required support for Contention 9. 10 C.F.R. § 2.309(f)(1)(v).

I. Contention 10 (Poor Treatment of Efficiency and Omission As Option) Is Inadmissible

In Contention 10, Petitioners claim that Progress's ER "has an omission in 9.2.1.1, Initiating Conservation measures." Petition at 98-99. Petitioners also argue that "[Progress] grossly underestimated the potential for Energy Efficiency and Conservation in it's [sic] service areas." Petition at 99. In support of Contention 10, Petitioners reference a report that broadly addresses the potential for energy conservation to meet Florida's electricity demands in the coming years. Petition at 99. The Petitioners conclude Contention 10 with a number of claims, arguing that conservation measures and energy efficiency would enable Progress to avoid (1) the risks of "transmission line construction;" (2) the environmental impacts of "water use" and waste generation; and (3) "economic" and "radiological" burdens on ratepayers. Id. at 99-100.

As set forth below, Contention 10 is inadmissible because it: (1) fails to raise a material dispute with the Application; (2) lacks the required factual or expert support; (3) raises matters that are outside the scope of this proceeding; and (4) raises matters that are not material to the determination the Board must make in this proceeding. 10 C.F.R. §§ 2.309(f)(1)(iii), (iv), (v), and (vi).

1. Petitioners' Claims That The ER Omits A Required Analysis Raise No Material Dispute With The Application

In their discussion of Contention 10, Petitioners claim that the ER "has an omission" in Section 9.2.1.1. See Petition at 98-99. Under the Commission's pleading requirements, "[i]f the petitioner believes that the application fails to contain information on a relevant matter as required by law," the petitioner must, in order to show a genuine dispute on a material issue, identify each "failure and the supporting reasons for the petitioner's belief." 10 C.F.R. § 2.309(f)(1)(vi). Contention 10, however, never identifies anything that is missing from the ER.

Moreover, the theme of Contention 10 – that the ER "underestimates" energy efficiency and conservation – demonstrates Petitioners' belief that those topics are, in fact, addressed in the Application. Accordingly, Petitioners' claim that there is an "omission" in ER Section 9.2.1.1 does not support Contention 10 because it fails to raise a genuine issue of material dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi).

2. Petitioners' Claims That The ER's Demand Side Management Analysis Is Insufficient Fail To Raise A Material Dispute With The Application And Lack The Required Support

As set forth above, Contention 10 claims that Progress "grossly underestimated the potential for Energy Efficiency and Conservation in it's [sic] service areas." Petition at 99. This claim lacks factual or expert support and fails to raise a material dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

ER Sections 9.2.1.1 and 9.2.1.1.1 describe in detail Progress's many programs for conservation measures and energy efficiency. Moreover, as Section 9.2.1.1 states, ER Sections 8.2.2.2 and 8.4 provide further detailed information concerning Progress's efforts to encourage energy efficiency and substitutions. All of those ER Sections set forth the wide range of Progress's efficiency and conservation programs (sometimes referred to as "DSM" programs in this Answer). Indeed, as the ER shows, Progress's DSM programs have been successful. For example, as Section 9.2.1.1.1 points out: "In addition to eliminating the need for 17 peaking generating facilities, [Progress's] energy-efficiency programs have also averted the production of more than 10 billion kilowatt hours of electricity." ER at 9-4. Nevertheless, the Application concludes that DSM measures "do not satisfy the 2200 MWe of baseload output proposed to be generated by the LNP." ER at 9-5.

Although Petitioners cite ER Section 9.2.1.1, they never challenge the particular data set forth in that Section which explain Progress's specific DSM efforts and the ER's conclusion that DSM would not be sufficient to meet the needed baseload generation. Nor do Petitioners even mention the DSM discussion in Chapter 8. Instead, Petitioners make unsupported claims that Progress "grossly underestimates the potential of energy efficiency and conservation," and that Progress's conservation effort is just a "public relation" campaign and a "half hearted effort" at DSM. Petition at 99. Petitioners, however, do not make any specific showing demonstrating how the ER supposedly has "grossly underestimated" DSM. Nor do the Petitioners controvert or challenge any specific aspect of the ER's discussion regarding Progress's many DSM efforts and their successes. Accordingly, Petitioners' claims that Progress has "grossly underestimated," and has engaged in a "public relations" campaign and a "half-hearted effort" at DSM, are bald, unsupported assertions that fail to raise a material dispute with the Application. 10 C.F.R. § 2.309(f)(1)(vi).

Petitioners state that "factual evidence" for this Contention is set forth in the ACEEE report that is described in Progress's Answer to Contention 9. According to Petitioners, the report's summary concludes that "with the proper incentives and leadership, 30% of Florida's energy needs could be met by conservation and renewable resources in 2023." Petition at 99. As discussed in Progress's response to Contention 9, however, at most the ACEEE report concludes that 30% of Florida's needs *could* be met *in 2023* by renewables and energy efficiency if Florida implemented *the specific eleven policies described in the report.* The ACEEE report – prepared more than a year before the Application was even filed – clearly was not commenting on whether Progress's Application underestimates the potential for efficiency and conservation, nor does it challenge the Application's conclusion that such programs are not a substitute for

baseload generation from Levy. Petitioners do not cite to anything in the ACEEE report that criticizes Progress's DSM efforts in particular, or concludes that those efforts are "half-hearted" or merely a "public relations" campaign. Accordingly, Contention 10 lacks the required factual or expert support.[91] 10 C.F.R. § 2.309(f)(1)(v).

3. Petitioners' Claims Regarding The ER's DSM Analysis Raise Matters That Are Outside The Scope Of This Proceeding And That Are Not Material To The Board's Findings

The licensing board in Summer recently denied a contention that was almost identical to Contention 10. In that case, as here, the applicant argued that DSM-related programs were not a substitute for over 2000 megawatts of baseload generation. According to the Summer Board:

> [b]ecause a DSM program is not a substitute for the addition of base-load power, which is the accepted project purpose, this challenge raises matters outside the scope of this proceeding, thus failing to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iii), and raises matters that are not material to the determination the NRC must make, thus failing to satisfy the requirements of 10 C.F.R, § 2.309(f)(1)(iv).

Summer, LBP-09-02, slip op. at 23.[92] The Summer Board's analysis "turn[ed] upon NRC policy to defer to Applicant's stated purpose (to produce base-load power), so long as reasonable alternative means of achieving that specific goal are examined." Id. at 22.[93]

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[91] Progress notes that the ACEEE report is attached to the Quillen Declaration. The Petition, however, never cites that Declaration. That Declaration contains the conclusory, unsupported statement that: "PEF has failed to properly and objectively consider the potential of energy conservation and efficiency as an alternative to new generating capacity." Quillen Declaration at 2. That is the extent of Quillen's statements regarding DSM. There are no specific cites to the Application, discussion of Progress's alleged failures, or any specificity whatsoever regarding the supposed shortcomings of the Application's analysis of efficiency and conservation. In addition, Quillen does not offer any opinion regarding the relevant issue, whether DSM programs are capable of replacing 2200 MWe of baseload generation. Accordingly, to the extent Petitioners intended to rely on this uncited Declaration, it fails to provide any support for Contention 10. See American Centrifuge Plant, LBP-05-28, 68 N.R.C. at 597.

[92] See also id. at 23 n.86 (noting "that in Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), 05-29, 62 NRC 801, (2005), the Commission affirmed the Clinton ESP Licensing Board's rejection of a similar assertion of error regarding DSM analysis").

Similar to the COLA in Summer, the stated purpose of Progress's Application is to install a facility that would generate more than 2000 MWe of baseload electricity for its customers. Accordingly, any reasonable alternative must be able to generate equivalent baseload power. Chapter 9 of the ER addresses a long list of potential alternatives to Levy. Those alternatives included DSM programs, which the Application found could not meet the baseload requirements. See e.g., ER at 9-4, 9-5. Thus, given that DSM programs are not a substitute for baseload power, and for the reasons set forth in Summer, Contention 10 should be rejected because it raises matters that are (1) outside the scope of this proceeding; and (2) not material to the determination the Board must make. 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv).

4. Petitioners' Claims Regarding The Cost Of Levy And The Economic Well-Being Of Ratepayers Are Not Properly Supported And Are Beyond The Scope Of This Proceeding

In Contention 10, Petitioners also claim that "adopting a more expensive alternative energy source such as nuclear will be detrimental to the economic well being of ratepayers." Petition at 99. Petitioners make a similar claim in Contention 9 with respect to solar water heaters. For the reasons set forth in Section A.3 of Progress's response to Contention 9, this claim does not support admission of Contention 10 because it is irrelevant to the issue raised by the Contention, lacks the required factual or expert support, and raises issues beyond the scope of this proceeding. 10 C.F.R.§§ 2.309(f)(iv) and (v).

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[93] See id. at 22 n.84 ("In 10 C.F.R. § 51.45(b)(3), the NRC's regulations adopt NEPA's requirement that an agency consider alternatives that are 'appropriate alternatives to recommended courses of action.' 42 U.S.C. § 4332(2)(E). A reviewing agency determines whether an alternative is 'appropriate' by looking at the objectives (i.e., purpose and need) of a project sponsor. See Citizens Against Burlington, Inc. v. Busy, 938 F.2d 190, 195 (D.C. Cir. 1991). So long as the applicant has 'not set forth an unreasonably narrow objective of its project,' see 68 Fed. Reg. at 55, 910, the NRC adheres to the principle that 'when the purpose is to accomplish one thing, it makes no sense to consider alternative ways by which another thing might be accomplished.' Citizens Against Burlington, 938 F.2d at 195 (citing City of Angoon , 803 F.2d 1016, 1021(9th Cir. 1986)").

5. Petitioners' Claims Regarding The Radiological Consequences Of Levy Lack the Required Support And Fail To Raise A Material Dispute With The Application

In Contention 10, Petitioners claim that operating a nuclear plant rather than utilizing demand side management "burdens" the Petitioners "with the potential for radiological consequences of accidents and events at the proposed Levy units 1 and 2." Petition at 99-100. Petitioners raised a similar claim in Contention 9 with respect to solar water heaters. Accordingly, for the reasons set forth in Section A.4 of Progress's response to Contention 9, this claim does not support admission of Contention 10 because it is irrelevant to the issue raised by the Contention, lacks the required factual or expert support, and raises no material dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

6. Petitioners' Claims Regarding Transmission Lines, Water Related Impacts, and Nuclear Waste Generation Fail To Raise A Material Dispute With The Application

In Contention 10, Petitioners also claim that "aggressive conservation and efficiency would not require further transmission line construction," and that "transmission lines carry many costs and risks." Petition at 99. Petitioners also claim that "energy efficiency does not increase the burden of water use…nor does it generate waste." Id. To the extent that Petitioners are attempting here to raise safety or environmental issues related to transmission line construction and operation, nuclear waste generation, and/or water related impacts, such claims are inadmissible.

The Commission's pleading standards require a petitioner to read the pertinent portions of the Application and supporting documents, state the applicant's position and the petitioner's opposing view, and explain why it has a disagreement with the applicant. 54 Fed. Reg. at 33,170; Millstone, CLI-01-24, 54 N.R.C. at 358. Petitioners in this Contention completely failed

to cite, much less dispute, anything in the Application's analyses of transmission line construction and operation (e.g. ER Sections 3.7, 4.0, 4.1.2, 4.3.2.4, 5.1.2, and 5.6), nuclear waste generation and management, (e.g. ER Sections 3.5, 3.8, and 5.5), or water related impacts (e.g. ER at 4.2, 5.2, and 5.3). In addition, Petitioners provide no factual or expert support for any of their speculation. As a result, Petitioners' bald, unsupported statements regarding transmission line construction and operation, water related impacts, and generation of nuclear waste do not justify admission of Contention 10, because they raise no material dispute with the Application and are not supported by facts or an expert report. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

Moreover, to the extent Petitioners' claims that DSM should be used to avoid transmission line construction/operation, water related impacts, and generation of wastes are viewed as a challenge to the need for Levy or to the ER's alternatives analysis, those claims fail. As set forth above, nothing in Contention 10 contains a properly supported challenge to the Application's conclusion that DSM programs cannot satisfy the baseload need that will be met by Levy, nor does Contention 10 take issue with ER Chapter 8's need for power analysis or the FSPC's Final Order which found that Levy is necessary. For these additional reasons, Petitioners' claims are not properly supported and fail to raise a material dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(v) and (vi).

J. Contention 11 (Omission And Failure To Analyze Distributed Generation) Is Inadmissible

Contention 11 states: "The basis for PEF's analysis of renewable energy options is inherently flawed since all options assessed are assumed to be centralized power production sites; PEF fails to assess distributed generation using renewable energy technologies." Petition

at 100. Contention 11 also makes numerous general statements regarding the supposed benefits of decentralized power generation as compared to a single large generation facility.

As set forth below, Contention 11 is inadmissible because it raises matters that are outside the scope of this proceeding, raises matters that are not material to the finding the Commission must make, lacks adequate factual or expert support, and fails to raise a material dispute with the Application. 10 C.F.R. §§ 2.309(f)(iii), (iv), (v), (vi).

1. Petitioners Have Not Shown That Distributed Generation Using Renewable Energy Is A Reasonable Alternative To Levy

Contention 11 argues that Progress "has failed to assess distributed generation using renewable energy technologies." Petition at 100. When asserting such a contention of omission, a petitioner must show that the alleged omission is relevant because the application was required to address the omitted issue. Grand Gulf ESP, CLI-05-04, 61 N.R.C. at 13. Petitioners have failed to satisfy this standard, because they do not offer reasoned support that distributed generation using renewables is a reasonable alternative to Levy. Accordingly, Contention 11 fails to raise a material dispute with the Application, and raises matters that are outside the scope of this proceeding and immaterial to the decision the Commission must make. 10 C.F.R. §§ 2.309(f)(1)(iii), (iv) and (vi).

Chapter 9 of the ER extensively analyzes the following set of alternatives: wind, geothermal, hydropower, solar power (concentrating solar power systems and photovoltaic cells), wood waste (and other biomass), municipal solid waste, energy crops, petroleum liquids, fuel cells, coal, natural gas, integrated gasification combined cycle, and various combinations of the above. ER at 9-6 to 9-32. This analysis concluded that there were no environmentally preferable alternatives to the baseload generation that will be provided by Levy. ER at 9-32.

Specifically, with respect to wind and solar (the two primary technologies mentioned in Contention 11[94]), the ER finds that "[b]ecause of the intermittent nature of the resource and the lack of cost-effective technology, wind and solar power generation are not sufficient on their own to generate the equivalent baseload capacity or output of the LNP." ER at 9-28. Similarly, the FPSC's Final Order in the Levy need determination proceeding found that "renewable alternatives such as solar [and] wind … have not yet become cost-effective, and these technologies are highly dependent upon intermittent natural energy sources that can be a valuable energy resource but cannot be depended upon to produce firm capacity." Final Order at 18. Thus, the Final Order concluded: "based on the record, we find there are no renewable energy sources and technologies … reasonably available for PEF that might mitigate the need for Levy Units 1 and 2." Id. at 17-18.

As the Board in the Summer COL proceeding recently found, based on U.S. Supreme Court precedent, a COL "applicant is not required to examine all possible alternatives, but only those that can reasonably accomplish [the applicant's] elected purpose." Summer, LBP-09-02, slip op. at 25, citing Vt. Yankee Nuclear Power Corp., 435 U.S. at 551. Since Progress's elected purpose in the Application is to generate baseload power (and the FPSC has determined that baseload power is necessary), the reasonable alternatives to Levy that must be considered in the NEPA analysis are limited to those that could provide baseload generation. Clinton ESP, LBP-05-19, 60 N.R.C at 157-58; Summer, LBP-09-02, slip op. at 22-26; see also Envtl. Law & Policy Ctr. v. NRC, 470 F.3d 676, 683-84 (7th Cir. 2006). Moreover, when a petitioner claims that there is an omission in an alternatives analysis, the burden is on the petitioner to propose

[94] Contention 11 also references "appropriate hydro." Petition at 100. It is unclear what Petitioners mean by "appropriate" hydro. In any event, as the ER states, there are no new hydropower units planned in Florida due to the absence of a feasible location given Florida's flat terrain. ER at 9-13.

reasonable alternatives that would serve the purpose identified by the applicant. Clinton ESP, LBP-05-19, 60 N.R.C. at 157-58; Summer, LBP-09-02, slip op. at 22-26.[95] Petitioners have not met their burden here.

Nothing in the Petition comes close to making the showing that distributed generation using renewable resources is a reasonable alternative to Levy. Contention 11 does not address, much less contradict or challenge, the conclusions of ER Chapter 9 and the FPSC that solar and wind technologies are intermittent, not cost-effective, and cannot provide the necessary baseload power to be generated by Levy. Petitioners have not shown why an analysis of *distributed* solar or wind power would reach a different conclusion. Nor have they even suggested how distributed generation using any renewable resources could provide the necessary baseload power or meet Progress's business objectives.

Since Petitioners have not shown that distributed generation is a reasonable alternative to Progress's selected purpose for the Application – baseload generation – Contention 11 raises an issue that is outside the scope of this proceeding and immaterial to the decision the Commission must make, and that Contention also fails to allege a material dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(iii), (iv) and (vi).

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[95] In reaching this conclusion, the Boards in Clinton and Summer also relied on the U.S. Court of Appeals for the D.C. Circuit's finding that:

> In commanding agencies to discuss "alternatives to the proposed action," however, NEPA plainly refers to alternatives to the "major *Federal* actions significantly affecting the quality of the human environment," and not to alternatives to the applicant's proposal. An agency cannot redefine the goals of the proposal that arouses the call for action; it must evaluate the alternative ways of achieving *its* goals, shaped by the application at issue and by the function that the agency plays in the decisional process. Congress did expect agencies to consider an applicant's wants when the agency formulates the goals of its own proposed action. Congress did not expect agencies to determine for the applicant what the goals of the applicant's proposal should be.

Citizens Against Burlington v. Busey, 938 F.2d 190, 199 (D.C. Cir.), cert. denied, 502 U.S. 994 (1991) (citation omitted) (emphasis in original).

2. Petitioners' Claims That The ER's Energy Alternatives Analysis Should Have Discussed Distributed Generation From Renewables Lack The Required Factual Or Expert Support

a. The Quillen Declaration Does Not Support Contention 11

As "expert support" for Contention 11, Petitioners apparently rely on the Quillen Declaration (although that Declaration is not cited in Contention 11's discussion), which states:

> PEF's analysis of renewable energy options is inherently flawed since all options assessed are [sic] assume the need for centralized power production and fail to assess the potential of distributed generation using renewable energy technologies.

Quillen Declaration at 2. See Petition at 100. Quillen, however, provides no basis for this conclusory statement. He never shows why it is "inherently flawed" to assume the need for centralized power, or how "distributed generation using renewable energy technologies" could replace the 2200 MWe of baseload power from Levy that the FPSC has determined is necessary.

Quillen's statement is nothing more than a statement that simply alleges something ought to be considered, which does not provide a sufficient basis for a contention. Rancho Seco, LBP-93-23, 38 N.R.C. at 246; See also American Centrifuge Plant, LBP-05-28, 62 N.R.C. at 597 (expert opinions must indicate the existence of adequate support for the contention). The Declaration does not even address the issue of whether decentralized renewable energy technologies could "reasonably accomplish the applicant's elected purpose" – providing 2200 MWe of baseload generation. See Vt. Yankee Nuclear Power Corp., 435 U.S. at 551. Accordingly, the Quillen Declaration fails to support Contention 11 and fails to raise a material dispute with the Application.[96] 10 C.F.R. §§ 2.309(f)(v) and (vi).

[96] Quillen's Declaration also states:

> Progress energy should not be permitted, in the interest of corporate and shareholder profit motive, to use public resources to develop a centralized energy infrastructure that

b. The New York Times Article And Books Cited By Petitioners Do Not Support Admission Of Contention 11

Petitioners' other support for Contention 11 is equally lacking. Petitioners cite to a New York Times article as an example of solar leasing which, Petitioners argue, Progress "fails to include" in its alternatives analysis. Petition at 101. As stated above, Progress is not required to examine all possible alternatives to Levy; it is only obligated to examine a reasonable set of alternatives that are viable to accomplish its purpose. A single New York Times article describing a few entities that participate in solar leasing hardly provides factual or expert support for the proposition that solar leasing is a reasonable alternative to construction of a 2200 MWe baseload power plant. Accordingly, the New York Times article does not provide the requisite support for Contention 11. 10 C.F.R. § 2.309(f)(1)(v).

Petitioners also cite to a more than 200 page book titled "Winning Our Energy Independence." Petition at 101 & 102 n.33. The purpose of this cite is not entirely clear. Petitioners appear to cite the book for the proposition that distributed generation of renewable energy will promote energy independence. Whether a particular type of energy will assist with energy independence is outside the scope of this proceeding, not material to the findings the Commission must make, and is irrelevant to the question of whether distributed generation using renewable technologies can provide the required baseload power. Furthermore, Petitioners do

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> is clearly not in the best interest of the citizens it serves and the environment we all live in.

Quillen Declaration at 2. To the extent that Petitioners are relying on this statement (which they do not cite in the Petition) as support for Contention 11 because it criticizes a "centralized energy infrastructure," the statement clearly does not address the relevant issue of whether distributed energy from renewables is a reasonable alternative to baseload generation from Levy and therefore should have been analyzed in the Application. It also consists of a number of conclusory, unsupported assertions, especially regarding Progress's "profit motive" for constructing Levy. In addition, its claims regarding Progress's use of "public resources" and "the best interests of customers it serves" are irrelevant to the question of whether Petitioners provide reasoned support for the conclusion that distributed generation can displace baseload power to be provided by Levy, and raise economic and rate issues addressed by state regulators that are outside the scope of this proceeding. Accordingly, the quoted statement – and the entire Declaration – fails to provide the necessary support for Contention 11.

not cite to any specific page or passage in the book to support the Contention. Accordingly, the book does not provide a basis for admitting Contention 11. See Seabrook, CLI-89-03, 29 N.R.C. at 240-41 ("a petitioner may not simply incorporate massive documents by reference as the basis for a statement of his contentions"); Millstone, LBP-04-15, 60 N.R.C. at 89 & n.26 ("petitioners are expected to clearly identify the matters on which they intend to rely, with reference to a specific point").

Similarly, Petitioners also cite to a more than 250 page book titled "Carbon-Free and Nuclear-Free: A Roadmap for U.S. Energy Policy" for the assertion that a nuclear plant is "not the best investment we can make towards a clean, safe, sustainable and carbon neutral energy future." Petition at 101-102. Petitioners' assertion is irrelevant to the question of whether the Application's alternatives analysis should include distributed generation using renewable technologies. Petition at 101. In addition, Petitioners again cite no page or passage in the book to support the Contention. As set forth above, mere reference to a document does not provide an adequate basis for a Contention. Seabrook, CLI-89-03, 29 N.R.C. at 240-41; Millstone, LBP-04-15, 60 N.R.C. at 89 & n.26.

For these reasons, Petitioners' assertions regarding the two books described above do not support admission of Contention 11 because those assertions: (1) raise matters outside the scope of this proceeding; (2) raise matters that are not material to the findings the Commission must make; (3) do not provide factual or expert support for the Contention; and (4) fail to raise a material dispute with the Application. 10 C.F.R. §§ 2.309(f)(1)(iii), (iv), (v), and (vi).

c. Petitioners' Conclusory Statements Regarding The Advantages Of Distributed Generation Do Not Support Admission Of Contention 11

Contention 11 also recites a host of unsupported, conclusory statements regarding the alleged advantages of distributed generation with respect to such topics as safety, efficiency, economy of scale, transmission, water use, water consumption, water withdrawals, waste, costs, environmental impact, and security. Petition at 100-102. Nothing in that entire discussion addresses the relevant question – whether distributed generation from renewables could provide the baseload power to be generated by Levy and, therefore, should be analyzed in the ER as an alternative to Levy. Accordingly, those statements do not provide the required support for Contention 11. 10 C.F.R. § 2.309(f)(1)(v).

In addition, none of Petitioners' conclusions are supported by facts or expert opinion demonstrating that the alleged advantages actually exist. Nor does that discussion provide references to Sections of the Application that Petitioners dispute. These allegations are precisely the type of bald, unsupported assertions that do not justify admission of a Contention. Private Fuel Storage, LBP-98-7, 47 N.R.C. at 180.

Moreover, as set forth above, Petitioners have not shown that distributed generation of renewable resources is a reasonable alternative to Levy's baseload power that should have been analyzed in the ER. Absent such a showing, all of the matters raised by Petitioners regarding the alleged, but unsupported, benefits of distributed generation are outside the scope of this proceeding and not material to the determination that must be made by the Commission. 10 C.F.R. §§ 2.309(f)(1)(iii) and (iv).

V. Selection of Hearing Procedures

Commission rules require the Atomic Safety and Licensing Board designated to rule on the Petition 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). Petitioners did not address the selection of hearing procedures in their Petition and, therefore, did not satisfy their burden to demonstrate why Subpart G procedures should be used in this proceeding. Accordingly, any hearing arising from the Petition should be governed by the procedures of Subpart L.

VI. Conclusion

For all of the foregoing reasons, the Petition should be denied.

Respectfully Submitted,

/Signed electronically by John H. O'Neill, Jr./

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March 3, 2009

March 3, 2009

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	Docket Nos. 52-022-COL
Progress Energy Florida, Inc.	)	52-023-COL
	)	
Levy County Nuclear Power Plant, Units 1 and 2	)	ASLBP No. 09-879-04-COL-BD01

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "Progress Energy's Answer Opposing Petition to Intervene and Request for Hearing By the Green Party of Florida, the Ecology Party of Florida, and Nuclear Information and Resource Service" dated March 3, 2009, were provided to the Electronic Information Exchange for service to those individuals on the service list in this proceeding, and courtesy copies were provided by email to the persons listed below, this 3rd day of March 2009.

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