

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)
)
SOUTH CAROLINA ELECTRIC AND GAS)
COMPANY)
) Docket Nos. 52-027 and 52-028
(Virgil C. Summer Nuclear Station,)
Units 2 and 3))

NRC STAFF BRIEF IN OPPOSITION TO
APPEAL OF LBP-09-2 BY SIERRA CLUB AND FRIENDS OF THE EARTH

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INTRODUCTION

Pursuant to 10 C.F.R. § 2.311(a), the staff of the Nuclear Regulatory Commission (Staff) hereby files a brief in opposition to the Notice of Appeal and Appeal Brief, filed on February 27, 2009, by Sierra Club and Friends of the Earth (Petitioners), regarding the Atomic Safety and Licensing Board's (Board's) decision in *South Carolina Electric & Gas Co. & South Carolina Public Service Authority (Also Referred to as Santee Cooper)* (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-09-2, 69 NRC __ (Feb. 18, 2009) (slip op.) (hereinafter "Summer Order"). This decision, among other things, concluded that the Petitioners' intervention petition (Petition) failed to comply with the contention admissibility requirements of 10 C.F.R. § 2.309 and that standing had only been established by the Sierra Club. As discussed below, the Board properly found that the Petitioners had not offered an admissible contention. The Board also committed no error of law or abuse of discretion in rejecting the standing arguments of Friends of the Earth. The Board's rulings should be upheld.

STATEMENT OF THE CASE

By letter dated March 27, 2008, South Carolina Electric and Gas Company (SCE&G or Applicant), acting for itself and as agent for the South Carolina Public Service Authority (also referred to as "Santee Cooper") submitted a COL application (Summer COL application or

COLA) for two AP1000 advanced passive pressurized water reactors (PWRs) to be located in Fairfield County, South Carolina. The Federal Register notice of receipt and availability of the Summer COL application was published on July 9, 2008 (73 Fed. Reg. 39,339), and the Summer COL application was accepted for docketing on July 31, 2008. The Federal Register docketing notice was published on August 6, 2008 (73 Fed. Reg. 45,792), and the Federal Register notice of hearing was published on October 10, 2008 (73 Fed. Reg. 60,362).

The Petitioners filed their intervention petition on December 9, 2008, which was accompanied by a declaration from Petitioners' proffered expert and several standing declarations (Standing Declarations). On January 5, 2009, the Staff and the Applicant filed answers to the Petition ("Staff Answer" and "Applicant Answer"), both of which argued that the Petition should be denied. Petitioners submitted a Reply to the Answer on January 12, 2009, which included modified versions of two of the standing declarations submitted with its Petition (Amended Standing Declarations).¹ On February 18, 2009, the Atomic Safety and Licensing Board issued LBP-09-2, which is now being appealed by Petitioners.

Two important parts of the Summer COL application that will be discussed extensively below are the Summer COL Final Safety Analysis Report (FSAR) and Environmental Report (ER). The Summer COL application also incorporates by reference 10 C.F.R. Part 52, Appendix D (which includes the AP1000 generic design control document (DCD) through Revision 15 (AP1000 R15)), as amended by AP1000 DCD, Revision 16 (AP1000 R16) "and Westinghouse Technical Report APP-GW-GLR-134, 'AP1000 DCD Impacts to Support COLA Standardization,' Revision 4, which was submitted on March 20, 2008."² The AP1000

¹ In response to the Petitioners' Reply, the Applicant filed a "Motion to Strike Portions of the Sierra Club and Friends of the Earth Reply" on January 22, 2009. In LBP-09-2, the Board denied the Applicant's motion as moot.

² Summer COL Application cover letter (ADAMS Accession No. ML081300460) (letter dated March 27, 2008). See *also* Hearing Notice, 73 Fed. Reg. at 60,362. Technical Report APP-GW-GLR-134 (TR-134) (ADAMS Package Accession No. ML080850419) has the purpose of identifying impacts to the

amendments remain subject to an ongoing NRC rulemaking under Docket No. 52-006. AP1000 R16 was accepted for docketing in that rulemaking proceeding and a notice to that effect was published in the Federal Register on January 28, 2008 (73 Fed. Reg. 4926). Revision 17 of the AP1000 design certification amendment, dated September 22, 2008, was published on the NRC public website on November 25, 2008.³ The Applicant has not yet incorporated AP1000 R17 into its FSAR, but it has incorporated AP1000 R17 information into its ER.⁴

STATEMENT OF THE ISSUES

The issue presented is whether the Board wrongly denied the Petition. Successful intervention requires both a demonstration of standing and the submission of an admissible contention. With respect to Sierra Club, since the Board found that Sierra Club had established standing, the Board's decision should be reversed only if it committed an error of law or abuse of discretion that caused it to wrongly reject one or more of the proffered contentions. With respect to Friends of the Earth, the Board's decision should be reversed only if it committed an error of law or abuse of discretion in both its standing and contention determinations, such that intervention for Friends of the Earth should have been granted.

AP1000 R16. TR-134 describes these impacts as those:

which occurred or were discovered subsequent to the submittal of the DCD in support of the AP1000 design certification amendment, [and] may be in the form of: DCD discrepancies; responses to requests for additional information (RAIs) issued against prior technical reports, where those responses contain DCD changes; and correction of typographical errors and other minor corrections. This report addresses DCD Revision 16 impacts for Tier 1, Tier 2*, and Tier 2. This document is provided to track the DCD impacts and thereby maintain consistency between the AP1000 Design Certification Amendment Application and the COL applications that reference the AP1000 Design Certification Rulemaking. The impacts included in this document will be incorporated into the AP1000 DCD in a forthcoming revision.

TR-134 at 1 (non-proprietary version). To some extent, TR-134 represents a bridge between Revisions 16 and 17 of the AP1000 design certification.

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<http://adamswebsearch2.nrc.gov/idmws/ViewDocByAccession.asp?AccessionNumber=ML083230868>.

⁴ The Applicant submitted Revision 1 to the ER by letter dated February 13, 2009, which incorporates information from AP1000 R17. (ADAMS Accession No. ML090510267). The ADAMS Package Accession Number for ER, Revision 1, is ML090510261.

LEGAL STANDARDS

I. Legal Standards for Review of a Board Order Denying a Petition to Intervene

Pursuant to 10 C.F.R. § 2.311(b), “An order denying a petition to intervene and/or request for a hearing is appealable by the requestor/petitioner on the question as to whether the request and/or petition should have been granted.” Because the Petition was wholly denied, this is an appeal as of right pursuant to 10 C.F.R. § 2.311(b). Appeals, and answers to appeals, under 10 C.F.R. § 2.311 must meet the requirements of § 2.311(a), which incorporates the requirements of 10 C.F.R. § 2.341(c)(2) for the briefs submitted by the parties.

The legal standards applicable to the Commission's review of the Board's rulings are set forth in Commission adjudicatory decisions. These decisions state that the Commission will give substantial deference to the Boards' determinations on threshold issues and will regularly affirm Board decisions on issues of admissibility of contentions where the appeal fails to point to an error of law or abuse of discretion. See *AmerGen Energy Company, LLC*, (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 121 (2006) (citing *USEC Inc. (American Centrifuge Plant)*, CLI-06-09, 63 NRC 433, 439 n.32 (2006)). Similarly, Board standing determinations are generally subject to deferential review and will not be overturned absent error of law or abuse of discretion. See *International Uranium (USA) Corp. (White Mesa Uranium Mill)*, CLI-01-18, 54 NRC 27, 31 (2001).

A petitioner appealing a Board's denial of intervention “bears the responsibility of clearly identifying the errors in the decision below and ensuring that its brief contains sufficient information and cogent argument to alert the other parties and the Commission to the precise nature of and support for the appellant's claims.” *Dominion Nuclear Conn., Inc. (Millstone Nuclear Power Stations, Units 2 and 3)*, CLI-04-36, 60 NRC 631, 639 n.25 (2004) (quoting *Advanced Medical Systems, Inc. (One Factory Row, Geneva, Ohio 44041)*, CLI-94-6, 39 NRC 285, 297 (1994)). The Commission applied this principle in *Millstone* to reject on appeal

“general arguments” that failed to “come to grips with the Board’s reasons for rejecting” the contention. *Millstone*, CLI-04-36, 60 NRC at 639.

II. Legal Standards for Intervention Petitions

A. Standing to Intervene

In accordance with the Commission’s Rules of Practice:⁵

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

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

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

Id.

Under the general standing requirements, an intervention petition must state:

- (i) The name, address and telephone number of the requestor or petitioner;
- (ii) The nature of the requestor’s/petitioner’s right under the [Atomic Energy Act of 1954, as amended (Act)] to be made a party to the proceeding;
- (iii) The nature and extent of the requestor’s/petitioner’s property, financial or other interest in the proceeding; and
- (iv) The possible effect of any decision or order that may be issued in the proceeding on the requestor’s/petitioner’s interest.

10 C.F.R. § 2.309(d)(1).

As the Commission has observed:

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

⁵ See “Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders,” 10 C.F.R. Part 2.

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

To demonstrate such a "personal stake," the Commission applies contemporaneous judicial concepts of standing. Accordingly, petitioner must (1) allege an "injury in fact" that is (2) "fairly traceable to the challenged action" and (3) is "likely" to be "redressed by a favorable decision."

Sequoyah Fuels, 40 NRC at 71-72 (quoting *Lujan v. Defenders of Wildlife*, 112 S.Ct. 2130, 2136 (1992)) (citations and internal quotations omitted).

In reactor license proceedings, licensing boards have typically applied a "proximity" presumption to persons "who reside in or frequent the area within a 50-mile radius" of the plant in question. See, e.g., *Fla. Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 148 (2001).⁶ The Commission noted this practice with approval for cases involving the construction or operation of a nuclear reactor. *Fla. Power & Light Co.* (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989). The proximity presumption establishes standing without the need to establish the elements of injury, causation, or redressability. *Turkey Point*, LBP-01-6, 53 NRC at 150. Because a COL application covers both construction and operation (see 10 C.F.R. § 52.1(a)), the proximity presumption would appear, in general, to apply to such applications.

An organization may establish its standing to intervene based on organizational standing (showing that its own organizational interests could be adversely affected by the proceeding), or representational standing (based on the standing of its members). Where an organization seeks to establish "representational standing," it must show that at least one of its members may be affected by the proceeding, it must identify that member by name and address and it must show that the member "has authorized the organization to represent him or her and to

⁶ The *Turkey Point* decision summarizes the development of this doctrine. See *Turkey Point*, LBP-01-6, 53 NRC at 147-48.

request a hearing on his or her behalf.” See, e.g., *Consumers Energy Co.* (Palisades Nuclear Power Plant), CLI-07-18, 65 NRC 399, 409 (2007); *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), LBP-06-07, 63 NRC 188, 195 (2006) (citing *GPU Nuclear Inc.* (Oyster Creek Nuclear Generating Station), CLI-00-6, 51 NRC 193, 202 (2000)). Further, for the organization to establish representational standing, the member seeking representation must qualify for standing in his or her own right, the interests that the organization seeks to protect must be germane to its own purpose, and neither the asserted claim nor the requested relief must require an individual member to participate in the organization's legal action. *Palisades*, CLI-07-18, 65 NRC at 409; *Private Fuel Storage*, CLI-99-10, 49 NRC at 323 (citing *Hunt v. Wash. State Apple Advertising Comm'n*, 432 U.S. 333, 343 (1977)).

B. Legal Requirements for Contention Admissibility

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

Section 2.309(f) provides:

- (1) A request for hearing or petition for leave to intervene must set forth with particularity the contentions sought to be raised. For each contention, the request or petition must:
 - (i) Provide a specific statement of the issue of law or fact to be raised or controverted;
 - (ii) Provide a brief explanation of the basis for the contention;
 - (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
 - (iv) Demonstrate that the issue raised in the contention is material to the findings the NRC must make to support the action that is involved in the proceeding;
 - (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue;

- (vi) In a proceeding other than one under 10 CFR 52.103, provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact. This information must include references to specific portions of the application (including the applicant's environmental report and safety report) that the petitioner disputes and the supporting reasons for each dispute, or, if the petitioner believes that the application fails to contain information on a relevant matter as required by law, the identification of each failure and the supporting reasons for the petitioner's belief; and

* * *

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

10 C.F.R. § 2.309(f)(1) and (2). The Commission has emphasized that the rules on contention admissibility are "strict by design." *Dominion Nuclear Connecticut, Inc.* (Millstone Nuclear Power Station, Units 2 and 3), CLI-01-24, 54 NRC 349, 358 (2001), *pet. for reconsideration denied*, CLI-02-01, 55 NRC 1 (2002). Failure to comply with any of these requirements is grounds for the dismissal of a contention. Final Rule, "Changes to the Adjudicatory Process," 69 Fed. Reg. 2182, 2221 (Jan 14, 2004); *see also Private Fuel Storage, L.L.C.*, CLI-99-10, 49 NRC at 325; *Ariz. Pub. Serv. Co. et al.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991). "Mere 'notice pleading' does not suffice." *Amergen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 119 (2006).

These rules focus the hearing process on real disputes susceptible to resolution in an adjudication. *See Duke Energy Corp.* (Oconee Nuclear Station, Units 1, 2, and 3), CLI-99-11, 49 NRC 328, 334 (1999). For example, "a petitioner may not demand an adjudicatory hearing to attack generic NRC requirements or regulations or to express generalized grievances about NRC policies." *Id.* NRC regulations do not allow a contention to attack a regulation unless the

proponent requests a waiver from the Commission. See 10 C.F.R. § 2.335; *Entergy Nuclear Vermont Yankee, LLC* (Vermont Yankee Nuclear Power Station), *Entergy Nuclear Generation Co.* (Pilgrim Nuclear Power Station), CLI-07-3, 65 NRC 13, 17-18 and n.15 (2007) (citing *Millstone*, CLI-01-24, 54 NRC at 364).

DISCUSSION

I. Standing

In the Petition, Sierra Club established representational standing based on the proximity of their members to the facility. See Petition at 3-6. The Petition included signed declarations from individuals who provided their address, stated that they lived within fifty miles of the facility, claimed that they were members of the Sierra Club, and authorized Sierra Club to represent them in this COL proceeding. See Standing Declarations. No party objected to the standing of Sierra Club on these grounds, and the Board agreed that the Sierra Club had standing.

Summer Order, LBP-09-2, 69 NRC __ (slip op. at 4).

The Board rejected the standing arguments of Friends of the Earth, however, concluding that Friends of the Earth had established neither representational nor organizational standing.

Id. With respect to representational standing, the Board further stated the following:

None of the affidavits from individuals living in the vicinity of the Summer site, submitted with the original Petition to Intervene and all of which are in substantially the same form, makes any mention of FOE or states that FOE is authorized to represent the affiant's interests. While FOE attempted to cure these deficiencies in its reply by attaching relevant affidavits, that effort is unavailing because it "is not acceptable in NRC practice for a petitioner to claim standing based on vague assertions, and when that fails, to attempt to repair the defective pleading with fresh details offered for the first time in [its reply]."

Id. (slip op. at 4 n.18) (quoting *Entergy Nuclear Operations, Inc. & Entergy Nuclear Palisades, LLC* (Palisades Nuclear Plant), CLI-08-19, 68 NRC __ (Aug. 22, 2008)).

Petitioners do not address the Board's organizational standing determination on appeal, but they do object to the Board's conclusion that Friends of the Earth failed to establish representational standing. Licensing board standing determinations are subject to deferential

review and generally will not be overturned absent error of law or abuse of discretion.

See *White Mesa*, CLI-01-18, 54 NRC at 31. The Staff believes that the Board did not commit an error of law or abuse of discretion in rejecting the standing arguments of Friends of the Earth.

The Board correctly recognized that none of the Petitioners' Standing Declarations contained a statement authorizing Friends of the Earth to represent the affiant, and the Board relied upon Commission precedent in rejecting attempts to cure these deficiencies with Petitioners' Reply.⁷

II. The Board Properly Found That No Admissible Contentions Were Submitted

A. The Board Properly Rejected Contention 1 on AP1000 Deficiencies.

The Board did not commit legal error or abuse of discretion in denying Contention 1.

Petitioners stated their first contention, titled "AP1000 Deficiencies," as follows:

The COLA is incomplete at this time because many of the major safety components and procedures proposed for the Summer reactors are only conditionally designed at best. In its COLA, SCE&G 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. SCE&G 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 SCE&G's application, the final design and 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 12-13. As the Staff stated previously, the COL application references the already certified AP1000 (AP1000 R15), as amended by AP1000 R16 and TR-134, Revision 4. See Summer COL Application cover letter (ADAMS Accession No. ML081300460). The elements of the AP1000 design that are not being changed in the ongoing design certification rulemaking, therefore, have already been finally approved, while the remainder is subject to revision. The

⁷ In its Answer to the Petition, the Staff agreed that Friends of the Earth had failed to establish standing, but stated that it would not object to standing for Friends of the Earth if amended declarations were submitted with the Reply. Staff Answer at 11-12 (explaining the reasons for the Staff position). Petitioners submitted the amended affidavits with its Reply. See Amended Standing Declarations. The Board denied standing, however, and the reasons it provided are consistent with Commission precedent and do not constitute an error of law or abuse of discretion.

Staff notes that, as discussed on pages 2 and 3 of this brief, the COL application FSAR does not yet incorporate AP1000 R17, but Revision 1 to the ER now does.

The Board rejected Contention 1 for a variety of reasons. LBP-09-2, 69 NRC ___ (slip op. at 8-13). On appeal, Petitioners claim that Contention 1 should have been admitted as a contention of omission based on the following two purported deficiencies in the COL application:

[T]he design features listed in the contentions *have not been conclusively approved* in the separate design certification rulemaking proceeding that has been designated by the Commission for their resolution. . . . [T]he *final AP 1000 design, as certified* and as potentially modified through the design certification process, has not been adopted by SCE&G.

Appeal Brief at 10-11 (emphases added).⁸ Stated more simply, Petitioners argue that the COL application is deficient because it does not incorporate a final certified design.

Before addressing the specific claims of Petitioners, the Staff will first address the nature of a “contention of omission.” This term does not appear in the Commission’s regulations, but the concept relates to a requirement that contentions demonstrate a genuine, material dispute with the applicant based on the application. See 10 C.F.R. § 2.309(f)(1)(vi) and (f)(2). A contention may be based on an application’s failure to contain required information, but only if it identifies each omission and gives supporting reasons for the petitioner’s belief that the application fails to contain information on a relevant matter as required by law. § 2.309(f)(1)(vi). Of course, the other requirements for contention admissibility in § 2.309(f)(1) must still be met.

Petitioners essentially claim that a COL application referencing a DC application is deficient, per se, if the design features “have not been conclusively approved in the separate

⁸ Although Petitioners only pursue a “contention of omission” theory on appeal, the Board also addressed a “contention of error” theory as follows:

Insofar as we might interpret this contention to assert an error (a defect that is not an omission) in the COLA, Petitioner fails utterly to identify and challenge any specific portion of the COLA, which is required by 10 C.F.R. § 2.309(f)(1)(vi), and fails to provide a scintilla of factual or expert support for, let alone any references to specific sources or documents upon which it intends to rely to indicate, any such asserted error, which is required by 10 C.F.R. § 2.309(f)(1)(v).

Summer Order, LBP-09-2, 69 NRC ___ (slip op. at 10).

design certification rulemaking proceeding.” Appeal Brief at 10. As recognized by the Board, this is nothing other than an attack on the NRC’s regulatory process. See *Summer Order*, LBP-09-2, 69 NRC ___ (slip op. at 8). NRC regulations, case law, and policy clearly allow COL applicants to reference a DC application. 10 C.F.R. § 52.55(c); *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant), CLI-08-15, 68 NRC ___ (July 23, 2008); “Conduct of New Reactor Licensing Proceedings; Final Policy Statement,” 73 Fed. Reg. 20,963, 20,972 (Apr. 17, 2008) (hereinafter “New Reactor Licensing Policy Statement”). The Applicant has done this with respect to certain elements of the proposed AP1000 amendments. The design features contained in a DC application, of course, will not have been finally approved by the NRC. If all the design features had been approved, the Applicant would be referencing an already certified design, rather than a DC application.⁹ Petitioners’ dispute, therefore, is not with the COL application, but with NRC regulations that allow COL Applicants to reference DC applications. Such attacks are impermissible, however, unless the standards of 10 C.F.R. § 2.335 are met, and these standards are not met here.¹⁰

To counter the Board’s rejection of Contention 1, Petitioners offer the following:

Nothing about the Contention challenges SCE&G’s right to submit a COLA that references an un-approved design certification application, however. What the contention *does* challenge is the adequacy of such a COLA to support a meaningful licensing review and meet the requirements for the issuance of a license.

Appeal Brief at 13. This attempted distinction, however, fails to carry the day because an application can hardly be faulted for following an approved regulatory course. A contention

⁹ The Staff also notes that non-design information in the COL application has also not been finally approved by the NRC. This does not mean that the information is deficient, just that the NRC’s formal process for reviewing and approving this information has not yet been completed.

¹⁰ To attack a Commission rule, § 2.335, among other things, requires a *prima facie* showing that applying the rule would not serve the purposes of the rule and requires that the *prima facie* showing be based on “special circumstances with respect to the subject matter of the particular proceeding” as outlined in a supporting affidavit.

must be rejected when its essence rests, not on the contents of the application, but on the NRC's process for reviewing the application.

Petitioners also fail to "come to grips with the Board's reasons for rejecting" their contention of omission arguments. See *Millstone*, CLI-04-36, 60 NRC at 639. The Board had this to say about Contention 1's asserted omissions:

To the extent that this contention asserts omissions from the COLA, Applicant has provided an exhaustive list in Attachment 2 to its Answer explicitly addressing where in the COLA each asserted omitted matter is, in fact, addressed, and Petitioner has not contradicted a single item in that list in its reply. Therefore, we find that, to the extent that Contention 1 is construed as a contention of omission, Petitioner fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(vi) because the matter(s) it asserts had not been addressed had in fact been addressed and thus there is no genuine dispute of material fact. For the same reasons, and because Petitioner has failed to present any reason why the assertedly omitted information must be addressed in the design certification process, to the extent that these challenges are directed at the certified design rather than the COLA, they fail to formulate an otherwise admissible contention.

Summer Order, LBP-09-2, 69 NRC ___ (slip op. at 10). Petitioners do not point to any errors in this analysis. Rather, they simply assert that Contention 1 should be admitted because it is "virtually identical" to a contention that was admitted by a licensing board in *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant), LBP-08-21, 68 NRC ___ (Oct. 30, 2008). See Appeal Brief at 11-12. The *Summer Order*, however, addresses this argument:

In contrast to Petitioner's contention here, (a) the petitioners in Shearon Harris listed and asserted specific omissions from the application itself, whereas here Petitioner did not do so; and (b) in the Shearon Harris proceeding, neither Staff nor applicant took exception to the asserted omissions, nor attempted to indicate where the relevant information was presented. We face, in this proceeding, neither any specifically asserted and supported omission or error nor any absence of clarity regarding where the relevant matters are addressed in the COLA.

Summer Order, LBP-09-2, 69 NRC __ (slip op. at 11-12) (discussing *Shearon Harris*, LBP-08-21) (internal footnote omitted).¹¹ Because Petitioners do not rebut the Board's reasoning, their arguments must be rejected on appeal.

For the above reasons, the Board's Contention 1 determination should be upheld.

B. The Board Properly Rejected Contention 2 on Aircraft Crashes.

Petitioners stated their second contention, titled "Aircraft Crashes," as follows:

SCE&G's ER [Environmental Report], Chapter 7, "Postulated Accidents," fails to satisfy [the National Environmental Policy Act (NEPA)] and the NRC rules because it does not address the environmental impacts of a successful attack by either the accidental or deliberate and malicious crash of a fuel-laden and/or explosive-laden aircraft and resulting severe accidents of the aircraft's impact and penetration on the facility. SCE&G is required to identify and incorporate into the design those design features and functional capabilities that avoid or mitigate, to the extent practicable and with reduced reliance on operator actions, the effects of the aircraft impact on the key safety functions, such as core cooling capability, containment integrity, spent fuel cooling capability and spent fuel pool integrity.

Petition at 17-18. The Board held that Contention 2 was inadmissible because it failed to satisfy the requirements for admissibility in 10 CFR § 2.309(f)(1). On appeal, Petitioners assert that the Summer COLA is inadequate because it does not address "the consequences of an aviation attack and the resulting impact, penetration, explosion and fire." Appeal Brief at 14. Petitioners argue that in order to comply with a proposed Commission rule on aircraft impacts, the Summer COLA must "assess the effects of the impact of a large, commercial aircraft on the nuclear power facility." Appeal Brief at 15 (citing to SECY-08-0152, Final Rule—Consideration of Aircraft Impacts for New Nuclear Power Reactors (Oct. 15, 2008) (hereinafter "Aircraft Impacts Rule")). Petitioners also claim that "10 CFR 51.53 requires that the license renewal applicant consider alternatives to mitigate severe accidents if the staff has not previously evaluated SAMAs for the

¹¹ The Staff notes that the *Summer Board* correctly recognized that the Commission allows contentions to be filed on a design certification application, and that these contentions should be admitted and held in abeyance only "if it is otherwise admissible." See *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 8 n.37) (quoting *Shearon Harris*, CLI-08-15, 68 NRC __ (slip op. at 4)). The *Summer Board* also correctly concluded that no otherwise admissible contention on the DC application was submitted. *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 8 n.37)

applicant's plan in an EIS or related supplement." Appeal Brief at 17. Finally, Petitioners make some remarks concerning aircraft attacks as design basis threats (DBTs). Appeal Brief at 14.

On appeal, a petitioner "bears the responsibility of clearly identifying the errors in the decision below and ensuring that its brief contains sufficient information and cogent argument to alert the other parties and the Commission to the precise nature of and support for the appellant's claims." *Millstone*, CLI-04-36, 60 NRC at 639 n.25 (quoting *Advanced Medical Systems*, CLI-94-6, 39 NRC at 297). Thus, if Petitioners do not address the Board's findings, this alone merits the rejection of their arguments. As explained below, many of Petitioners arguments, in fact, fail to effectively grapple with the Board's reasoning. In addition, Petitioners do not identify any errors of law or abuse of discretion on the part of the Board that would call into question the Board's conclusion that Contention 2 is inadmissible. The Board's ruling on Contention 2, therefore, should be upheld.

On appeal, Petitioners allege that the Summer COLA must assess the effects of an aircraft impact on nuclear reactors due to the proposed Aircraft Impacts Rule. See Appeal Brief at 14-15. The Commission recently approved the final rule for the Aircraft Impacts Rule in a Staff Requirements Memorandum (SRM). See SRM-SECY-08-0152 (Feb. 17, 2009) (approving SECY-08-0152, Final Rule—Consideration of Aircraft Impacts for New Nuclear Power Reactors (Oct. 15, 2008)). In its Order, the Board held that because the Aircraft Impacts Rule is the subject of an ongoing rulemaking, Contention 2 is outside the scope of this proceeding. See *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 17 n. 71); see also *Oconee*, CLI-99-11, 49 NRC at 345 (quoting *Potomac Elec. Power Co.* (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85 (1974)). As such, Petitioners' argument on this issue is inadmissible pursuant to 10 CFR § 2.309(f)(1)(iii). Petitioners' arguments here are largely a repetition of issues previously asserted in the Petition to Intervene.

See Petition at 22.¹² Petitioners' Appeal should be denied because it does not address the rationale given in the Board's Order, See *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 17 n.71). Nor does it identify an error of law or Board abuse of discretion. See *Oyster Creek*, CLI-06-24, 64 NRC at 121.

In its Order, the Board correctly ruled that Contention 2 is inadmissible, as it concerns issues which are the subject of an ongoing rulemaking. The Commission has stated that "[i]t has long been agency policy 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 NRC at 345 (quoting *Douglas Point*, ALAB-218, 8 AEC 79, 85 (1974)) (alteration in original). To date, the Final Aircraft Impacts Rule has not yet been published in the Federal Register. The Staff points out that the SRM directs the draft Final Rule to be delivered to the Federal Register by June 5, 2009. See SRM-SECY-08-0152. This rule will only become binding on the effective date of the rule, which will be announced in the Federal Register. Therefore, the Aircraft Impacts Rule is not currently binding on any COL applicant. Petitioners, thus, cannot claim that the Summer application contains a material error, nor can they assert that the COL application fails to meet currently applicable requirements. As such, Petitioners cannot meet the materiality requirements for admissible contentions pursuant to 10 CFR § 2.309(f)(1)(iv) and (vi).¹³

¹² The Staff also notes that Petitioners include a brief statement on the "Power Reactor Security Requirements; Supplemental Proposed Rule," 73 Fed. Reg. 19,443 (Apr. 10, 2008) (hereinafter "Power Reactor Security Rule"), when discussing their argument on the Aircraft Impacts Rule. See Appeal Brief at 17 (discussing a "new paragraph (hh) in 10 C.F.R. § 50.54"). Although Petitioners appear to treat the Power Reactor Security Rule as a part of the Aircraft Impacts Rulemaking, the two rulemakings are, in fact, distinct. An SRM was issued on December 17, 2008, approving, with certain changes, the draft Final Power Reactor Security Rule contained in SECY-08-0099 (July 9, 2008). The final Power Reactor Security Rule has yet to be published in the *Federal Register*.

¹³ The Staff also notes that Westinghouse is attempting to address the provisions of the Aircraft Impacts Rule in Revision 17 to the AP1000. See AP1000 DCD, Revision 17, Chapter 19, App. 19F (considering the impacts of a large, commercial aircraft). Although the Applicant has not yet incorporated this part of Revision 17 of the AP1000 into its COL application, it appears that this issue will be addressed through the design certification rulemaking and not specifically in this licensing proceeding.

Petitioners' Appeal also asserts that the COL applicant must consider Severe Accident Mitigation Alternatives ("SAMAs") in its application. Petitioners base their argument on the following ground: "10 CFR § 51.53 requires that the license renewal applicant consider alternatives to mitigate severe accidents if the staff has not previously evaluated SAMAs for the applicant's plant in an EIS." Appeal Brief at 17. SAMAs are environmental issues addressed under NEPA. *Shearon Harris*, LBP-08-21, 68 NRC __ (slip op. at 13-14) (Oct. 30, 2008). Severe Accident Mitigation Design Alternatives ("SAMDA") are a subset of SAMAs. For the AP1000, a COL applicant's SAMDA is incorporated by reference from the AP1000 DCD, Revision 15, environmental assessment.¹⁴ As the Board correctly noted, 10 C.F.R. § 51.53 states requirements for license renewals. "However, [a]n applicant for a COL that elects, as here, to reference a certified design is permitted, under 10 C.F.R. § 51.51(c)(2), to incorporate by reference the ER prepared in connection with the certified design, and that is, in turn, required pursuant to 10 C.F.R. § 51.55(a), to consider severe accident mitigation design alternatives." *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 15).

The Board correctly recognized that the Petitioners' NEPA claims were based on the impacts of terrorist acts, which are not considered in NRC environmental reviews outside the Ninth Circuit:

In addressing Petitioner's NEPA arguments, we are bound by the Commission's steadfast position that NEPA is not an appropriate vehicle for exploring questions about the potential for a terrorist attack upon a proposed nuclear facility. Although the United States Court of Appeals for the Ninth Circuit has held that the NRC must address such matters to satisfy its NEPA obligations, the Commission has stated that it does not consider itself bound by that holding outside the Ninth Circuit, and this Board is bound by that position. Thus, there

¹⁴ As explained on pages 2-3 of this brief, the Summer COL application incorporates by reference AP1000 R15, as amended by AP1000 R16 and TR-134, Rev. 4. After the Petitioners filed their contentions, the Applicant submitted Revision 1 to the ER by letter dated February 13, 2009, which incorporates information from AP1000 R17. See also ER at 7.3-2 (Rev. 1) (ADAMS Package Accession No. ML090510261) (incorporating AP1000 R17 SAMDA analysis). As with other revisions of the AP1000, such as Revision 17, the SAMDA analysis for AP1000 R16 can be found in Appendix 1B of the generic DCD.

can be no question that a challenge asserting that aircraft impact attacks are required to be assessed under NEPA raises matters outside the scope of this proceeding.

See *Summer Order*, LBP-09-2, 69 NRC ___ (slip op. at 16-17). For this reason, the Board also held that “examination of SAMAs and SAMDAs relating to aircraft attacks, which arise under the Agency’s NEPA obligations, are outside the scope of this proceeding. From the NEPA perspective, therefore, there is no omission in the Summer COLA relating to the assessment of environmental effects of an aircraft attack on the proposed facility.” See *Summer Order*, LBP-09-2, 69 NRC ___ (slip op. at 17).

The Board also noted that “the Commission considers ‘[a]ll environmental issues concerning severe accident mitigation design alternatives associated with the information in the NRC’s EA for the AP1000 design’ to be ‘resolved within the meaning of 10 CFR § 52.63(a)(5) in subsequent proceedings for issuance of a COL’ To the extent we were to interpret this contention to contain a challenge to Applicant’s SAMDA analysis, it not only fails to provide the requisite specificity to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v) and (vi), but it also constitutes an impermissible challenge to Commission regulations.” *Id.* at n.70. Thus, to the extent Petitioners’ take issue with the AP1000 R15 SAMDA analysis, their challenge is foreclosed by the regulations. 10 C.F.R. Part 52, App. D, Section VI.B.7. To the extent Petitioners believe that proposed revisions to the AP1000 make the earlier SAMDA analysis invalid or that any changes to the SAMDA analysis made in the AP1000 revisions are erroneous, they make no such argument.¹⁵

Lastly, the Petitioners’ statements on appeal relating to the DBT are little more than a repetition of statements previously made in the Petition. See Petition at 18-20.¹⁶ Also, it is not

¹⁵ The Staff also notes that the Petitioners’ intervention petition did not discuss any specific feature of the ER’s SAMA analysis in Section 7.3 (Rev. 0), or explain how any specific feature was deficient.

¹⁶ The Staff notes that Petitioners take no exception to the Board’s rejection of any challenge to

clear to the Staff whether the Petitioners are really pursuing a DBT argument on appeal. In the Staff's Answer to the Petition, the Staff argued that this part of Contention 2 was inadmissible and the Petitioners failed to respond to this argument in their reply. See Staff Answer at 33. As the Staff explained in its Answer, 10 C.F.R. § 73.1(a) requires a facility to establish and maintain a physical protection system to protect against the DBTs for radiological sabotage.

Nonetheless, the Commission declined to include an aircraft attack in the Design Basis Threat rule. See "Final Rule, Design Basis Threat," 72 Fed. Reg. 12,705, 12707 (Mar. 19, 2007) (hereinafter "DBT rule"). As such, the DBT rule does not direct that a COL applicant build its nuclear reactors to protect against an aircraft attack. Because a DBT aircraft attack argument amounts to an attack on the DBT rule, Petitioners' contention in this respect, is barred by 10 C.F.R. § 2.335. Thus, their DBT arguments should be rejected as being outside the scope of this proceeding, 10 C.F.R. § 2.309(f)(1)(iii), and for failing to meet the materiality requirement of 10 C.F.R. § 2.309(f)(1)(iv) and (vi).¹⁷

The Petitioners' Appeal does not address the rationale given by the Board, but, rather, repeats arguments included in the Petition. Since Petitioners do not effectively address the Board's conclusions, Petitioners' arguments should be rejected. See *Millstone*, CLI-04-36, 60 NRC at 639. Further, they do not give any reason to believe that the Board's Order

the Applicant's analysis of the probability of accidental aircraft impacts under the current regulations. See *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 17-18). See also Staff Answer at 33 n. 38 (discussing the analysis of accidental impacts) and Summer FSAR at 2.2-5 to 2.2-7 (analyzing the probability of accidental aircraft impacts).

¹⁷ The Board rejected the DBT argument because the need for design features to guard against DBTs is outside the scope of the proceeding as it is the subject of an ongoing rulemaking. See *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 17 n.71).

The Aircraft Impacts Rule, however, is not associated with the design basis threat and is not predicated on necessity to adequate protection of public health and safety. See SECY-08-0152, Final Rule—Consideration of Aircraft Impacts for New Nuclear Power Reactors. To the extent that Petitioners are considered to be pursuing a DBT argument on appeal, the Board's conclusion can be upheld on the alternate grounds stated in this Answer to the Appeal. "Acting as an appellate body we are free to affirm a Board decision on any ground finding support in the record, whether previously relied on or not." *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-05-8, 61 NRC 129,166 (2005).

constitutes an error of law or abuse of discretion. See *Oyster Creek*, CLI-06-24, 64 NRC at 121 (2006).

For the above reasons, the Board's ruling on Contention 2 should be upheld.

C. The Board Properly Rejected Contention 3 on
Need for Power, Cost of Action, and Alternatives.

The Board did not commit legal error or abuse of discretion in denying Petitioners' third contention, titled "Need for Power, Cost of Action, and Alternatives," which is stated as follows:

Contrary to the requirements of the National Environmental Policy Act and 10 C.F.R. § 51.45 the Applicant's Environmental Report (ER) fails to adequately discuss the impacts of the proposed action and alternatives in proportion to their significance; fails to discuss alternatives with sufficient completeness to aid the Commission in developing and exploring "appropriate alternatives to recommended courses of action" in this "proposal which involves unresolved conflicts concerning alternative uses of available resources;" fails to adequately present the environmental impacts of this proposal and the alternatives in comparative form; fails to adequately discuss the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity with respect to this proposal and alternatives; fails to adequately discuss irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented; fails to include an adequate analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects; fails to include analyses which, to the fullest extent practicable, quantify the various factors considered or adequately discuss important qualitative considerations or factors that cannot be quantified; and fails to contain sufficient data to aid the Commission in its development of an independent analysis in the following particulars:

A. With respect to Chapter 8 of the ER, "Need for Power," the Applicant completely dismisses the current economic crisis and recent reductions in its sales, and has conducted no sensitivities of its load forecast to try to capture the possible effects of a recession, including the possibility of a long and deep economic downturn.

B. With respect to Chapter 9 of the ER, "Proposed Action Alternatives," the Applicant almost completely ignores demand-side management, undervaluing opportunities for cost-effective energy efficiency and demand response or load management.

C. With respect to Chapter 9 of the ER, "Proposed Action Alternatives," the Applicant ignores the potential contribution of renewables to an overall sustainable and economic portfolio, and does not take into account significant improvement in unit costs and operations of renewables in recent years and as projected to continue.

D. With respect to Chapter 9 of the ER, "Proposed Action Alternatives," the Applicant fails to properly evaluate the risk of choosing a single technology and two extremely large construction projects in lieu of a more modular

approach made up of a greater variety of resource options allowing a greater opportunity to change course during implementation of the plan, in the event that risks, known to be potential and those that are not now foreseeable, develop into real difficulties during implementation, and in the event that other superior opportunities become realistic.

E. With respect to Chapter 10 of the ER, "Proposed Action Consequences," the Applicant underestimates the impact of its proposed construction and operation on vulnerable customers via rate increases.

F. With respect to Chapter 10 of the ER, "Proposed Action Consequences," the Applicant's cost estimate for construction and operation fails to take into account recent rapid increases in the cost of inputs for construction.

G. With respect to Chapter 10 of the ER, "Proposed Action Consequences," the Applicant's cost estimate for construction and operation is based on an unrealistic schedule, and assumes a settled and approved design for its proposed AP1000, which has not yet been established and for which there is no firm date for Commission determination.

Petition at 24-26. The Staff will address Parts A-G of Contention 3 in order.

The Board rejected Contention 3A, which attacks the ER's Chapter 8 need for power analysis, for two main reasons. First, the Board stated that Petitioners did not provide sufficient support to show that the Applicant "failed to consider a sufficient economic impact" or "that the magnitude of the impact of the economic crisis on the load forecast was improperly calculated by Applicant so as to be material to the outcome of the Agency's determination with regard to the license." *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 21). The Board did not credit the assertions of Petitioners' proffered expert "because [she] did not quantify the impact on the needed power nor provide any alternative analysis to that provided in the COLA." *Id.* at 21 n.80. The Board concluded that Contention 3A did not challenge the ER's analysis with the specificity needed to show a genuine, material dispute with the Applicant as required by 10 C.F.R § 2.309(f)(1). *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 21).¹⁸

¹⁸ The Staff notes that a demonstration of the significance of a dispute is required for the materiality of either a safety or environmental contention. With respect to the materiality of environmental contentions, the Commission, in affirming a licensing board's rejection of a contention, stated the following:

At NRC licensing hearings, petitioners may raise contentions seeking correction of significant inaccuracies and omissions in the ER. Our boards do not sit to 'flyspeak' environmental documents or to add details or nuances.

System Energy Resources, Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005). See also *Yankee Atomic Electric Co.* (Yankee Nuclear Power Station), CLI-96-7, 43 NRC

As a second reason for rejecting Contention 3A, the Board pointed out that the Petitioners' challenge addressed a level of detail beyond that which is required by the NRC. *Id.* at 21 and n.81 (citing authorities).¹⁹ On appeal, Petitioners simply repeat the arguments made in their Petition without addressing the Board's rationale. Appeal Brief at 22. This alone merits the rejection of their arguments. *Millstone*, CLI-04-36, 60 NRC at 639. The Board's determination on Contention 3A should be affirmed because Petitioners offer nothing to suggest that the Board committed an error of law or abuse of discretion in its analysis.

The Staff will address Contentions 3B and 3C together because the Board rejected these contentions on largely common grounds. Contentions 3B and 3C claim that the energy conservation, solar power, and offshore wind alternatives were wrongly rejected in the ER's alternatives analysis.²⁰ All of these alternatives were, in fact, examined in the ER. The energy conservation alternative was rejected as not providing sufficient energy savings "to offset a significant portion of future demand." ER Section 9.2.1.3.3 (Rev. 0). The wind and solar alternatives were rejected, in part, because they were intermittent power sources incapable of providing baseload power in the needed amount. ER Sections 9.2.2.2 and 9.2.2.3 (Rev. 0).

235, 259 (1996) (stating, "[I]t should be evident that not all actual or alleged errors in a decommissioning plan are of equal significance; to be significant enough to be 'material,' within the meaning of the contention rule, there needs to be some indication that an alleged flaw in a plan will result in a shortfall of the funds actually needed for decommissioning").

¹⁹ An authority cited by the Board that is particularly relevant to Contention 3A is "Nuclear Energy Institute; Denial of Petition for Rulemaking," 68 Fed. Reg. 55,905, 55,910 (Sept. 29, 2003) (hereinafter "NEI Rulemaking Petition Denial"). In denying this rulemaking petition, the Commission stated the following:

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

Id. (citing *Louisiana Energy Servs., L.P.* (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 88, 94 (1998)).

²⁰ The word "biomass" is contained in the discussion of Contention 3C and the *Summer Order* mentions the biomass alternative. LBP-09-2 at 24. The Petition never develops any biomass argument, however, and Petitioners pursue no biomass argument on appeal. See Petition *and* Appeal.

Fundamentally, therefore, these alternatives were rejected because the Applicant did not believe that they satisfied the purpose and need of the project, the production of the needed amount of baseload electric power. See ER at 1.1-1 (Rev. 0) (statement of purpose and need); ER at 8.1-7 (Rev. 0) (baseload power needs of SCE&G); ER at 8.2-4 (Rev. 0) (baseload power needs of Santee Cooper).²¹

In rejecting Contentions 3B and 3C, the Board took account of the ER's alternatives analysis and relied upon applicable NEPA case law. The Board concluded that these contentions were inadmissible primarily because they advanced alternatives that failed to meet the Applicant's stated purpose and need for baseload power. *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 22-25). The Board further pointed out that none of these contentions "provide any support for the proposition that the alternatives it suggests are reasonable means by which to generate base-load power." *Id.* at 24.

Petitioners offer several arguments on appeal. For the sake of addressing these arguments, the Staff provides the following background: NEPA analyses need only consider an appropriate range of alternatives, rather than every alternative. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-03-30, 58 NRC 454, 479 (2003). Furthermore, Council on Environmental Quality (CEQ) regulations provide that, while an EIS must "[r]igorously explore and objectively evaluate" alternatives that are "reasonable," the EIS need only "briefly discuss" the reasons why an alternative was rejected from more detailed study. 40 C.F.R. § 1502.14(a); See also *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), CLI-07-27, 66 NRC 215, 222 n.21 (2007) (discussing 40 C.F.R. § 1502.14(a)). Although an alternative might not be considered reasonable for a variety of reasons, an alternative's failure to meet the purpose and need of the project is a compelling reason to reject it. Consistent with NEPA, the NRC defers to an applicant's stated

²¹ As stated in the ER, "[b]aseload capacity typically operates in excess of 70% of the time." ER at 8.1-7 (Rev. 0).

objectives: “[A]n 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.” *Exelon Generation Co.* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 806 (2005), *aff’d Environmental Law and Policy Center v. U.S. Nuclear Regulatory Comm’n*, 470 F.3d 676 (7th Cir. 2006) (hereinafter “Environmental Law and Policy Center”) (quoting *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 199 (D.C. Cir. 1991)).²²

Clinton ESP is particularly instructive because the Commission encountered a contention asserting that the EIS inappropriately rejected the energy conservation alternative. Basing its decision on the principles outlined in the preceding paragraph, both the Commission and Licensing Board rejected this challenge. See *Exelon Generation Co., LLC* (Early Site Permit for the Clinton ESP Site), LBP-05-19, 62 NRC 134 (2005); *Clinton ESP*, CLI-05-29, 62 NRC 801. The Commission agreed with the Licensing Board that the NRC did not have the “mission (or power) to implement a general societal interest in ‘energy efficiency.’” *Clinton ESP*, CLI-05-29, 62 NRC at 806. The Commission further agreed that the energy conservation alternative did not need to be further analyzed since it failed to meet the applicant’s goal of generating electricity, *id.*, noting that the applicant was in the sole business of generating electricity and selling energy and capacity at wholesale, *id.* at 807.

The Commission in *Clinton ESP* also examined the licensing board’s rejection of a challenge to the EIS examination of wind and solar power as alternatives. *Id.* at 809-10. In discussing this challenge, the Commission focused on the *type and amount* of electrical energy

²² See also *Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho NM 87174), CLI-01-4, 53 NRC 31, 55-56 (2001) (stating, “[T]he agency should take into account the needs and goals of the parties involved in the application”) (quoting *Citizens Against Burlington*, 938 F.2d at 196). Furthermore, “[w]hen the purpose is to accomplish one thing’ . . . ‘it makes no sense to consider the alternative ways by which another thing might be achieved.’” *Clinton ESP*, CLI-05-29, 62 NRC at 806 (quoting *Citizens Against Burlington*, 938 F.2d at 194).

that the applicant sought to produce. The Commission had previously noted that the licensing board's decision rested, in part, upon the fact that "[i]n order to satisfy the purpose of the project, and thus to constitute a reasonable alternative, the combined facility must be able to generate power in the amount of 2180 MW at all times." *Id.* at 809. With this in mind, the Commission stated that "[b]ecause a solely wind- or solar-powered facility could not satisfy the project's purpose, there was no need to compare the impact of such facilities to the impact of the proposed nuclear plant." *Id.* at 810.

Petitioners argue that the Board's conclusions run counter to the Commission's stated position in the NEI Rulemaking Petition Denial. In the NEI Rulemaking Petition Denial, however, the Commission simply affirmed the proposition that need for power and alternatives to nuclear power generation must still be considered in NRC environmental reviews. 68 Fed. Reg. 55,905. The ER, in fact, considered need for power in ER Chapter 8 and a range of energy alternatives in ER Section 9.2.²³ Petitioners appear to believe that the Applicant chose a baseload power source for economic reasons and that such purposes need not be credited in NEPA environmental reviews. See Appeal Brief at 27. However, the business purposes of an applicant, which are motivated by economic considerations, were credited in *Clinton ESP*. CLI-05-29, 62 NRC 801. Petitioners also misread ER Section 9.2.2.12 as "stingily" agreeing with their position. See Appeal Brief at 28. This section of the ER merely recognizes that it might be possible to mix coal and gas-fired generation or to mix a small renewable alternative with a large-scale gas-fired generation to meet the purpose and need of the project.

²³ Petitioners also cite the following from the NEI Rulemaking Petition Denial:

There may well be circumstances where an entity seeking a CP or COL may be able to establish, consistent with NEPA and current judicial precedents, a narrow statement of purpose and need for the project sufficient to justify excluding from the EIS a consideration of non-nuclear alternative energy sources.

Id. at 55,911. This statement cuts against Petitioners, however, because the NRC recognized the possibility that a statement of purpose and need could even potentially exclude *non-nuclear* sources. Here, the statement of purpose and need is not so narrowly drawn, and the ER found the non-nuclear alternatives of coal and gas to be reasonable alternatives that were worthy of further analysis in the ER. See ER Section 9.2.3 (Rev. 0).

See ER Section 9.2.2.12 (Rev. 0). These alternatives, however, were rejected in the ER and Petitioners take no issue with this analysis. The environmental impacts of reasonable non-nuclear alternatives were compared with the proposed reactors in ER Section 9.2.3, Revision 0.

The Staff agrees with Petitioners that an ER cannot set out an “unreasonably narrow objective of its project, thereby artificially narrowing the scope of alternatives to be considered by the NRC.” NEI Rulemaking Petition Denial, 68 Fed. Reg. at 55,910. The Petition, however, did not set out a specific, material, sufficiently supported dispute with the application over the project purpose of providing over 2000 MW of baseload power—in other words, an admissible contention. The Petition also does not create a genuine, material dispute over whether the rejected alternatives could meet the Applicant’s baseload power needs. Under NRC rules, Petitioners bear the burden of stating contentions and demonstrating their admissibility. 10 C.F.R. § 2.309(f)(1). In its discussion of the offshore wind alternative, the Petition concedes that wind power is intermittent and that “its capacity cannot substitute mW for mW with baseload thermal generation,” but asserts that “this is not a reason to ignore wind.” Petition at 40. No support for this assertion is provided, however, and Petitioners’ mere say-so does not create a genuine, material dispute with the application.²⁴ For the above reasons, the Board’s determinations on Contentions 3B and 3C should be upheld.

Contention 3D claims that the alternatives analysis needed to examine the use of a modular approach in light of the “risk of choosing a single technology and two extremely large construction projects.” The Board rejected Contention 3D because “Petitioner’s concern about

²⁴ Petitioners also attempt to distinguish *Environmental Law and Policy Center*, 470 F.3d 676 (which affirmed *Clinton ESP*, CLI-05-29, 62 NRC 801) by pointing out that the applicant in that case was in the business of providing power at wholesale. Appeal Brief at 19. The Staff recognizes that the 7th Circuit noted that the applicant did not have the incentive or authority to implement energy efficiency measures. *Environmental Law and Policy Center*, 470 F.3d at 683. This distinction, however, does not obviate Petitioners’ failure to offer an admissible challenge to the Applicant’s purpose. If Petitioners believed that this purpose was too narrowly drawn, they should have submitted an admissible contention in this regard. Also, as the Staff Answer explained in its discussions of Contentions 3B and 3C, Petitioners do not offer sufficient support to demonstrate a genuine dispute over whether the alternatives it advances meet the Applicant’s need for approximately 2000 MW of baseload electricity.

assessment of 'risk' can only be relevant to our deliberations if we consider it to be an attack on Applicant's selected project purpose or an assertion that there are other alternatives Applicant must examine." *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 25). The Board also concluded that Contention 3D was barred to the extent that it questioned the Applicant's business decisions. *Id.* at 25-26 (citing *La. Energy Servs., L.P.* (National Enrichment Facility), CLI-05-28, 62 NRC 721, 726 (2005) and *Citizens Against Burlington*, 938 F.2d at 197 n.6).²⁵

On Appeal, Petitioners clearly indicate that their project "risk" concerns are attacks on the business decisions of the Applicant:

A key benefit of the modular approach, which should be reflected in such an assessment, is the opportunity a modular approach would provide the Applicant to avert making a commitment to two large central station plants of an uncertain design whose costs are at least equal to the utility's net worth.

Appeal Brief at 28. Contention 3D, therefore, is inadmissible for the reasons given by the Board, reasons which Petitioners do not rebut. Petitioners also do not explain how their modular approach would satisfy the purpose and need of the project. Finally, the exhaustive modeling approach that Petitioners set out on page 28 of the Appeal Brief is beyond that which is required by NEPA. NEPA is subject to a rule of reason and does not require that every alternative be examined, but only a reasonable range of alternatives. *Private Fuel Storage*, LBP-03-30, 58 NRC at 479.

The Board correctly rejected Contention 3E, which concerns ratepayer interests, because these interests lie outside the NRC's regulatory jurisdiction. *Summer Order*, LBP-09-2, 69 NRC __ (slip op. at 26-27). In making standing determinations, the Commission has held that economic injury not directly related to environmental or radiological harm, such as ratepayer interests, are outside the zone of interests protected by NEPA and the AEA. See

²⁵ The Board also concluded that to the extent the risk-related components of the contention were based on the costs of the project, consideration of costs is barred in the absence of an environmentally preferable alternative, and no such alternative was identified. *Summer Order*, LBP-09-2 (slip op. at 25). The Staff will discuss the Board's economic cost materiality rationale in the discussion of Contention 3F.

Pacific Gas and Elec. Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), CLI-02-16, 55 NRC 317, 336 and n.23 (2002). In their Appeal Brief, Petitioners simply repeat their previous arguments and offer nothing to suggest that the ratepayer issues they offer are within the NRC's regulatory purview.

The Board rejected Contentions 3F and 3G because Petitioners failed to demonstrate the materiality of the economic costs of construction to the NRC's NEPA analysis. *Summer Order*, LBP-09-2, 69 NRC ___ (slip op. at 27-28). In doing so, the Board expressed its agreement with the reasoning provided in *Shearon Harris*, LBP-08-21 (slip op. at 25), which primarily relied upon *Consumers Power Co.* (Midland Plant, Units 1 and 2), ALAB-458, 7 NRC 155 (1978). Agreeing with the cited authority, the Board concluded that monetary construction costs are only relevant to the NRC's NEPA analysis if an environmentally preferable alternative is identified. See *Summer Order*, LBP-09-2, 69 NRC ___ (slip op. at 27 and n.102). Because neither the ER nor the Petitioners identified an environmentally preferable alternative, the Board did not believe that the materiality of monetary construction costs had been demonstrated. *Id.* at 27-28. The reasoning of the Appeal Board in *Midland* is set out in the following selection from its opinion:

The passage of the National Environmental Policy Act increased our concern with the economics of nuclear power plants, but only in a limited way. That Act requires us to consider whether there are environmentally preferable alternatives to the proposal before us. If there are, we must take the steps we can to see that they are implemented if that can be accomplished at a reasonable cost; i.e., one not out of proportion to the environmental advantages to be gained. But if there are no preferable environmental alternatives, such cost-benefit balancing does not take place. Manifestly, nothing in NEPA calls upon us to sift through environmentally inferior alternatives to find a cheaper (but dirtier) way of handling the matter at hand. In the scheme of things, *we leave such matters to the business judgment of the utility companies* and to the wisdom of the State regulatory agencies responsible for scrutinizing the purely economic aspects of proposals to build new generating facilities. In short, *as far as NEPA is concerned*, cost is important only to the extent it results in an environmentally superior alternative. If the 'cure' is worse than the disease, that it is cheap is hardly impressive.

Midland, ALAB-458, 7 NRC at 162-63 (internal footnotes omitted) (emphases added). On appeal, Petitioners do not argue against the *Midland* holding. Rather, Petitioners argue that monetary construction costs are material because one or more of the alternatives they promote in Contention 3 might “emerge as an environmentally preferable alternative upon the conduct of an effective environmental review.” Appeal Brief at 29-30. Petitioners, however, fail to recognize that a rigorous comparison of the environmental impact of an alternative with the proposed project is only performed if the alternative is a *reasonable* one.

40 C.F.R. § 1502.14(a). As the Commission stated in Clinton ESP, there is no need to compare the impacts of facilities failing to meet the project purpose with the impacts of the proposed project. See *Clinton ESP*, CLI-05-29, 62 NRC at 810.

For the above reasons, the Board’s Contention 3 ruling should be upheld.

CONCLUSION

Petitioners do not identify any legal errors or abuse of discretion in the Board's contention admissibility determinations. The Board also committed no error of law or abuse of discretion in determining that Friends of the Earth had failed to meet the regulatory requirements for standing. For these reasons, Petitioners' appeal should be denied.

Respectfully submitted,

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/Executed in accord with 10 CFR 2.304(d)/

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Dated at Rockville, Maryland
this 9th day of March, 2009

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of)
)
SOUTH CAROLINA ELECTRIC AND GAS)
COMPANY,)
) Docket Nos. 52-027 and 52-028
(Virgil C. Summer Nuclear Station)
Units 2 and 3))

CERTIFICATE OF SERVICE

I hereby certify that copies of NRC STAFF BRIEF IN OPPOSITION TO APPEAL OF LBP-09-2 BY SIERRA CLUB AND FRIENDS OF THE EARTH has been served upon the following persons by Electronic Information Exchange this 9th day of March, 2009:

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