

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

Before Administrative Judges:

Dr. Paul B. Abramson, Chairman  
Dr. Michael F. Kennedy  
Dr. Jeffrey D. E. Jeffries

In the Matter of

SOUTH CAROLINA ELECTRIC & GAS  
COMPANY AND SOUTH CAROLINA  
PUBLIC SERVICE AUTHORITY (ALSO  
REFERRED TO AS SANTEE COOPER)

(Virgil C. Summer Nuclear Station, Units 2  
and 3)

Docket Nos. 52-027-COL & 52-028-COL

ASLBP No. 09-875-03-COL-BD01

February 18, 2009

ORDER

(Ruling on Standing and Contention Admissibility)

Applicant South Carolina Electric and Gas Company, acting for itself and as agent for the South Carolina Public Service Authority (also referred to as Santee Cooper) (SCE&G or Applicant), has applied to the Nuclear Regulatory Commission (NRC or Agency) for a combined operating license (COL) under 10 C.F.R. Part 52 that would authorize SCE&G to construct and operate two new Westinghouse Electric Corporation AP1000 advanced pressurized water power reactor units on its existing Virgil C. Summer site, located in Fairfield County, South Carolina.<sup>1</sup> By hearing petition dated December 7, 2008, Joseph Wojcicki filed a petition to intervene,<sup>2</sup> and on December 8, 2008, the Sierra Club and Friends of the Earth (FOE) filed a joint petition to intervene.<sup>3</sup> In their joint petition, the Sierra Club and FOE challenge various

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<sup>1</sup> See South Carolina Electric and Gas Company (SCE&G) and the South Carolina Public Service Authority (Santee Cooper); Notice of Receipt and Availability of Application for a Combined License, 73 Fed. Reg. 39,339 (July 9, 2008) [hereinafter Notice of Receipt].

<sup>2</sup> Petition to Intervene (Dec. 7, 2008) [hereinafter Wojcicki Petition].

<sup>3</sup> Petition to Intervene and Request for Hearing by Sierra Club and Friends of the Earth (Dec. 8, 2008) [hereinafter Sierra Club Petition].

aspects of SCE&G's combined operating license application (COLA). Additionally, the South Carolina Office of Regulatory Staff (SC ORS) filed a request to participate in the proceeding as an interested governmental entity pursuant to 10 C.F.R. § 2.315.<sup>4</sup>

For the reasons set forth below, we find that while the Sierra Club has standing to intervene and SC ORS may participate in the proceeding as an interested governmental entity, the Sierra Club's Petition is denied because it has failed to submit an admissible contention. Petitions to intervene by FOE and Joseph Wojcicki are both denied as neither has demonstrated standing to participate in this proceeding. There being no admissible contention from any petitioner, SC ORS's request is denied as moot.

### I. BACKGROUND

On March 27, 2008, SCE&G submitted a COLA to construct and operate two Westinghouse AP1000 pressurized water reactors at the existing Virgil C. Summer site.<sup>5</sup> The NRC Staff (Staff) docketed the COLA on July 9, 2008,<sup>6</sup> and on October 10, 2008, a Notice of Hearing and Opportunity to Petition for Leave to Intervene was issued.<sup>7</sup> On December 7, 2008, Joseph Wojcicki, and on December 8, 2008, the Sierra Club together with FOE filed petitions to intervene on the Summer Units 2 and 3 COLA.<sup>8</sup> On December 8, 2008, SC ORS filed a request for an opportunity to participate in the Summer proceeding pursuant to 10 C.F.R. § 2.315.

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<sup>4</sup> Request of the [SC ORS] for an Opportunity to Participate in any Hearing and to be Added to the Official Service List (Dec. 8, 2008) [SC ORS Request].

<sup>5</sup> The COLA for Virgil C. Summer, Units 2 and 3, may be viewed at <http://www.nrc.gov/reactors/new-reactors/col/summer.html>.

<sup>6</sup> See Notice of Receipt.

<sup>7</sup> [SCE&G] Application for the Virgil C. Summer Nuclear Station Units 2 and 3; Notice of Order, Hearing, and Opportunity to Petition for Leave to Intervene, 73 Fed. Reg. 60,362 (Oct. 10, 2008).

<sup>8</sup> Wojcicki Petition; Sierra Club Petition.

This Atomic Safety and Licensing Board was established on December 18, 2008 to adjudicate the Summer COL proceeding.<sup>9</sup> SCE&G and Staff filed answers to the petitions to intervene<sup>10</sup> and the request to participate from the SC ORS.<sup>11</sup> Thereafter, on January 7, 2009 and January 12, 2009, Mr. Wojcicki and Sierra Club and FOE, respectively, filed replies to the answers.<sup>12</sup>

To be admitted as a party in an NRC proceeding, a petitioner must establish standing<sup>13</sup> by satisfying the requirements set forth in 10 C.F.R. § 2.309(d), and must proffer an admissible contention, in accordance with 10 C.F.R. § 2.309(f)(1).

## II. ANALYSIS

### A. Standing of Petitioners and Request of SC ORS to Participate as a Non-Party Interested Governmental Entity

#### 1. Sierra Club and Friends of the Earth

In assessing a petition to determine whether the requirements for standing are met, the

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<sup>9</sup> See Establishment of Atomic Safety and Licensing Board, 73 Fed. Reg. 79,196 (Dec. 24, 2008).

<sup>10</sup> [SCE&G's] Answer Opposing Joseph Wojcicki's Petition to Intervene (Jan. 2, 2009); NRC Staff Answer to "Petition to Intervene" from Joseph Wojcicki (Jan. 2, 2009); [SCE&G's] Answer Opposing the Petition to Intervene of Sierra Club and Friends of the Earth (Jan. 5, 2009) [hereinafter SCE&G Answer]; NRC Staff Answer to "Petition to Intervene and Request for Hearing by Sierra Club and Friends of the Earth" (Jan. 5, 2009) [hereinafter Staff Answer].

<sup>11</sup> [SCE&G's] Answer to the [SC ORS's] Request to Participate as an Interested State and to be Added to the Official Service List (Dec. 24, 2008); NRC Staff Answer to "Request of the [SC ORS] for an Opportunity to Participate in Any Hearing and to be Added to the Official Service List" (Jan. 2, 2009).

<sup>12</sup> The Additional Information Supporting Joseph Wojcicki's "Petition to Intervene" (Jan. 7, 2009); Reply by Sierra Club and Friends of the Earth (Jan. 12, 2009).

<sup>13</sup> 10 C.F.R. § 2.309(a).

Commission has indicated that it “construe[s] the petition in favor of the petitioner.”<sup>14</sup> Neither SCE&G nor Staff objects to Sierra Club’s representational standing.<sup>15</sup> In this situation, and considering the requirements for granting standing to a petitioner, we find that Sierra Club (Petitioner) has made the requisite showing to demonstrate that the interests of several of its members, who have agreed in signed affidavits that Sierra Club should represent them,<sup>16</sup> satisfy the requirements of representational standing.<sup>17</sup> FOE, however, failed to make a satisfactory showing to obtain standing in its own right because it has neither demonstrated representational standing in its original petition<sup>18</sup> nor made any showing of harm to its organizational interests.<sup>19</sup>

## 2. Joseph Wojcicki

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<sup>14</sup> Georgia Inst. of Tech. (Georgia Tech Research Reactor), CLI-95-12, 42 NRC 111, 115 (1995).

<sup>15</sup> SCE&G Answer at 8; Staff Answer at 3.

<sup>16</sup> See Pet., Decl. of Susan Corbett (Dec. 8, 2008); Pet., Decl. of Thomas W. Clements (Dec. 8, 2008); Pet., Decl. of Leslie A. Miner (Dec. 8, 2008); Pet., Decl. of Meira Maxine Warshauer (Dec. 8, 2008); Pet., Decl. of Pamela Greenlaw (Dec. 7, 2008).

<sup>17</sup> For a detailed discussion of the requirements to show standing, see, e.g., Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996). See also Vt. Yankee Nuclear Power Corp. & Amergen Vt., LLC (Vermont Yankee Nuclear Power Station), CLI-00-20, 52 NRC 151, 163 (2000) (discussing representational standing); Fla. Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989) (discussing proximity factors as a standing requirement).

<sup>18</sup> 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].” Entergy Nuclear Operations, Inc. & Entergy Nuclear Palisades, LLC (Palisades Nuclear Plant), CLI-08-19, 68 NRC \_\_, \_\_ (slip op. at 5) (Aug. 22, 2008) (citing Final Rule, “Changes to the Adjudicatory Process,” 69 Fed. Reg. 2182, 2203 (Jan. 14, 2004)).

<sup>19</sup> See, e.g., Pac. Gas & Elec. Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), LBP-02-23, 56 NRC 413, 426 (2002) (stating that “[a]n organization that wishes to intervene in a proceeding may do so either in its own right by demonstrating harm to its organizational interests, or in a representational capacity by demonstrating harm to its members”).

Joseph Wojcicki cannot be granted standing because he failed to address the NRC's standing requirements in his petition.<sup>20</sup> Additionally, we note that even if we were to find that Mr. Wojcicki has standing, we would not admit him as a party to this proceeding because he failed to submit an admissible contention.<sup>21</sup>

### 3. SC ORS

We would grant, pursuant to the provisions of 10 C.F.R. § 2.315(c), SC ORS's request to participate as a non-party interested governmental entity,<sup>22</sup> but because no petitioner has submitted an admissible contention, SC ORS's request must be denied as moot.

## B. Admissibility of Contentions

### 1. Contention Admissibility Standards

Contention admissibility is governed by 10 C.F.R. § 2.309(f)(1), which specifies a set of strict requirements that must all be satisfied for a contention to be admissible. For a contention to be admissible under 10 C.F.R. § 2.309(f)(1), it must satisfy each of the following criteria: (1) provide a specific statement of the legal or factual issue sought to be raised; (2) provide a brief explanation of its basis; (3) demonstrate that the issue raised in the contention is within the scope of the proceeding; (4) demonstrate that the issue raised in the contention is material to

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<sup>20</sup> Although Mr. Wojcicki attempted to cure this failure in his reply by stating that he resides within fifty miles of the Summer facility, his effort fails because NRC practice prohibits a petitioner from establishing standing in a reply when it was not established in the original petition. Entergy Nuclear Operations, Inc. & Entergy Nuclear Palisades, LLC (Palisades Nuclear Plant), CLI-08-19, 68 NRC \_\_, \_\_ (slip op. at 5) (Aug. 22, 2008) (citing Final Rule, "Changes to the Adjudicatory Process," 69 Fed. Reg. at 2203).

<sup>21</sup> In his petition, Mr. Wojcicki states that he would like to intervene in this proceeding so that he can "be sure that the motion to change the location of the two AP1000 nuclear reactors from the currently proposed . . . site, to a new location" is accepted because it would provide "significantly better economic, environmental, and social solutions." Wojcicki Petition at 1. This statement fails to meet any of the contention admissibility requirements set forth in 10 C.F.R. § 2.309(f)(1). To be admitted, a petitioner must put forth a contention that satisfies all of these requirements in addition to demonstrating that he or she has satisfied the standing requirements.

<sup>22</sup> Under 10 C.F.R. § 2.315(c), "an interested State [or] local governmental body . . . which has not been admitted as a party under 10 C.F.R. § 2.309 [shall be afforded] a reasonable opportunity to participate in a hearing." Neither SCE&G nor Staff objects to allowing SC ORS to participate as an interested governmental entity.

the findings the NRC must make to support the action that is involved in the proceeding; (5) provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at hearing; and (6) provide sufficient information demonstrating that a genuine dispute exists in regard to a material issue of law or fact, including references to specific portions of the application that the petitioner disputes, or in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief.<sup>23</sup> These standards have been considered at length by other licensing boards and the Commission, and we will not repeat the discussion here.<sup>24</sup>

## 2. Sierra Club's Contentions

### a. Contention 1 (AP1000 Deficiencies)

#### **CONTENTION:**

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 [Design Control Document] 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.<sup>25</sup>

**DISCUSSION:** In support of this contention, insofar as it might be a challenge to the COLA, Petitioner makes a series of assertions that we divide into two categories. Petitioner

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<sup>23</sup> 10 C.F.R. § 2.309(f)(1).

<sup>24</sup> A thorough discussion of relevant case law has been presented, for example, in Duke Energy Carolinas, LLC (Combined License Application for William States Lee III Nuclear Station, Units 1 and 2), LBP-08-17, 68 NRC \_\_, \_\_ (slip op. at 7-9) (2008).

<sup>25</sup> Sierra Club Petition at 12-13.

asserts either that the COLA is incomplete (i.e., a contention of omission), or that there is a defect in the COLA (i.e., there is some specific error).

Petitioner asserts, as support for its contention, that “[t]he most significant elements of the proposed reactors, i.e., the design and operational practices, are lacking in the COLA.”<sup>26</sup> Petitioner goes on to discuss the history of the recently submitted revisions on the AP1000 design, which currently are being examined for certification.<sup>27</sup> Petitioner alleges, without support, that “[i]t is impossible to conduct a meaningful technical and safety review of the COLA without knowing the final design of the reactors as they would be constructed by SCE&G,”<sup>28</sup> and that, “[o]n its face, the DCD is incomplete . . . .”<sup>29</sup> Petitioner then presents a series of bare assertions relating to components that have or have not been certified.<sup>30</sup> Petitioner’s perception of the interaction between the design certification process, which is being conducted by rulemaking, and the COLA review and litigation process, is expressed in its statement: “[d]uring the Revision 17 certification process, any or all of these [certified/uncertified components] may be modified by the Commission, and as a result, require the applicant to modify its application.”<sup>31</sup> Petitioner asserts that “[a]n assessment of the risk is required for a COLA review, and that depends on the ultimate design of the reactor and how all of the components interact

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<sup>26</sup> Id. at 13.

<sup>27</sup> Id. at 14.

<sup>28</sup> Id.

<sup>29</sup> Id.

<sup>30</sup> Id. at 14-15.

<sup>31</sup> Id. at 15.

with each other . . . .”<sup>32</sup> Finally, Petitioner asserts that the severe accident mitigation alternatives (SAMAs)<sup>33</sup> cannot be determined until the final design is complete.<sup>34</sup>

Both Staff and Applicant oppose admission of this contention, stating that it is an attack upon the design certification process that is being conducted by rulemaking and, accordingly, is outside the scope of this proceeding.<sup>35</sup> In addition, Staff and Applicant oppose admission of this contention on the grounds that it fails to comply with the requirements of 10 C.F.R. § 2.309(f)(1).<sup>36</sup>

**HOLDING:** This contention is, for the reasons set out below, inadmissible.

First, this contention is an impermissible attack on the design certification process and such matters are outside the scope of this proceeding.<sup>37</sup> Second, to the extent that Petitioner

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<sup>32</sup> Id. at 16.

<sup>33</sup> Id. at 17. Throughout its contentions, Petitioner exclusively refers to severe accident mitigation alternatives (SAMAs) when it would have been more appropriate to discuss severe accident mitigation design alternatives (SAMDA) since SAMDA analysis is an integral part of the design certification process and is the more relevant element of the analysis at this stage of the COL process. Applicant has addressed the SAMA process in its ER and stated that its intent is to demonstrate that the Summer units are bounded by the SAMDA analysis performed by Westinghouse in its Design Control Document (DCD). The relevant SAMA analysis is being performed in connection with the design certification rulemaking, and is therefore outside the scope of this proceeding (see infra n.37).

<sup>34</sup> Sierra Club Petition at 17.

<sup>35</sup> See, e.g., Staff Answer at 21-24; SCE&G Answer at 21-28. Both of these Answers provide accurate references to legal authority that is binding upon this Board with regard to this issue. See, e.g., 10 C.F.R. §§ 52.55(c), 52.73(a); 73 Fed. Reg. at 20,972-73; Shearon Harris, CLI-08-15, 68 NRC at \_\_\_ (slip op. at 3-4).

<sup>36</sup> See, e.g., Staff Answer at 24-26; SCE&G Answer at 28-34. In Attachment 2 to SCE&G’s Answer, the Applicant explicitly points to the particular locations in the COLA where the matters Petitioner argues are missing from the COLA are actually addressed. Petitioner failed to contradict, or even address, these assertions in its Reply.

<sup>37</sup> “[A] contention that attacks a Commission rule, or which seeks to litigate a matter that is, or clearly is about to become, the subject of a rulemaking, is inadmissible.” See Potomac Elec. Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85, 89 (1974); see also Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003). An applicant for a COLA is expressly authorized by NRC’s regulations to incorporate by reference a certified design. See, e.g., 10 C.F.R. §§ 52.55(c), 52.73(a), 52.79(d)(1). The certification of the AP1000 design (including

asserts that nuclear safety matters and environmental matters are not satisfactorily addressed in the design certification or the COLA because the design is still evolving, Petitioner again raises matters outside the scope of this proceeding.<sup>38</sup> Moreover, Petitioner here impermissibly challenges NRC's regulations, which explicitly provide that "[a]ll nuclear safety issues"<sup>39</sup> and "[a]ll environmental issues concerning severe accident mitigation design alternatives [(SAMDAs)] associated with . . . the NRC's EA [(environmental assessment)] for the AP1000 design and Appendix 1B of the generic DCD" are considered resolved by the Commission.<sup>40</sup> While we recognize that Petitioner's principal complaint is that the design continues to evolve through revision, the revision process is contemplated by NRC regulations<sup>41</sup> and is currently being carried out through the design certification rulemaking. The appropriate path for any

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consideration of proposed revisions to the certified design) is the subject of current Commission rulemaking. In addressing precisely this issue, the Commission noted that it had "discussed this very situation in [Conduct of New Reactor Licensing Proceedings; Final Policy Statement, 73 Fed. Reg. 20,963, 20,972 (Apr. 17, 2008)] . . . [and] stated that issues concerning a design certification application should be resolved in the design certification rulemaking and not in a COL proceeding." Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-08-15, 68 NRC \_\_, \_\_ (slip op. at 3-4) (July 23, 2008). We take the use of the word "should" by the Commission therein to mean, for this Board, "must." Therefore, challenges to the certified design (or the certification thereof) are outside the scope of this adjudicatory proceeding. Had, however, Petitioner properly raised a contention challenging information in the design certification rulemaking (*i.e.*, a contention that would be admissible except for the fact that it challenged information in the design certification), such a contention "should [be] refer[red] . . . to the staff for consideration in the design certification rulemaking, and [held] . . . in abeyance, if it is otherwise admissible." *Id.* at 4 (emphasis added). Here, as our analysis above discusses, no such "otherwise admissible" contention regarding the design certification was submitted.

<sup>38</sup> See supra n.37. Matters relating to all nuclear safety issues (with certain delineated exceptions) are deemed resolved by the design certification for the AP1000. See 10 C.F.R. Part 52 App. D.VI.B.1.

<sup>39</sup> 10 C.F.R. Part 52 App. D.VI.B.1. The regulation sets out certain exceptions to this rule, none of which falls within Petitioner's challenge.

<sup>40</sup> 10 C.F.R. Part 52 App. D.VI.B.7.

<sup>41</sup> See, e.g., 10 C.F.R. § 52.55(c); Shearon Harris, CLI-08-15, 68 NRC at \_\_ (slip op. at 3).

petitioner's challenges to proposed design revisions is through participation in those rulemaking proceedings, not through a COL proceeding.<sup>42</sup>

With regard to Petitioner's direct challenges to the COLA itself, we address these challenges as either asserted omissions from, or asserted errors in, the COLA. 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. Therefore we will not hold the challenges in abeyance or refer them to Staff for resolution in the design certification rulemaking.

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). Thus we find that, in this contention, Petitioner has not submitted an admissible contention asserting an omission from, or error in, the COLA. Similarly, and for the same reasons, to the extent we might interpret this to assert an omission from, or error in, the design that is being considered for certification, it fails to create an otherwise admissible contention that

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<sup>42</sup> See 73 Fed. Reg. 20,963; Shearon Harris, CLI-08-15, 68 NRC at \_\_\_, (slip op. at 3-4).

should be held in abeyance and referred to Staff for consideration in the design certification rulemaking.

Further, we note that Petitioner makes a variety of other unsupported assertions regarding its view of the process, but none are definitive enough to satisfy NRC's contention admissibility requirements.<sup>43</sup>

Additionally, in response to Petitioner's analogy to a contention raised in the Shearon Harris COLA proceeding,<sup>44</sup> we point out the clear distinction between Petitioner's Contention 1 and the contention of omission asserted by the petitioners in the Shearon Harris proceeding. In the Shearon Harris proceeding, petitioners asked the Commission to delay the proceeding until the design certification was completed, and in submitting its contentions asserted, as the Commission had advised in ruling upon their request, specific omissions from the COLA itself. 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

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<sup>43</sup> For example, Petitioner asserts, without citation to any legal authority, that "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." Sierra Club Petition at 13. Furthermore, Petitioner alleges that, "[r]egardless of whether the components are certified or not, the COLA cannot be reviewed without the full disclosure of all designs and operational procedures." Id. But the fact is that the COLA is being reviewed by the Staff, which has access to all the information required for design certification and to the complete COLA, and Petitioner has the same access and fails to provide any support for any implied proposition that it does not. Petitioner makes the bare unsupported assertion that "it is impossible to conduct the probabilistic risk assessment [(PRA)] for the proposed Summer reactors without a final design and operations procedures." Id. at 15. Here again, Petitioner fails to contradict the COLA, failing to consider, examine, or criticize the PRA that exists in the COLA. It is worthy of note that the Commission deems all environmental issues associated with SAMDAs developed in connection with the certified design to be resolved and to provide adequate protection of the public health and safety in each case where a site-specific evaluation demonstrates the particular plant is bounded by the generic design certification parameters. 10 C.F.R. Part 52 App. D.VI.B.7.

<sup>44</sup> Sierra Club Petition at 15-16 (citing Shearon Harris, CLI-08-15, 68 NRC \_\_ (slip op.)).

asserted omissions, nor attempted to indicate where the relevant information was presented.<sup>45</sup> 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.

Finally, we call to Petitioner's attention the process by which new information, which may arise in connection with the ongoing certification process, is integrated with the eventual site-specific plant application. As we observed above, an applicant is permitted to incorporate by reference the certified design into the COLA, but changes proposed to the certified design are to be addressed in the design certification rulemaking and are not within the scope of this proceeding.<sup>46</sup> Nonetheless, along the way, and certainly once a final design is certified, each COLA applicant will have to determine whether it will adopt in toto the certified design, or whether it will take exemptions thereto and/or departures therefrom.<sup>47</sup> An applicant will also have to demonstrate that the site-specific parameters are bounded by the parameters developed for the certified design.<sup>48</sup> The process for taking such exemptions and departures is set forth in 10 C.F.R. Part 52 App. D.VIII., and we note that there are provisions in both subsections A.4 and B.4 thereof that describe the process for hearings and litigation on any such departures and exemptions.<sup>49</sup> Thus, at the appropriate point in the overall COLA/DCD process, an interested party will have the opportunity to petition for intervention to raise matters

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<sup>45</sup> Progress Energy Carolinas, Inc. (Shearon Harris Nuclear Power Plants, Units 2 and 3), LBP-08-21, 68 NRC \_\_, \_\_ (slip op. at 7, 8) (Oct. 30, 2008).

<sup>46</sup> See, e.g., 10 C.F.R. § 52.55(c); 73 Fed. Reg. 20,963; Shearon Harris, CLI-08-15, 68 NRC at \_\_, (slip op. at 3-4).

<sup>47</sup> See, e.g., 10 C.F.R. § 52.63(b)(1), (2); 10 C.F.R. Part 52 App. D.IV., VIII.

<sup>48</sup> See, e.g., 10 C.F.R. Part 52 App. D.II.C., VI.B.7.

<sup>49</sup> See 10 C.F.R. §§ 52.63(b)(1), 52.98(f), 50.12(a). See also 73 Fed. Reg. 20,963; Shearon Harris, CLI-08-15, 68 NRC at \_\_ (slip op. at 4) ("If an applicant later decides not to reference a certified design, and instead proceeds with a site-specific design, any admissible issues would have to be addressed in the licensing adjudication.").

that are material to the decision the NRC must make regarding the licenseability of the proposed Summer nuclear units.

b. Contention 2 (Aircraft Crashes)

**CONTENTION:**

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.<sup>50</sup>

**DISCUSSION:** In support of this contention, Petitioner refers us to 10 C.F.R.

§ 50.34(a)(4), which provides that an application for a construction permit must include,

a preliminary analysis and evaluation of the design and performance of structures, systems, and components of the facility with the objective of assessing the risk to public health and safety resulting from operation of the facility and including determination of the margins of safety during normal operations and transient conditions anticipated during the life of the facility, and the adequacy of structures, systems, and components provided for the prevention of accidents and the mitigation of the consequences of accidents.<sup>51</sup>

Petitioner then asserts that the Summer COLA does not assess the consequences of one particular category of potential accidents – aviation attacks – including failing to assess the resulting impact, penetration, explosion, and fire. Such an attack, alleges Petitioner, is "likely enough" to qualify as a design-basis threat (DBT).<sup>52</sup> Citing an NRC study released in October 2000, which analyzed spent fuel pool hazards associated with nuclear plants undergoing

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<sup>50</sup> Sierra Club Petition at 17-18.

<sup>51</sup> Id. at 18.

<sup>52</sup> Id. We note, however, there is a fundamental distinction between design basis events, which are accidents that must be considered in the design of the plant, see 10 C.F.R. § 50.34(a)(4), and design basis threats, which are accidents that must be considered in the design of plant security features, see 10 C.F.R. § 73.1. The Petitioner seems to conflate these terms.

decommissioning, Petitioner asserts that the study found that, “the impacts of an aircraft attack were possible, and the results were potentially devastating.”<sup>53</sup> Petitioner then refers to Commission rulemakings initiated in 2002<sup>54</sup> and 2006,<sup>55</sup> and an issue brief from the Union of Concerned Scientists<sup>56</sup> to support Petitioner’s conclusion that “[a]ll of the studies conducted by the NRC and outside parties have shown that nuclear reactors cannot withstand aviation attacks, and that attacks on containment structures and spent fuel pools can be devastating.”<sup>57</sup> Finally turning to legal precedent, Petitioner asserts that: (a) the United States Court of Appeals for the Ninth Circuit found that the Commission’s position in its Final Rulemaking that the “passive measures already in place . . . are appropriate for protecting nuclear facilities from an aerial attack”<sup>58</sup> was unreasonable and required the NRC to investigate aviation threats,<sup>59</sup> and (b) if the Commission finalizes the rule it is currently considering in an ongoing NRC rulemaking proceeding, “applicants for new nuclear power reactors [would be required] to incorporate into their design additional practical features that would avoid or mitigate the effects of an aircraft impact.”<sup>60</sup> In all of the foregoing, we find Petitioner’s focus to be on “attacks,” which relate to acts of sabotage (i.e., DBTs not Design Basis Events (DBEs)).

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<sup>53</sup> Sierra Club Petition at 20.

<sup>54</sup> Id. (citing All Operating Power Reactor Licensees; Order Modifying Licenses, 67 Fed. Reg. 9792 (Mar. 4, 2002)).

<sup>55</sup> Id.; Design Basis Threat, 72 Fed. Reg. 12,705 (Mar. 19, 2007).

<sup>56</sup> Sierra Club Petition at 21 (citing David Lochbaum, The NRC’s Revised Security Regulations, (Feb. 1, 2007), available at <http://a4nr.org/library/security/02.01.2007-ucs>).

<sup>57</sup> Id.

<sup>58</sup> Id. at 20-21 (citing SECY-06-0219 (Final Rulemaking to Revise 10 CFR 73.1, Design Basis Threat (DBT) Requirements) (Oct. 30, 2006) at 4).

<sup>59</sup> San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016 (9th Cir. 2006), cert. denied, 549 U.S. 1166 (2007).

<sup>60</sup> Sierra Club Petition at 23 (citing Power Reactor Security Requirements; Supplemental Proposed Rule, 73 Fed. Reg. 19,443 (Apr. 10, 2008)).

Petitioner seeks to rely upon the provisions of 10 C.F.R. § 51.53 to support its proposition that the COLA ER at issue here must analyze aircraft impact events because, Petitioner notes, it requires a license renewal applicant to consider severe accident mitigation alternatives (SAMAs) within its ER if the Staff has not previously evaluated such alternatives for the plant for which a license renewal is sought.<sup>61</sup> (We note, however, that Petitioner misapprehends the scope of the requirements of 10 C.F.R. § 51.53 that relate to license renewals. An 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.) Petitioner concludes that the ER for the proposed Summer reactors does not provide sufficient information for the Staff to consider reasonable alternatives for avoiding or reducing the environmental impacts of this class of threats and accidents (a fault that would amount to an asserted failure of the Staff to satisfy its NEPA obligations), which, it asserts, is considered a serious omission in the COLA.<sup>62</sup>

Both Applicant and Staff oppose admission of this contention.<sup>63</sup> Applicant asserts that the contention is inadmissible for several reasons. First, Applicant asserts that Contention 2 directly challenges Commission precedent and regulations and raises matters that are subject to ongoing rulemakings and are therefore outside the scope of this proceeding, failing to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iii). Second, Applicant asserts that Contention 2 fails to satisfy the requirements of 10 C.F.R. 2.309(f)(1)(vi) in that the contention fails to controvert relevant portions of the COLA. Third, Applicant asserts that Contention 2 fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(v) in that the specific documents Petitioner

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<sup>61</sup> Id.

<sup>62</sup> Sierra Club Petition at 24.

<sup>63</sup> SCE&G Answer; Staff Answer.

identifies as being among those upon which it would rely lack adequate factual support for the assertion that an aircraft impact assessment is needed for the proposed Summer facility.<sup>64</sup> In like manner, the Staff opposes Contention 2, asserting that it is inadmissible both because it concerns issues that are the subject of an ongoing rulemaking and because it fails to satisfy 10 C.F.R. § 2.309(f)(1)(iii), (iv), (v), and (vi).<sup>65</sup> With respect to issues raised in this contention regarding severe accident mitigation, Staff asserts that such matters are outside the scope of this proceeding because 10 C.F.R. Part 52, App. D.VI.B.7. provides, in relevant part, that “[t]he Commission considers the following matters resolved within the meaning of 10 CFR 52.63(a)(5) in subsequent proceedings for issuance of a COL . . . [a]ll environmental issues concerning severe accident mitigation design alternatives associated with the information in the NRC’s EA for the AP1000 design.”<sup>66</sup>

**HOLDING:** This contention is, for the reasons set out below, inadmissible.

The kernel of this contention is the assertion that there is an omission from the COLA because it does not contain an assessment of aircraft impacts. This deficiency, asserts Petitioner, is contrary to both NEPA and NRC regulations.

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.<sup>67</sup> Although the United States Court of Appeals for the Ninth Circuit has held that the NRC must address such matters to

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<sup>64</sup> SCE&G Answer at 36.

<sup>65</sup> Staff Answer at 27-39.

<sup>66</sup> Id. at 38 (citing 10 C.F.R. 52 App. D.VI.B.7.).

<sup>67</sup> See, e.g., Sys. Energy Res., Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-07-10, 65 NRC 122 (2007); Nuclear Mgmt., LLC (Palisades Nuclear Plant), CLI-07-9, 65 NRC 139, 141-42 (2007); Amergen Energy Co., LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124, 128-34 (2007).

satisfy its NEPA obligations,<sup>68</sup> the Commission has stated that it does not consider itself bound by that holding outside the Ninth Circuit,<sup>69</sup> and this Board is bound by that position. Thus, there 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. Similarly, examination of SAMAs and SAMDAs relating to aircraft attacks, which arise under the Agency's NEPA obligations, are outside the scope of this proceeding.<sup>70</sup> 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.

As to Petitioner's assertion that failure to incorporate analysis of design features to mitigate the effects of an aircraft impact fails to comply with NRC safety-related regulations, the underlying inquiry is whether the probability of aircraft impacts falls above or below the threshold probability that requires analysis.<sup>71</sup> Events that could cause radioactive releases (including aircraft impact events) are included within the set of DBEs required to be analyzed and designed against only if the probability of such events is above  $10^{-6}$  per year.<sup>72</sup> Here, Applicant

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<sup>68</sup> San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016 (9th Cir. 2006), cert. denied, 549 U.S. 1166 (2007).

<sup>69</sup> “[The Commission] is not obliged to adhere, in all of its proceedings, to the first court of appeals decision to address a controversial question,” in that “[s]uch an obligation would defeat any possibility of a conflict between the Circuits on important issues.” Oyster Creek, CLI-07-8, 65 NRC at 128-29.

<sup>70</sup> Nor does Petitioner address the fact 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.

<sup>71</sup> To the extent Petitioner asserts the need for design features to guard against DBTs, the matter is, as we said above, outside the scope of this proceeding because it is the subject of an ongoing rulemaking. See Consideration of Aircraft Impacts for New Nuclear Power Reactor Designs, 72 Fed. Reg. 56,287 (Oct. 3, 2007).

<sup>72</sup> Private Fuel Storage (Independent Spent Fuel Storage Installation), CLI-01-22, 54 NRC 255, 260 (2001) (“Estimating the probability of extremely unlikely events involves considerable

has examined the probability of such an event in Section 19.58 of the COLA (which incorporates by reference the same section of the AP1000 DCD) and determined it falls below the threshold for a DBE. Thus, this portion of Contention 2 is inadmissible as a contention of omission because there is no foundation for either the proposition that such an event must be analyzed in the COLA or that design alternatives must be examined to mitigate the consequences of such an event. Further, Petitioner fails to challenge with any specificity the analysis set out in the COLA. Thus, this contention is inadmissible as a contention asserting an error in the COLA because it fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(vi).

c. Contention 3 (Need for Power, Cost of Action, and Alternatives)

**CONTENTION:**

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

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uncertainty when sufficient data are not available to plug into the formula. Therefore, the Standard Review Plan for reactors deems a threshold probability of one in a million ( $1 \times 10^{-6}$ ) to be acceptable where, 'when combined with reasonable qualitative arguments, the realistic probability can be shown to be lower.'" Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants, NUREG-0800 (Rev. 2, July 1981), § 2.2.3(II), "Evaluation of Potential Accidents." "That is, where a conservative estimate shows an event has no greater than a one-in-a-million probability, that event may be ignored in facility design if reasonable estimates result in a lower probability when conservative margins are not factored in."). We note that guidance to prospective licensees set out in the latest version (Revision 3, March 2007) of NUREG-0800 mirrors the same guidance as noted above.

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.<sup>73</sup>

**DISCUSSION:** In the "Support" section of Contention 3, Petitioner raises a series of vague and generalized challenges to the adequacy or sufficiency of the information contained in Applicant's ER.<sup>74</sup> In substance, these challenges assert that the ER is inadequate or insufficient

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<sup>73</sup> Sierra Club Petition at 24-26.

<sup>74</sup> Id. at 27-47.

in one of two ways: it either fails to comply with the NRC's COLA ER requirements, or fails to comply with the NEPA.<sup>75</sup>

The Commission's regulations define matters which must be addressed in a COLA-related ER, but they do not specify what constitutes adequate or sufficient content. Thus a contention asserting the inadequacy or insufficiency of the content of the ER cannot succeed as a challenge to an applicant's compliance with an Agency regulation so long as the ER reasonably addresses the topics that the Agency's regulations require, as does the COLA under consideration here. The Commission's regulations do, however, instruct petitioners to file NEPA-related contentions at this stage of the proceeding "based on the applicant's environmental report."<sup>76</sup> We view this regulatory requirement as an instruction to consider contentions based on the ER as if they were directed at an NRC-generated document intended to satisfy the Agency's NEPA obligations.

The initial paragraphs of Petitioner's "Support" section for this contention set out Petitioner's view of the NEPA requirements and extol the qualifications of its expert, Ms. Brockway.<sup>77</sup> These paragraphs provide no information that is relevant to our determination regarding the admissibility of this contention, either in the context of the NRC's requirements for contention admissibility, or from the perspective of the NEPA or COLA ER requirements. Nevertheless, the balance of the section provides some illumination of Petitioner's position. We address below each of the components of Contention 3 (Parts A-G), Petitioner's support, and the relevant portions of the Staff's and Applicant's Answers.

**HOLDING:** This contention is, for the reasons set out below, inadmissible.

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<sup>75</sup> Id.

<sup>76</sup> 10 C.F.R. § 2.309(f)(2). The regulation states, "[o]n issues arising under [NEPA], the petitioner shall file contentions based on the applicant's [ER]. The petitioner may amend those contentions or file new contentions if there are data or conclusions in the NRC draft or final [EIS] . . . that differ significantly from the data or conclusions in the applicant's documents." Id.

<sup>77</sup> Sierra Club Petition at 27-29.

In Part A, Petitioner asserts that Applicant has not considered the current economic crisis in assessing the need for power, including the possibility of a long and deep economic downturn.<sup>78</sup> Applicant did, however, consider different economic conditions,<sup>79</sup> and the assertion therefore can only be successful if it is interpreted to argue that it considered an insufficient impact. Petitioner did not provide any supporting data or analysis to indicate Applicant failed to consider a sufficient economic impact, nor did Petitioner provide any analysis or definitive criticism of Applicant's analysis 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.<sup>80</sup> Accordingly, although we are aware of the serious nature of the current national economic problems, the contention does not challenge the COLA with any (let alone the requisite) specificity nor provide sufficient information to show that a genuine dispute exists between Petitioner and Applicant on a material issue of fact, and therefore fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(i), (iv), and (vi).

In addition, two other factors would also make inadmissible this portion of Petitioner's challenges regarding the detail of the load forecast provided in the ER: (a) the challenges address a level of detail well beyond what is required of the Agency in its analyses<sup>81</sup> and, therefore, such an examination is outside the scope of what is required by the Agency and

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<sup>78</sup> Id. at 25.

<sup>79</sup> SCE&G Answer at 54 (citing ER § 8.1.1).

<sup>80</sup> Petitioner's expert, Ms. Brockway, made assertions that Applicant failed to consider the impact of the economic downturn on the amount of power that would be required. However, Ms. Brockway did not quantify the impact on the needed power nor provide any alternative analysis to that provided in the COLA.

<sup>81</sup> The Applicant need not provide "burdensome . . . analyses." Nuclear Energy Institute; Denial of Petition for Rulemaking, 68 Fed. Reg. 55,905, 55,910 (Sept. 29, 2003) (citing Louisiana Energy Servs., L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 88, 94 (1998)). Indeed, as the Commission said on a nearly identical topic, "[q]uibbling over the details of an economic analysis in this situation [amounts to] . . . standing NEPA on its head by asking that the license be rejected not due to environmental costs, but because the economic benefits are not as great as estimated." Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 145 (2004) (internal citations omitted).

thereby fails to satisfy the requirements of C.F.R. § 2.309(f)(1)(iii); and (b) Petitioner offers no information to indicate that there is a genuine dispute over an issue that is material to the decision the NRC must make and thus fails to satisfy the requirements of 10 C.F.R.

§ 2.309(f)(1)(iv).

In Part B, Petitioner asserts that Applicant, in investigating alternatives to the proposed action, ignored demand-side management (DSM) and undervalued “opportunities for cost-effective energy efficiency and demand or load management.”<sup>82</sup> As to Petitioner’s assertion that Applicant ignored DSM, the ER in fact examined and considered DSM, indicating that a program of this nature “reliably reduces the system’s peak demand by approximately 250 MW of capacity.”<sup>83</sup> Thus there is no “omission,” and we turn to Petitioner’s assertion that Applicant has undervalued (*i.e.*, underestimated) the potential contributions from DSM. Analysis of this latter assertion, once again, turns 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.<sup>84</sup> As Applicant stated, “the various DSM-related reports and initiatives discussed by Petitioners—which generally cite single-digit percentage gains in energy savings or efficiency—are not a substitute for the over 2000 megawatts-electric of baseload generating

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<sup>82</sup> Sierra Club Petition at 25.

<sup>83</sup> SCE&G Answer at 61 (citing ER § 8.1.1.2, at 8.1-5).

<sup>84</sup> 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. Busey, 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)). In the instant proceeding, the Applicant has selected base-load generation as its project purpose, and has examined several alternative ways of achieving that goal. NRC precedent dictates that we defer to that stated goal and, in these circumstances, find that challenges to an alternatives examination that assert a requirement to examine methods of achieving another goal are outside the scope of this proceeding and not material to the decision the NRC must make.

capacity that SCE&G seeks to install at VCSNS.”<sup>85</sup> Because 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).<sup>86</sup>

At their root, all of the challenges set out in Parts B, C, and D are challenges to Applicant’s selected project purpose to add base-load power generation, all asserting, in one way or another, that there are other ways not examined by Applicant to achieve (or eliminate the

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<sup>85</sup> SCE&G Answer at 62.

<sup>86</sup> We note 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, saying

We agree with the Board that energy conservation or efficiency – or, as it is sometimes called, “demand side management” – is not a reasonable alternative that would advance the goals of the Exelon project . . . . Intervenors complain that the Board “blindly adopted” Exelon’s goal of creating baseload power in defining the scope of the project . . . . Energy efficiency would be a possible “alternative” to the project only if the project’s purpose was recast (as Intervenors would have it) as meeting “future energy needs in the area.” . . . The Board cited extensive case law supporting the proposition that a reviewing agency should take into account the applicant’s goals for the project. . . . The lead case is Citizens Against Burlington v. Busey, [938 F.2d 190 (D.C. Cir. 1991)], where the D.C. Circuit held that “[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.” [*Id.* at 199.] “When the purpose is to accomplish one thing . . . it makes no sense to consider the alternative ways by which another thing might be achieved.” [*Id.* at 195.] Here, the Board rightly stressed that neither the NRC nor Exelon has the mission (or power) to implement a general societal interest in “energy efficiency.” . . . Thus, while it makes some sense to inquire into various non-nuclear options for generating power – and Exelon and the NRC staff have done so – the NEPA “rule of reason” does not demand an analysis of what the Board called the “general goal” of energy efficiency. . . . [I]t is reasonable here to confine the inquiry to potential sources of power. Exelon and the NRC staff were not obliged to examine general efficiency or conservation proposals that would do nothing to satisfy this particular project’s goals.

Clinton, 05-29, 62 NRC at 806-808.

We see the present COLA challenge as directly analogous to the situation in Clinton, and see the Commission’s ruling therein as affirming the conclusion there, and mandating our conclusion here, that DSM need not be considered an alternative to the generation of base-load power.

need for) additional generation. But the Commission is clear that such alternatives need not be considered in performance of its NEPA alternatives examination.<sup>87</sup> Moreover, none of these challenges raises any explicit challenge to the analyses set out in the ER that Applicant indicates could meet its stated need for base-load power, thereby failing to satisfy 10 C.F.R. § 2.309(f)(1)(vi). Nor does Petitioner provide any support for the proposition that the alternatives it suggests are reasonable means by which to generate base-load power. Therefore, the assertion, that failure to consider those alternatives is a flaw in the ER, fails to satisfy the requirement for support set out in 10 C.F.R. § 2.309(f)(1)(vi).

In Part C, Petitioner asserts that “SCE&G dismisses the potential of renewable sources of power, such as solar, wind, [and] biomass to contribute substantially to meeting its future need for resources.”<sup>88</sup> Petitioner further identifies the allegedly insufficient criteria employed by Applicant in assessing the viable alternative technologies.<sup>89</sup> To the extent that this constitutes a challenge to Applicant’s selected project purpose to generate base-load power, such a challenge is, as we said above, inadmissible; therefore, we examine this challenge as one to the alternatives analyses contained in the ER.

As we observed above, the NRC defers to Applicant’s stated purpose so long as that purpose is not so narrow as to eliminate alternatives. In this instance, Applicant considered and examined in the ER a number of reasonable alternative ways to generate base-load power. In fact, Applicant’s ER considered and examined precisely those renewable sources of power that Petitioner extols here (wind, solar, and biomass) and determined that those sources, individually or in combination, cannot meet the identified purpose of the proposed action, which is to develop approximately 2000 megawatts of base-load electrical generation. Thus no “omission” regarding these alternatives is present. As to the possibility that this is an asserted error

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<sup>87</sup> See supra n.84.

<sup>88</sup> Sierra Club Petition at 39.

<sup>89</sup> Id.

(defect) in the analysis, no specific error is pointed to in Applicant's analysis, nor is Applicant's conclusion that Petitioner's proposed alternatives cannot generate base-load power challenged by Petitioner. For the foregoing reasons, Part C fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(vi).

In Part D, Petitioner's substantive assertion is that "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."<sup>90</sup> Petitioner's concern about 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. In either case, this challenge fails. As we noted several times above, Applicant's project purpose is an acceptable election in this instance. With regard to the latter proposition, an applicant is not required to examine all possible alternatives, but only those that can reasonably accomplish its elected purpose.<sup>91</sup>

As to the "risk"-related components of this contention, which present a challenge to the project costs, costs for a project are relevant for the determination only if an environmentally preferable option is identified,<sup>92</sup> which is not the case here. Similarly, to the extent that this amounts to a challenge to the sensibility of Applicant's commercial business decision to build a single large generation facility rather than an aggregation of smaller similar or dissimilar facilities, "the NRC is not in the business of regulating the market strategies of licensees . . . and leave[s] to licensees the ongoing business decisions that relate to costs and profit."<sup>93</sup> As the United States Court of Appeals for the District of Columbia Circuit put it, Federal agencies are

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<sup>90</sup> Id. at 42.

<sup>91</sup> Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council, 435 U.S. 519, 551 (1978).

<sup>92</sup> Consumers Power Co. (Midland Plant, Units 1 and 2), ALAB-458, 7 NRC 155, 163 (1978).

<sup>93</sup> La. Energy Servs., L.P. (National Enrichment Facility), CLI-05-28, 62 NRC 721, 726 (2005) (citation omitted).

not required under NEPA “to canvas . . . business choices,” having “neither the expertise nor the proper incentive structure to do so.”<sup>94</sup>

As Applicant identified, “ER Section 9.2.2.12 contains the pertinent evaluation[s]” of “combinations of energy sources as alternatives to the construction and operation of proposed VCSNS Units 2 and 3,” and none of those evaluations are controverted by Petitioner.<sup>95</sup> Petitioner thus fails to contradict any specific part of the ER or the COLA, thereby failing to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(vi). To the extent this might be construed to be asserting an omission, Applicant did, in fact, look at a variety of alternative combinations, and therefore no omission exists. To the extent that Petitioner asserts in this contention that Applicant had an obligation to examine other (modular) alternatives, the obligation falls squarely upon Petitioner to specify such alternatives and indicate why they are appropriate,<sup>96</sup> and Petitioner has identified no such alternative with any particularity. Thus, Petitioner fails to satisfy 10 C.F.R. § 2.309(f)(1)(vi).

In Part E, Petitioner asserts that “the Applicant underestimates the impact of its proposed construction and operation on vulnerable customers via rate increases.”<sup>97</sup> The issue of future rates for Applicant’s customers is outside the purview of the NRC because the issue of electric rates is, as Applicant succinctly put it, “germane to protection of the ‘public interest’ as opposed to public health and safety or the environment.”<sup>98</sup> NEPA charges a Federal agency with weighing the environmental effects and impacts of the proposed project and its alternatives

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<sup>94</sup> Citizens Against Burlington, 938 F.2d at 197 n.6.

<sup>95</sup> SCE&G Answer at 70.

<sup>96</sup> Exelon Generation Co., LLC (Early Site Permit for Clinton ESP Site), LBP-05-19, 62 NRC 134, 158 (2005).

<sup>97</sup> Sierra Club Petition at 42.

<sup>98</sup> SCE&G Answer at 71.

against each other and balancing those effects against the benefits of each such project.<sup>99</sup>

Thus Part E fails to raise a matter that is within the scope of this proceeding, thereby failing to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iii), and fails to provide information that indicates that there is a genuine dispute with Applicant on a material issue of law or fact, thereby failing to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(vi).

Parts F and G of the “Support” section of this contention raise issues regarding the costs of the proposed project. In Part F, Petitioner asserts that “the Applicant’s cost estimate for construction and operation fails to take into account recent rapid increases in the cost of inputs for construction,”<sup>100</sup> while in Part G Petitioner asserts that “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.”<sup>101</sup> The accuracy of project cost estimates only becomes relevant if an environmentally preferable alternative has been identified.<sup>102</sup> In the present situation, since neither the Applicant’s ER nor Petitioner’s petition identifies an alternative that is preferable from the perspective of its environmental impacts, the cost of the proposed project (and therefore the accuracy of the estimates thereof) is irrelevant to the

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<sup>99</sup> As Applicant succinctly points out, this is not a cost/benefit analysis, but a balancing of the environmental effects of the proposed action and the alternatives determined to be reasonable (in light of the sponsor’s selected purpose), against the benefits of each thereof. SCE&G Answer 48-49. The Commission is consummately clear that its obligations under NEPA focus on “the adjective ‘environmental,’” and “NEPA does not require the agency to assess every impact or effect . . . , but only the impact or effect on the environment.” Claiborne, CLI-98-3, 47 NRC at 88 (citing Metro. Edison Co. v. People Against Nuclear Energy, 460 U.S. 766, 772 (1983)).

<sup>100</sup> Sierra Club Petition at 26.

<sup>101</sup> Id.

<sup>102</sup> We agree with the analysis of the Board in the Shearon Harris COL proceeding that found that “Commission precedent establishes that NEPA requires an Applicant to present . . . cost-benefit analysis . . . only where the Applicant’s alternatives analysis indicates that there is an environmentally preferable alternative.” Shearon Harris, LBP-08-21, 68 NRC at \_\_\_ (slip op. at 25).

decision the NRC must make. For the foregoing reasons, Parts F and G fail to demonstrate that the matters they raise are material to the decision the NRC must make, thereby failing to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iv), and fail to demonstrate that the matters raised are within the scope of this proceeding, thereby failing to satisfy the requirements of 10 C.F.R. § 2.309(f)(1)(iii).

### III. CONCLUSION

While Sierra Club has standing to participate, neither FOE nor Mr. Wojcicki has satisfied the Agency's requirements for standing. Furthermore, neither the joint petition submitted by Sierra Club and FOE nor the petition submitted by Mr. Wojcicki presents an admissible contention. Accordingly, (a) SC ORS's unopposed request to participate in any hearing as an interested government entity is moot, (b) SCE&G's motions<sup>103</sup> to strike portions of the replies filed by Sierra Club and FOE and Mr. Wojcicki are denied as moot, and (c) Mr. Wojcicki's motion<sup>104</sup> opposing SCE&G's motion to strike is denied as moot.

### IV. ORDER

For the foregoing reasons, it is this 18th day of February 2009, ORDERED that:

1. The Joint Petition to Intervene and Request for Hearing from Sierra Club and Friends of the Earth is DENIED.
2. The Petition to Intervene and Request for Hearing from Mr. Wojcicki is DENIED.
3. SC ORS's unopposed Request for an Opportunity to Participate in any Hearing is DENIED as moot.
4. SCE&G's Motion to Strike Portions of Sierra Club's and Friends of the Earth Petition is DENIED as moot.
5. SCE&G's Motion to Strike Portions of Mr. Wojcicki's Petition is DENIED as moot.

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<sup>103</sup> [SCE&G] Motion to Strike Portions of the Sierra Club and Friends of the Earth Reply (Jan. 22, 2009); [SCE&G] Motion to Strike Portions of Joseph Wojcicki's Reply (Jan. 16, 2009).

<sup>104</sup> The Joseph Wojcicki's Motion to Deny [SCE&G] Motion to Strike Portions of Joseph Wojcicki's Reply (Jan. 21, 2009).

6. Mr. Wojcicki's Motion to Deny SCE&G's Motion to Strike is DENIED as moot.

7. In accordance with the provisions of 10 C.F.R. § 2.311, any appeal to the Commission from this Memorandum and Order must be taken within ten (10) days after it is served.

THE ATOMIC SAFETY  
AND LICENSING BOARD<sup>105</sup>

***/RA/***

Dr. Paul B. Abramson, Chairman  
ADMINISTRATIVE JUDGE

***/RA/***

Dr. Michael F. Kennedy  
ADMINISTRATIVE JUDGE

***/RA/***

Dr. Jeffrey D. E. Jeffries  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
February 18, 2009

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<sup>105</sup> A copy of this Memorandum and Order was sent this date by the Agency's E-Filing System to: (1) Counsel for the Staff; (2) Counsel for SCE&G; (3) Sierra Club and Friends of the Earth; (4) SC ORS; and (5) Joseph Wojcicki.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of )  
)  
SOUTH CAROLINA ELECTRIC ) Docket Nos. 52-027-COL  
AND GAS COMPANY, ACTING FOR ITSELF ) 52-028-COL  
AND AS AGENT FOR THE SOUTH CAROLINA )  
PUBLIC SERVICE AUTHORITY (ALSO )  
REFERRED TO AS SANTEE COOPER) )  
)  
(Virgil C. Summer Nuclear Station )  
Units 2 and 3) )  
)  
(Combined Operating License) )

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB ORDER (RULING ON STANDING AND CONTENTION ADMISSIBILITY) (LBP-09-02) have been served upon the following persons by Electronic Information Exchange.

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Docket Nos. 52-027 and 52-028-COL  
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Docket Nos. 52-027 and 52-028-COL  
LB ORDER (RULING ON STANDING AND CONTENTION ADMISSIBILITY) (LBP-09-02)

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[Original signed by Nancy Greathead]  
Office of the Secretary of the Commission

Dated at Rockville, Maryland  
this 18<sup>th</sup> day of February 2009