UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

COMMISSIONERS:

Gregory B. Jaczko, Chairman
Dale E. Klein
Kristine L. Svinicki

In the Matter of	)	
SOUTH CAROLINA ELECTRIC AND GAS CO. and SOUTH CAROLINA PUBLIC SERVICE AUTHORITY (ALSO REFERRED TO AS SANTEE COOPER)	)	Docket Nos. 52-027-COL & 52-028-COL
(Virgil C. Summer Nuclear Station, Units 2 and 3)	)	

CLI-10-01

MEMORANDUM AND ORDER

This proceeding concerns the application of South Carolina Electric and Gas Company and South Carolina Public Service Authority (also referred to as Santee Cooper) (together, SCE&G or Applicant) for a combined license (COL) under 10 C.F.R. Part 52 to construct and operate two new nuclear reactor units at the Virgil C. Summer Nuclear Station (Summer) in Fairfield County, South Carolina.[1] Today we resolve two appeals. The Sierra Club and Friends of the Earth, filing jointly (together, Joint Petitioners),[2] and Mr. Joseph Wojcicki, filing

[1] The proposed project is a joint effort between SCE&G and Santee Cooper (a state-owned public utility), with SCE&G acting on behalf of itself and as Santee Cooper's agent in this combined license proceeding. According to the application, "SCE&G and Santee Cooper will jointly own the facility and share in the costs (including the cost of decommissioning) and output of the facility as follows: SCE&G, 55%; Santee Cooper, 45%." COL Application Part 1, "General and Administrative Information", Section 1.3.3., "Decommissioning Funding" (Rev. 0, Mar. 27, 2008)(ADAMS accession number ML081300504).

[2] *See Brief on Appeal of Sierra Club and Friends of the Earth* (Feb. 27, 2009)(Joint Petitioners' Appeal).

separately,[3] have appealed LBP-09-2, an Atomic Safety and Licensing Board decision denying their respective intervention petitions.[4] The Applicant[5] and the NRC Staff[6] oppose both appeals.

For the reasons set forth below, we affirm the Board's decision in part, reverse it in part, and remand the case for further proceedings consistent with this Memorandum and Order.

I. BACKGROUND

Following publication of the notice of hearing for this proceeding, Mr. Wojcicki and the Joint Petitioners filed timely intervention petitions, on December 7 and 8, 2008, respectively.[7] Joint Petitioners submitted three contentions. First, Joint Petitioners challenge the completeness of the COL application, given the NRC Staff's ongoing review of Revision 17 of the AP1000 Design Control Document (DCD), which the application incorporates by reference.[8] Second, Joint Petitioners contend that the COL application does not address the effects of an aircraft impact at the proposed site.[9] Finally, Joint Petitioners argue that the Applicant's Environmental Report (ER) inadequately addresses seven discrete issues, broadly

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[3] *See Notice of Appeal* (Feb. 27, 2009) (Wojcicki Appeal).

[4] *See South Carolina Electric and Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), LBP-09-2, 69 NRC 87 (2009).

[5] *South Carolina Electric and Gas Company Brief in Opposition to Sierra Club and Friends of the Earth Appeal from LBP-09-2* (Mar. 9, 2009)(Applicant Opposition).

[6] *NRC Staff Brief in Opposition to Appeal of LBP-09-2 By Sierra Club and Friends of the Earth* (Mar. 9, 2009)(Staff Opposition).

[7] *See* Notice of Order, Hearing and Opportunity To Petition for Leave To Intervene, 73 Fed. Reg. 60,362 (Oct. 10, 2008); *Petition to Intervene* (Dec. 7, 2008)(Wojcicki Petition); *Petition to Intervene and Request for Hearing By Sierra Club and Friends of the Earth* (Dec. 8, 2008)(Joint Petition).

[8] *See* Joint Petition at 12-13.

[9] *See id.* at 17-18.

characterized as analyses addressing the need for power, energy alternatives, and costs and schedule for the proposed action.[10]

Mr. Wojcicki, petitioning as an individual, did not specifically identify a contention, although he indicated his desire to participate in the proceeding so that he could "be sure that the motion to change the location of [proposed Units 2 and 3] to a new location near the Atlantic Ocean . . . is accepted by the NRC."[11] He asserted in a general fashion that such a change would provide "significantly better economic, environmental, and social solutions."[12]

The Board denied both intervention petitions. The Board found that the Sierra Club successfully demonstrated standing to participate in the proceeding, but that Friends of the Earth and Mr. Wojcicki did not, and that neither Joint Petitioners nor Mr. Wojcicki submitted an admissible contention. Mr. Wojcicki and Joint Petitioners filed timely appeals of the Board's decision.[13]

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[10] *See id.* at 24-26.

[11] Wojcicki Petition at 1. The referenced "motion" appears to be a filing that Mr. Wojcicki made before the South Carolina Public Service Commission, in a parallel "public convenience and necessity" proceeding related to the proposed new units. *See Motion to Change the Location of the Two New Reactors Planned by the Applicant* (Nov. 10, 2008)(ML090080830), filed as an attachment to Mr. Wojcicki's reply. *See The Additional Information Supporting Joseph Wojcicki's "Petition to Intervene"* (Jan. 7, 2009).

[12] Wojcicki Petition at 1.

[13] Prior to filing his appeal, Mr. Wojcicki filed a motion asking the Board to reconsider its decision to reject his petition to intervene. *See Motion for the Reconsideration* (Mar. 6, 2009). The Board noted that jurisdiction transferred to the Commission upon termination of the proceeding, but accepted jurisdiction "in the interests of rapid resolution of the matter." *See South Carolina Electric and Gas Co.* (Virgil C. Summer Nuclear Station, Units 2 and 3), Order, No. 09-875-03-COL-BD01, at 1-2 (Mar. 12, 2009)(unpublished). The Board denied the motion, citing Mr. Wojcicki's failure to demonstrate the existence of a compelling circumstance that would warrant reconsideration of the Board's decision. *See id.* at 2. The Board's order is not before us on appeal.

II. DISCUSSION

Our rules of practice provide for an automatic right to appeal a Board decision wholly denying a petition to intervene.[14] We will defer to the Board's rulings on standing and contention admissibility, however, unless the appeal points to an error of law or abuse of discretion.[15]

A. Wojcicki Appeal

Mr. Wojcicki intervened on his own behalf, and raised a single issue. In his original petition, Mr. Wojcicki asserted that SCE&G should locate the two proposed new reactors at a different site, closer to the Atlantic Ocean.[16] The Board determined that this issue failed to comply with any of our contention admissibility requirements.[17] On appeal, Mr. Wojcicki reiterates in summary form the reasons underlying his argument. Specifically, he states that if SCE&G would agree to re-site its two proposed plants to an unspecified "Atlantic Ocean location," then it would realize significant cost savings "by avoiding: (a) evaporating over 40 million gallons of water per day[,] (b) building unnecessary hundreds of miles of 230 & 115 kV transmission lines and [(c)] other savings in construction costs (hundreds of millions [of] dollars) and operational costs (billions per reactors' life)."[18] He also claims that, if we disregard his siting proposal and "seawater cooling solution" and instead approve the current application, then we

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[14] *See* 10 C.F.R. § 2.311(b).

[15] *See Crow Butte Resources, Inc.* (License Renewal for In Situ Leach Facility, Crawford, Nebraska), CLI-09-9, 69 NRC 331, 336 (2009); *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-06-24, 64 NRC 111, 121 (2006); *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 324 (1999); *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), ALAB-855, 24 NRC 792, 795 (1986).

[16] *See* Wojcicki Petition at 1.

[17] *See* LBP-09-2, 69 NRC at 94-95 n.21.

[18] Wojcicki Appeal at 3.

"will have to change (revoke) [our] finding about the drought affecting nuclear plants – 24 of them existing in Southeast region, on the map widely publicized in January 2008."[19] These latter claims were not stated before the Board, and are presented for the first time on appeal.[20]

SCE&G and the NRC Staff oppose Mr. Wojcicki's appeal. Both argue that Mr. Wojcicki has not identified any error of law or abuse of discretion on the part of the Board. Further, SCE&G and the Staff both argue that the Board properly ruled on both Mr. Wojcicki's standing and the admissibility of his proposed contention.[21]

For the reasons stated by the Board, Mr. Wojcicki's proposed contention fails to satisfy the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1).[22] We generally extend some latitude to *pro se* litigants, but they still are expected to comply with our procedural rules, including contention pleading requirements.[23] Mr. Wojcicki's filings on appeal largely restate his

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[19] *Id.* (citation omitted). Outside of this adjudication Mr. Wojcicki transmitted a letter, which included a substantively identical statement of his proposed contention, to the President of the United States. This letter has been referred to us for response. *See* Letter from J. Wojcicki to the President of the United States (Mar. 14, 2009)(White House Referral ID number WH1912009110473). Because the arguments in Mr. Wojcicki's letter duplicate those raised in his initial petition and his appeal, we do not address them separately.

[20] We will not consider information that is introduced for the first time on appeal in an attempt to "cure deficient contentions." *See USEC, Inc.* (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 458 (2006). In any event, however, the additional general statements provided by Mr. Wojcicki are not sufficient to repair his inadmissible contention.

[21] *See South Carolina Electric & Gas Company Brief in Opposition to Joseph Wojcicki Appeal From LBP-09-2* (Mar. 9, 2009), at 7-13; *NRC Staff Brief in Opposition to Wojcicki Appeal of LBP-09-2* (Mar. 9, 2009), at 9-13.

[22] *See* LBP-09-2, 69 NRC at 94-95 & n.21.

[23] *See, e.g.*, *USEC*, CLI-06-10, 63 NRC at 456-57; *Shieldalloy Metallurgical Corp*. (Cambridge, Ohio Facility), CLI-99-12, 49 NRC 347, 354 (1999).

diffuse and generalized claims. He has given us no reason to set aside the Board's ruling, and we decline to do so.[24]

B. Joint Petitioners' Appeal

1. Standing

The Board concluded that although the Sierra Club had demonstrated representational standing, Friends of the Earth had failed to do so. In reaching this conclusion, the Board found that none of the affidavits submitted with the original intervention petition "makes any mention of [Friends of the Earth] or states that [Friends of the Earth] is authorized to represent the affiant's interests."[25] The Board also rejected Joint Petitioners' efforts to cure this defect on reply.[26]

Contrary to the Board's determination, two of Joint Petitioners' standing declarations, which were timely submitted in conjunction with the initial petition, refer to Friends of the Earth. The declarations of Thomas W. Clements and Leslie A. Minerd expressly reference that they are members of Friends of the Earth; Mr. Clements' declaration states that he is employed by that organization.[27] However, neither of these declarations, as originally submitted, specifically

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[24] Because Mr. Wojcicki has not identified any error or abuse of discretion with regard to his proposed contention, we need not reach the question of his standing.

[25] *See* LBP-09-2, 69 NRC at 94 n.18.

[26] *See id.* (citing *Entergy Nuclear Operations, Inc. & Entergy Nuclear Palisades, LLC* (Palisades Nuclear Plant), CLI-08-19, 68 NRC 251, 261 (2008)(citation omitted)).

[27] *See* Declaration of Thomas W. Clements ¶ 1 (Dec. 8, 2008)(ML083440664)(stating that affiant is "employee and member in good standing of Friends of the Earth," resides within 50 miles of the proposed plant, and engages in recreational activities within 10 miles of the plant); Declaration of Leslie A. Minerd ¶ 1 (Dec. 8, 2008)(ML083440664)(stating that she is a member of Friends of the Earth, resides within 50 miles of the plant, and owns and operates a nature preserve on land within 10 miles of the plant). The declarations were filed with Joint Petitioners' original petition.

stated that Friends of the Earth was authorized to represent the declarant's interests.[28] In conjunction with Joint Petitioners' reply, the declarants provided revised declarations, which expressly authorized Friends of the Earth to represent their legal interests in the proceeding.[29] Joint Petitioners argue that the failure of these declarations to expressly authorize representation in the original petition was an "inadvertent omission."[30]

The Board's finding seems to hinge on its inaccurate determination that none of the initial affidavits mentions Friends of the Earth, and that Friends of the Earth's subsequent efforts to cure the affidavits constituted entirely new information that was improper for a reply. Considering the record before us, however, we find that the Board's misinterpretation of the record led to an erroneous ruling with respect to the affidavits. As described above, the declarants had demonstrated standing in every other respect, and cited their affiliation with Friends of the Earth in their original declarations. The reply pleading and supplemental declarations appropriately clarified the original affidavits,[31] and we find that the corrections provided in the reply did not exceed the appropriate scope of a reply.[32]

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[28] *See* LBP-09-2, 69 NRC at 94 n.18.

[29] *See* Supplemental Declaration of Thomas W. Clements ¶ 4 (Jan. 8, 2009)(ML090120908); Supplemental Declaration of Leslie A. Minerd ¶ 4 (Jan. 8, 2009)(ML090120908). The revised declarations accompanied Joint Petitioners' reply. *See Reply by Sierra Club and Friends of the Earth* (Jan. 12, 2009).

[30] *See* Joint Petitioners' Appeal at 2-3.

[31] *See Georgia Institute of Technology* (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995)("To derive standing from a member, the organization must demonstrate that the individual member has standing to participate, and has authorized the organization to represent his or her interests.").

[32] Replies should be "narrowly focused on the legal or logical arguments presented in the [answers] on a request for hearing/petition to intervene." Final Rule, Changes to Adjudicatory Process, 69 Fed. Reg. 2182, 2203 (Jan. 14, 2004).

For these reasons, we *reverse* the Board's ruling on standing with respect to Friends of the Earth, and find that Friends of the Earth has demonstrated representational standing on the basis of their original and supplemental declarations.

2. Contention Admissibility

Our contention admissibility "requirements are deliberately strict, and we will reject any contention that does not satisfy the requirements."[33] Under our rules:

> 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:
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> (i) Provide a specific statement of the issue of law or fact to be raised or controverted . . . ;
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> (ii) Provide a brief explanation of the basis for the contention;
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> (iii) Demonstrate that the issue raised in the contention is within the scope of the proceeding;
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> (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;
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> (v) Provide a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue and on which the petitioner intends to rely at hearing, together with references to the specific sources and documents on which the requestor/petitioner intends to rely to support its position on the issue; [and]
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> (vi) . . . Provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.[34]

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[33] *USEC, Inc.* (American Centrifuge Plant), CLI-06-9, 63 NRC 433, 437 (2006).

[34] 10 C.F.R. § 2.309(f)(1).

Contrary to Joint Petitioners' assertion, our contention admissibility standards do not call for "a dispositive standard of proof for a contention or its bases,"[35] but rather, "a clear statement as to the basis for the contention[] and the submission of . . . supporting information and references to specific documents and sources that establish the validity of the contention."[36]

a. Contention 1 (AP1000 Deficiencies)

Joint Petitioners appeal the rejection of their proposed Contention 1, which states:

> The [COL application] 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 [COL application], 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 [COL application] as a plant-specific design or to adopt Revision 17 by reference and provide a timetable when its safety components will be certified.[37] 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.

This contention, Joint Petitioners assert, is a "'classic' contention of omission," that is, an argument that an application omits one or more necessary safety-related steps or analyses.[38]

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[35] Joint Petitioners' Appeal at 9.

[36] *Oyster Creek*, CLI-06-24, 64 NRC at 119 (quoting *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991).

[37] We note that SCE&G submitted Revision 1 of its ER in early 2009 and, at that time, incorporated into the ER the information from Revision 17 of the DCD. *See* Letter from R.B. Clary, SCE&G, to NRC Document Control Desk (Feb. 13, 2009)(ML090510267). SCE&G has since incorporated Revision 17 into the balance of the COL application. *See* Letter from R.B. Clary, SCE&G, to NRC Document Control Desk (July 30, 2009)(ML092170504).

[38] Joint Petitioners' Appeal at 10.

According to Joint Petitioners, the Summer COL application falls short in two such respects. First, the Commission has not yet certified the design revision of the version of the AP1000 that the Applicant proposes to use.[39] Second, Joint Petitioners argue, the Applicant has not adopted the "final AP1000 design, as certified and as potentially modified through the design certification process."[40] Joint Petitioners also rely on a Board decision in the *Shearon Harris* COL proceeding to admit for litigation a similar contention of omission.[41] Joint Petitioners conclude that their contention is similarly admissible, and request that the contention be admitted and held in abeyance pending completion of the design certification rulemaking.[42]

We find that Joint Petitioners have failed to identify any error of law or abuse of discretion by the Board in rejecting Contention 1. We recently have addressed contentions substantively similar to Joint Petitioners' Contention 1 in a number of combined license cases, and held that "our regulations allow an applicant – at its own risk – to submit a COL application that does not reference a certified design."[43] Our analysis in those cases applies equally here. Further, we recently overturned the *Shearon Harris* contention admissibility decision, finding that

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[39] *See id.*

[40] *See id.* at 10-11.

[41] *See id.* at 11-12 (quoting *Progress Energy Carolinas, Inc.* (Combined License Application for Shearon Harris Nuclear Power Plant, Units 2 & 3), LBP-08-21, 68 NRC 554, 563 (2008)).

[42] *See id.* at 13.

[43] *Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-08-15, 68 NRC 1, 4 (2008). *See Southern Nuclear Operating Co.* (Vogtle Electric Generating Plant, Units 2 and 3), CLI-09-13, 69 NRC __ (June 25, 2009)(slip op.); *Fermi*, CLI-09-4, 69 NRC 80 (2009). *See also Luminant Generating Co., LLC* (Comanche Peak Nuclear Power Plant, Units 3 and 4), Nos. 52-034-COL and 52-035-COL (Apr. 27, 2009)(unpublished); Letter from Andrew Bates to Diane Curran, Esq., and James Blackburn, Jr. (Dec. 30, 2008)(ML083650299).

the Board erred in referring the contention to the Staff (for consideration in conjunction with the design certification rulemaking) without first assessing its admissibility.[44] Before a Board may refer such a contention to the Staff and hold it in abeyance, the contention must first be admissible.[45] If the contention is inadmissible in the first instance, as is the case here, no further action is required on the part of the Board.

We find, therefore, that the Board did not err in rejecting this contention.

b. Contention 2 (Aircraft Impacts)

Joint Petitioners appeal the Board's rejection of Contention 2, which argues that the COL application has not addressed the possibility of an accidental or deliberate aircraft crash into the proposed reactors:

> SCE&G's ER, Chapter 7, "Postulated Accidents," fails to satisfy NEPA [the National Environmental Policy Act] 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.

Contention 2 incorporates both safety and environmental arguments.

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[44] *See Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), CLI-09-8, 69 NRC 317 (2009). Following the remand, the Board reassessed the contention and found it to be inadmissible, due in part to the presence in the COL application of the petitioner's asserted omissions. *See Progress Energy Carolinas, Inc.* (Shearon Harris Nuclear Power Plant, Units 2 and 3), LBP-09-8, 69 NRC __ (June 30, 2009) (slip op.).

[45] *See* Conduct of New Reactor Licensing Proceedings; Final Policy Statement, 73 Fed. Reg. 20,963, 20,972 (Apr. 17, 2008)*; Shearon Harris*, CLI-09-8, 69 NRC at 324.

From the safety standpoint, Joint Petitioners cite the requirement, in 10 C.F.R. § 50.34(a)(4), that a construction permit application consider the consequences of design basis events, and argues that "the potential for accidents caused by deliberate malicious actions and the resulting equipment failures is not only reasonably foreseeable, but is likely enough to qualify as a design-basis threat ("DBT"), i.e., an accident that must be designed against under NRC safety regulations."[46] Joint Petitioners also direct our attention to our own recent rulemaking activity on the same issue, noting that, under a then-proposed rule, applicants for new reactors would be required to incorporate into their design "additional practical features that would avoid or mitigate the effects of an aircraft impact."[47]

In support of its argument that SCE&G's environmental analysis is inadequate, Joint Petitioners cite a 2006 decision of the U.S. Court of Appeals for the Ninth Circuit, *San Luis Obispo Mothers for Peace v. NRC*, which held that the NRC could not, under NEPA, categorically refuse to consider the consequences of a terrorist attack against a spent fuel storage facility at the Diablo Canyon reactor site in California.[48] Joint Petitioners further argue that SCE&G's ER "does not provide information that allows the NRC staff to consider reasonable alternatives for avoiding or reducing the environmental impacts of this class of threats and accidents."[49] Finally, Joint Petitioners reiterate their argument that

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[46] Joint Petitioners' Appeal at 14.

[47] *See id.* at 14-17.

[48] *See* 449 F.3d 1016 (9th Cir. 2006), *cert. denied*, 549 U.S. 1166 (2007))(cited in Joint Petitioners' Appeal at 15).

[49] *See* Joint Petitioners' Appeal at 18.

10 C.F.R. § 51.53 requires SCE&G to consider alternatives to mitigate severe accidents (SAMAs).[50] Both SCE&G and the Staff oppose Joint Petitioners' appeal.[51]

As an initial matter, as the Board observes, Joint Petitioners appear to confuse the concepts of the "design basis threat," that is, the set of events that must be considered in the design of plant security features, and a "design basis event," that is, an accident that must be considered in plant design.[52] Considering the aircraft crash hazard in either context, however, leads us to the same conclusion: Joint Petitioners have not raised an admissible contention.

With respect to aircraft crash as an element of the design basis threat, the Ninth Circuit recently upheld our decision not to include the threat of air attacks in our revised final DBT rule.[53] The court held, among other things, that the agency reasonably concluded that adequate protection against the air threat was assured by the active defenses provided by other federal agencies, together with what reasonably could be expected of licensees.[54] The issue of whether aircraft crashes are appropriately considered part of the DBT, therefore, is settled in our regulations and thus is beyond the scope of this proceeding.[55] The Board did not err in excluding it.

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[50] *See id.* at 17-18. The Board correctly observed that 10 C.F.R. § 51.53, a provision pertaining to operating reactor license renewal, does not apply to COL applicants. *See* LBP-09-2, 69 NRC at 102.

[51] *See* Applicant Opposition at 13-17; Staff Opposition at 14-20.

[52] LBP-09-2, 69 NRC at 101 n.52. *Compare* 10 C.F.R. § 50.34(a)(4)(design basis event), *with* 10 C.F.R. § 73.1 (design basis threat).

[53] *See Pub. Citizen v. NRC*, 573 F.3d 916 (9th Cir. 2009). *See generally* Final Rule, Design Basis Threat, 72 Fed. Reg. 12,705 (Mar. 19, 2007).

[54] *See Pub. Citizen*, 573 F.3d at 925-26.

[55] *See* 10 C.F.R. § 2.335(a) (NRC regulations not "subject to attack" in adjudications).

With respect to aircraft crash as a safety matter, Joint Petitioners assert an omission from the COL application – a failure to incorporate into the design features to mitigate the effects of an aircraft impact. As the Board pointed out, the inquiry underlying this issue is whether the probability of aircraft impacts is greater than the threshold probability that calls for analysis – generally, for reactors, a probability greater than one in ten million per year.[56] SCE&G's COL application specifically assessed the risk due to aircraft hazards, concluding that the probable accidental rate of an aircraft affecting the site was less than the threshold "one-in-ten-million" probability stated in our guidance.[57] As noted by the Board, Joint Petitioners did not challenge this analysis "with any specificity."[58] Absent any such challenge, the Board correctly ruled that Joint Petitioners failed to articulate a genuine dispute with the application, as required by 10 C.F.R. § 2.309(f)(1)(vi).

In any event, Joint Petitioners' current safety arguments with respect to Contention 2 are effectively moot as adjudicatory matters, because of our recent final rule requiring applicants for

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[56] *See* 10 C.F.R. §§ 52.17, 52.79, 100.10, 100.20, 100.21; NUREG-0800, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants (SRP), Section 3.5.1.6, "Aircraft Hazards" (Rev. 3, Mar. 2007)(ML070510639), at 3.5.1.6-4 (providing that Part 52 and Part 100 regulations are satisfied "if the probability of aircraft accidents resulting in radiological consequences greater than the 10 [C.F.R.] Part 100 exposure guidelines is less than order of magnitude of 10^{-7} [one in ten million] per year[,]" provided that certain distance criteria identified in the SRP are met). *See also* SRP Section 2.2.3, "Evaluation of Potential Accidents" (Rev. 3, Mar. 2007)(ML070460336)(SRP Section 2.2.3).

[57] *See* FSAR Section 2.2.2.7.6, "Aircraft and Airway Hazards" (Rev. 0, Mar. 27, 2008) (ML081300513). The AP1000 DCD states that a COL applicant referencing the design should provide an analysis of aircraft hazards. *See* AP1000 Design Control Document Revision 17, Tier 2, Chapter 2.2 (Sept. 22, 2008)(ML083230296). NRC guidance states that the threshold probability for considering potential accidents is 10^{-7} (one in ten million), so that events falling below this threshold need not be analyzed. *See* SRP Section 2.2.3, at 2.2.3-3. In this case, SCE&G calculated the probable accidental rate of aircraft affecting the Summer site would be "on the order of 3.64×10^{-8} per year." FSAR Section 2.2.2.7.6, at 2.2-8.

[58] LBP-09-2, 69 NRC at 105.

new nuclear power reactors to perform a design-specific assessment of the effects of the impact of a large, commercial aircraft.[59] The final rule identified a number of avenues by which the rule may be implemented, including by amendment to a certified reactor design.[60] As reflected in the statements of consideration for the final rule, Westinghouse Electric Company (Westinghouse), the AP1000 design certification applicant, has submitted a proposed amendment to the certified design that is intended to comply with the final rule.[61] That proposed amendment is currently under consideration as part of the ongoing design certification rulemaking for the AP1000.[62] Joint Petitioners may participate in the design certification rulemaking process, through which the NRC staff will assess the Westinghouse proposal for the AP1000 design's compliance with the final aircraft impacts rule.[63]

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[59] *See* Final Rule, Consideration of Aircraft Impacts for New Nuclear Power Plants, 74 Fed. Reg. 28,112 (June 12, 2009). The rule, which went into effect on July 13, 2009, reflects the agency's determination that the impact of a large, commercial aircraft is a beyond-design-basis event. The objective of the rule "is to require nuclear power plant designers to perform a rigorous assessment of the design to identify features and functional capabilities that could provide additional inherent protection to withstand the effects of an aircraft impact . . ." *Id.* (footnote omitted).

[60] *See id.* at 28,137-41.

[61] *See* Letter from R. Sisk, Westinghouse, to NRC, "AP1000 Standard COL Technical Report Submittal of APPGW- GLR-126, Revision 0 (TR 126) (Apr. 3, 2008)(ML080980257); Westinghouse, Technical Report Number 126, APP-GW-GLR-126-NS, Nuclear Island Response to Aircraft Impact (Public Version) (Apr. 3, 2008)(ML080980258). *See also* AP1000 Design Control Document Revision 17, Appendix 19F (Sept. 22, 2008)(ML083230294).

[62] *See* 74 Fed. Reg. at 28,140.

[63] If a referenced design (here, the AP1000) is not amended to comply with the aircraft impacts rule during the pendency of the COL application, then the COL applicant would be required to amend its application to comply with the requirements of the rule. *See id.* Such an amendment could form the basis for a late-filed contention, provided our procedural requirements for contention admissibility are met. *See* 10 C.F.R. § 2.309(f)(1), (f)(2).

With respect to Joint Petitioners' environmental arguments related to a terrorist attack, the Board correctly rejected them. As the Board observed, we have consistently maintained that "NEPA is not an appropriate vehicle for exploring questions about the potential for a terrorist attack upon a proposed nuclear facility."[64] We summed up our position in *Grand Gulf*:

> "The 'environmental' effect caused by third-party miscreants 'is . . . simply too far removed from the natural or expected consequences of agency action to require a study under NEPA'. [citation omitted.] The claimed impact is too attenuated to find the proposed federal action to be the 'proximate cause' of that impact."[65]

This is true of an aircraft attack, which – as the Third Circuit recently held in *New Jersey Department of Environmental Protection v. NRC* – "lengthens the causal chain beyond the 'reasonably close causal relationship'" required to be considered under NEPA.[66]

Joint Petitioners would have us apply the Ninth Circuit's *Mothers for Peace* ruling here, rather than the Third Circuit's *NJDEP* ruling. We decline to do so.[67] We continue to believe that

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[64] LBP-09-2, 69 NRC at 103 (citing *System Energy Resources, Inc*. (Early Site Permit for Grand Gulf ESP Site), CLI-07-10, 65 NRC 122 (2007); *Nuclear Management Co., 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), *aff'd*, *N.J. Dep't of Envtl. Prot. v. NRC*, 561 F.3d 132 (3d Cir. 2009)(*NJDEP*)).

[65] *Grand Gulf*, CLI-07-10, 65 NRC at 146-47 (quoting *Oyster Creek*, CLI-07-8, 65 NRC at 129, in turn quoting *Private Fuel Storage, LLC* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 NRC 340, 349 (2002)).

[66] 561 F.3d at 132 (holding, among other things, that the fact that an aircraft attack on a nuclear power plant requires at least two intervening events (the act of a third-party criminal, and the failure of government agencies specifically charged with preventing terrorist attacks), and results in a chain of causation too attenuated to require NEPA review).

[67] In *Oyster Creek*, we observed that "the NRC is not obliged to adhere, in all of its proceedings, to the first court of appeals decision to address a controversial question." CLI-07-8, 65 NRC at 129 (citing *United States v. Stauffer Chem. Co.*, 464 U.S. 165, 173 (1984)). The proposed new Summer plant lies outside the Ninth Circuit.

NEPA does not require the NRC to consider the environmental consequences of hypothetical terrorist attacks, including aviation attacks, on NRC-licensed facilities.[68]

We are not persuaded by the Chairman's dissent, and are not prepared to abandon our carefully-considered decisions without sufficient justification. Fundamentally, we cannot agree with the Chairman's assertion that our approach is at odds with the agency's commitment to transparency. At bottom, this ruling reflects our consistent position on the requirements of NEPA and their application.[69] Moreover, there is no dispute that the agency has devoted enormous resources and effort to ensure the adequate protection of public health and safety from the risks of terrorism after the events of September 11, 2001. Our differences with Chairman Jaczko on this issue should not obscure this fact.

For all of these reasons, proposed Contention 2 is rejected.

c. Contention 3 (Need for Power, Energy Alternatives and Costs of Proposed Action)

Finally, Joint Petitioners appeal the Board's rejection of their Contention 3, which comprises seven discrete subparts:

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[68] The examination of SAMAs and severe accident mitigation design alternatives (SAMDAs) relating to aircraft attacks, which arise in connection with the agency's NEPA obligations, is similarly outside the scope of this proceeding for this reason. In addition, a challenge to the SAMDA analysis performed for the AP1000 certified design constitutes an impermissible challenge to our regulations. *See* LBP-09-2, 69 NRC at 104 & n.70 (quoting 10 C.F.R. Part 52, App. D, § VI.B); 10 C.F.R. § 51.107(c). To the extent that Joint Petitioners challenge a proposed amendment to the AP1000 design, they do not cite to any DCD revision, and therefore their challenge also fails for lack of specificity. In addition, Joint Petitioners fail to challenge the SAMA discussion in ER Section 7.3, "Severe Accident Mitigation Alternatives."

[69] We have complied with the Ninth Circuit's ruling for facilities within the Ninth Circuit, as we are required to do. That experience, however, is very limited, and does not demonstrate that conducting environmental analyses of terrorist scenarios for the licensing of all major facilities would be practicable or lead to meaningful additional information.

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.

Joint Petitioners' appeal does not address Contention 3 by "subpart," and is diffuse and somewhat difficult to follow. Therefore, we address the appeal in three broad categories – the need for power, energy alternatives, and costs and schedule for the proposed action.

i. The Need for Power Analysis – Subpart 3A

The Board rejected Joint Petitioners' "need for power" arguments, citing a lack of supporting data or analysis challenging the application's assessment of economic conditions, including the load forecast.[70] Regarding the load forecast, Joint Petitioners complained that

[70] LBP-09-2, 69 NRC at 107-08.

SCE&G 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."[71] The Board rejected this proposition because, in its view, the challenge to the economic analysis "address[ed] a level of detail well beyond what is required of the Agency in its analyses,"[72] and the contention raised no genuine dispute with the application that is material to the NRC's decision on the application.[73]

On appeal, Joint Petitioners principally argue that the Board's decision would impermissibly narrow the discussion in the COL application of the need for power, contravening the Commission's 2003 denial of the Nuclear Energy Institute's (NEI) rulemaking petition.[74] Joint Petitioners also assert that the Applicant's ER contains an outdated load forecast, which fails to account for current economic conditions.[75]

SCE&G counters that the Board correctly rejected the need for power claim on the ground that the contention was not adequately supported and failed to demonstrate a material dispute because the COL application includes an evaluation of the need for power, including a consideration of the effects of the current economic conditions.[76] Similarly, the Staff argues that the Board properly rejected Joint Petitioners' claim because it lacked the specificity required to

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[71] *See* Joint Petition at 29.

[72] LBP-09-2, 69 NRC at 108 (citing, *inter alia*, Nuclear Energy Institute; Denial of Petition for Rulemaking, 68 Fed. Reg. 55,905, 55,910 (Sept. 29, 2003)(NEI Rulemaking Denial)).

[73] *See id.*

[74] *See* Joint Petitioners' Appeal at 20 (citing NEI Rulemaking Denial).

[75] *See id.* at 22, 23-24.

[76] *See* Applicant Opposition at 19-21.

show a genuine dispute with the COL application, and because it discussed a level of detail not required by the NRC.[77] Moreover, the Staff argues, Joint Petitioners have not articulated any error of law or abuse of discretion by the Board in rejecting this contention.[78]

At the outset, we do not find that the Board's ruling runs counter to our denial of NEI's rulemaking petition. In particular, NEI requested that the agency initiate a rulemaking to remove the 10 C.F.R. Part 51 requirements that applicants, licensees, and the NRC Staff analyze "alternative energy sources and the need for power with respect to the siting, construction, and operation of nuclear power plants."[79] We denied the request, concluding that NEI had not demonstrated any change in NEPA law or practice that would lead us to believe that consideration of need for power or energy alternatives were no longer required as part of our NEPA obligations.[80] With respect to the "need for power" analysis, we emphasized, however, that such an assessment "should not involve burdensome attempts to precisely identify future conditions. Rather, it should be sufficient to reasonably characterize the costs and benefits associated with proposed licensing actions."[81]

Joint Petitioners' appeal appears to misunderstand the Board's ruling as it relates to the NEI decision. In rejecting this aspect of Contention 3, the Board *did not* find that need for power should not be considered at all. Rather, the Board cited the NEI rulemaking decision as an illustration of the level of detail necessary in a "need for power" analysis. The Board rejected

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[77] *See* Staff Opposition at 21.

[78] *See id.* at 21-22.

[79] NEI Rulemaking Denial, 68 Fed. Reg. at 55,906.

[80] *See id.* at 55,911.

[81] *Id.* at 55,910.

Joint Petitioners' challenges to the "need for power" analysis for other reasons. In particular, the Board cited Joint Petitioners' failure to provide supporting data or analysis to indicate that SCE&G "failed to consider a sufficient economic impact," or to challenge the analysis contained in SCE&G's load forecast.[82]

On appeal, Joint Petitioners do not refute the Board's conclusions, which, in our view, were reasonable. The focus of the Board's ruling on the "need for power" claims is the fact that SCE&G did in fact consider several different economic conditions, including recessions. The Board reasoned that the contention could succeed only if it argued, with adequate support, that the Applicant's economic impact analysis was inadequate.[83] The Board found, and we agree, that the contention did not challenge the COL application with specificity, nor did it otherwise provide sufficient information to demonstrate the existence of a genuine dispute.[84]

Further, in our view, the Board reasonably concluded that Joint Petitioners' load forecast claims would call for a more detailed "need for power" analysis than the NRC requires.[85] As we have stated:

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[82] *See* LBP-09-2, 69 NRC at 107.

[83] *See id.*

[84] The Board concluded that Joint Petitioners' expert, who asserted that SCE&G failed to consider the impact of the current economic downturn, neither quantified the impact on the need for power nor provided any analysis to challenge that supplied by SCE&G. *See id.* at 107 n.80. We agree. The declaration submitted by Joint Petitioners' expert provides several statistical or anecdotal references intended to demonstrate the severity of the current economic downturn, *see, e.g.*, *Declaration of Nancy Brockway in Support of Petition for Intervention and Request for Hearing by the Sierra Club and Friends of the Earth* ¶¶ 18-27 (Dec. 9, 2008)(ML083440663)(Brockway Declaration), but gives only unsupported assertions that SCE&G is "naïve" in its refusal to update its load forecasts, *see id.* ¶ 32, and provides no specific challenge to SCE&G's current analysis – which accounts for recessions.

[85] *See* LBP-09-2, 69 NRC at 107-08.

> [W]hile 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.[86]

The Board also rejected the challenge to the load forecast on an alternate ground – that Joint Petitioners failed to offer information to indicate that there is a genuine dispute on a material issue.[87] We agree that Joint Petitioners' expert provided merely conclusory statements, without supporting facts or detail, that fundamentally do not challenge SCE&G's load forecasts. Thus, the Board reasonably concluded that Joint Petitioners had failed to demonstrate the existence of a genuine dispute.

We find no error on the part of the Board in denying the "need for power" aspect of Contention 3.

ii. Energy Alternatives – Subparts 3B, 3C and 3D

Regarding energy alternatives, the Board held that Joint Petitioners presented, at bottom, a challenge to SCE&G's stated project purpose of providing baseload power

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[86] NEI Rulemaking Denial, 68 Fed. Reg. at 55,910. *Cf. Louisiana Energy Services, L.P.* (Claiborne Enrichment Facility), CLI-98-3, 47 NRC 77, 94 (1998)(affirming the Board's findings of fact regarding price effects, in the context of a "need for power" analysis, and observing: "[T]he Board's price projections reflect not ineluctable truth, but rather a plausible scenario that . . . should be added to the environmental record of decision").

[87] LBP-09-2, 69 NRC at 108. Joint Petitioners rely on the Brockway Declaration for their challenge to the load forecast. *See* Brockway Declaration ¶¶ 9-33. The Brockway Declaration states that SCE&G's April 2007 and May 2008 load forecasts are "out of date" and "unreliable," because they fail to take into account the likely impact of the recent economic crises in the United States. *Id.* ¶¶ 15-17. However, beyond these statements, the Brockway Declaration does not challenge the application; the balance of the Declaration's discussion of the load forecasts includes general statements about the U.S. economic downturn that are unrelated to the COL application.

generation.[88] The Board further found that Joint Petitioners failed to raise a specific challenge to SCE&G's energy alternatives analyses, and did not demonstrate that Joint Petitioners' preferred alternatives could reasonably meet SCE&G's stated purpose.[89]

Joint Petitioners contend on appeal that the Board erred in "narrow[ing] the proposed action to be considered" and in "uncritically accepting" the Applicant's statement of purpose, thereby eliminating "fair consideration" of the need for, or alternatives to, the generation of approximately 2000 megawatts of baseload power.[90] Specifically, they argue that the Board "summarily dismisses" consideration of renewable energy sources and takes the position that "neither wind nor solar are baseload forms of power."[91] Joint Petitioners also contend that the ER is inadequate because it does not adequately address demand-side management or a "modular" approach to adding sources of electrical power generation.[92]

SCE&G argues principally that Joint Petitioners "ignore longstanding agency precedent" in asserting that the Board improperly narrowed the applicant's stated purpose.[93] SCE&G further argues that Joint Petitioners' appeal does not address the Board's conclusions that their contention neither controverts the energy alternatives analysis in the COL application nor

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[88] *See* LBP-09-2, 69 NRC at 109.

[89] *See id.* at 109-10.

[90] Joint Petitioners' Appeal at 19-20.

[91] *Id.* at 25.

[92] *See id.* at 23-24, 28. Additionally, Joint Petitioners argue that, as with the "need for power" analysis, the Board's decision would improperly dismiss *any* consideration of energy alternatives. *See id.* at 20 (citing NEI Rulemaking Denial). As discussed above, the Board's rejection of the contention did not, in our view, amount to a rejection of energy alternatives analysis as a general matter.

[93] *See* Applicant Opposition at 22.

provides support for their assertion that certain alternatives are reasonable methods for generating baseload power.[94]

With respect to whether SCE&G "undervalued" the potential contributions of demand-side management (Subpart 3B of the contention), the Board grounded its contention admissibility ruling on the legal determination that demand-side management is not a substitute for the addition of baseload power, the project's accepted purpose. The Board therefore found that Joint Petitioners' challenge raises matters outside the scope of the proceeding, and raised matters not material to the determination the NRC must make.[95]

As support for this ruling, the Board cited to our decision in the *Clinton* early site permit (ESP) case.[96] There, the Commission affirmed the licensing board's rejection of a similar demand-side management analysis contention, observing that the ESP applicant, Exelon (which intended the proposed plant to generate power for sale on the open market) had no transmission or distribution system of its own, and no link to the consumer. We found, on this basis, that the NEPA "rule of reason" did not require Exelon to consider "energy efficiency" in its NEPA analysis, because "energy efficiency" was not a reasonable alternative for a merchant power producer.[97] The Board found that that the challenge to SCE&G's demand-side management analysis is "directly analogous" to the situation in *Clinton*, and found that the

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[94] *See id.* at 23-24.

[95] LBP-09-2, 69 NRC at 108-09.

[96] *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-29, 62 NRC 801, 806-08 (2005), *aff'd*, *Envtl. Law & Policy Ctr. v. NRC*, 470 F.3d 676 (7th Cir. 2006).

[97] CLI-05-29, 62 NRC at 806-07.

Clinton decision mandated its conclusion to exclude the demand-side management contention here.[98]

But in our view the Board paints the issue with too broad a brush. In *Clinton*, the applicant was a merchant power producer proposing to sell power on the open market, nationwide. Given that goal, Exelon had neither the mission nor the ability to implement "energy efficiency" alternatives. In such a circumstance, energy efficiency is not a reasonable alternative under NEPA. Here, by contrast, SCE&G and Santee Cooper propose to produce power for state-designated service territories in which customers have no choice of alternative electric service providers.[99] SCE&G and Santee Cooper are, therefore, in a position to implement and promote programs such as energy conservation, efficiency and load management such that the need for additional generation capacity may be reduced. As discussed below, SCE&G and Santee Cooper have such programs in place, and they themselves discussed in the ER the potential for demand-side management programs to offset future demand. Because, unlike *Clinton*, this case involves an application to produce baseload power for a defined service area, we find that NEPA's "rule of reason" would not exclude consideration of demand-side management as part of an alternatives analysis *per se*. We therefore find that the Board erred in excluding Contention 3B on this basis.

The inquiry turns, then, on whether Joint Petitioners otherwise have submitted a challenge to the demand-side management analysis that satisfies the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1). In this vein, the Board suggests in conclusory terms that it does not. The Board observed that the claims in Subpart B challenge SCE&G's selected

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[98] *See* LBP-09-2, 69 NRC at 109 n.86.

[99] *See* ER Section 8.0.

project purpose to add baseload power generation, and need not be considered because demand-side management is not a substitute for the addition of baseload power.[100] The Board also concludes that Joint Petitioners do not support their proposition that demand-side management is not a reasonable means by which to accomplish its project purpose – to generate baseload power.[101] However, the Board did not articulate a basis for its conclusion that Subpart 3B is not adequately supported, and it is not self-evident that the Board is correct. Given our determination that Subpart 3B may not be excluded as a legal matter on the basis of the *Clinton* case, we remand Subpart 3B to the Board for a further evaluation of its admissibility.

Joint Petitioners also renew on appeal their challenge to the adequacy of SCE&G's alternatives analysis as it relates to renewable sources of power. The Board excluded this aspect of the contention to the extent that it constituted an impermissible challenge to SCE&G's selected project purpose to generate baseload power.[102] The Board further found that Joint Petitioners pointed to no error in the applicant's analysis of renewables, or in its conclusion that the proposed alternatives cannot generate baseload power.

We find that the Board did not err in excluding this portion of the contention, because Joint Petitioners have not identified a genuine dispute with SCE&G on the application. Section 9.2.2 of the ER discusses possible alternatives for new generating capacity, including wind power, solar technologies, and power generation from combustion of biomass.[103] In challenging

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[100] LBP-09-2, 69 NRC at 109.

[101] *Id.* at 110.

[102] *Id.*

[103] *See* ER Sections 9.2.2.2 ("Wind"), 9.2.2.3 ("Solar Technologies"), 9.2.2.6 ("Biomass Related Fuels").

the adequacy of SCE&G's analysis of renewable sources of power, Joint Petitioners again rely on the Brockway Declaration.[104] However, the Brockway Declaration does not specifically challenge the ER's alternatives analysis of renewable energy sources. For example, with respect to wind power, the Brockway Declaration states that offshore wind is a "proven source of generation," but also observes that "wind power is intermittent and therefore its capacity cannot substitute [megawatt for megawatt] with baseload thermal generation."[105] With respect to solar power, the Brockway Declaration makes a number of observations about the lower costs of solar technologies, and the evolution of solar alternatives, but none that expressly challenge the analysis contained in the ER.[106] As the Board observed, such general assertions, without some effort to show why the assertions undercut findings or analyses in the ER, fail to satisfy the requirements of Section 2.309(f)(1)(vi).

Finally, Joint Petitioners argue that the application "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."[107] SCE&G's ER included a discussion in which it considered whether a mix of alternatives might be cost-effective to generate 2214 megawatts electric (MWe).[108] Joint Petitioners did not contradict this discussion

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[104] *See* Joint Petition at 39-42; Brockway Declaration ¶¶ 57-76. The Brockway Declaration focuses specifically on wind and solar technologies, with a brief mention (¶ 76) of off-system purchases.

[105] *Id.* ¶¶ 65, 67.

[106] *See id.* ¶¶ 69-73.

[107] Joint Petition at 42.

[108] *See* ER Section 9.2.2.12, "Combination of Alternatives." SCE&G acknowledged that a large number of combinations could be possible, but considered two combinations in particular: a mix (continued ...)

in the ER. Nor did they offer alternate combinations of modular alternatives, with a discussion of why such alternate combinations would constitute reasonable alternatives.[109] As the Board correctly observed, Joint Petitioners do not dispute the discussion in the application on "modular" alternatives. We therefore find no error in the Board's determination that this aspect of the contention fails to articulate a genuine dispute with the application.

On this issue, Joint Petitioners also focus on SCE&G's business decisions.[110] To the extent that Joint Petitioners' claims concerning modular energy projects challenge SCE&G's business decisions, the Board reasonably excluded them on the basis that the business decisions of licensees or applicants are beyond our purview.[111]

In sum, we find that the Board erred in excluding Subpart 3B on the basis that NEPA's "rule of reason" does not require consideration of demand-side management as part of an alternatives analysis. Therefore, we reverse the Board's decision on Subpart 3B and remand it to the Board for further consideration, as delineated above. We find, however, that the Board did not err in excluding Subparts 3C and 3D of the contention regarding renewable energy alternatives and the use of a "modular" approach.

(… continued)
of wind energy and natural gas (one wind farm and three gas-fired combined cycle units), and a mix of coal and natural gas (two coal-fired units and one gas-fired combined cycle unit).

[109] LBP-09-2, 69 NRC at 111.

[110] *See* Joint Petitioners' Appeal at 28 (observing that inclusion in the ER of a modular approach to adding electrical generation resources would provide "the Applicant [an opportunity] 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").

[111] *See* LBP-09-2, 69 NRC at 111 (citing *Louisiana Energy Services, L.P.* (National Enrichment Facility), CLI-05-28, 62 NRC 721, 726 (2005)). *See also Hydro Resources, Inc.* (P.O. Box 15910, Rio Rancho, NM 87174), CLI-01-4, 53 NRC 31, 48-49 (2001).

iii. Costs and Schedule for the Proposed Action

Joint Petitioners conclude their appeal with a brief discussion concerning rate increases and costs associated with the proposed project, relative to Subparts 3E, 3F and 3G of this contention as originally submitted. The Board excluded these challenges as outside the scope of the proceeding, and irrelevant to the findings the agency must make.[112]

Joint Petitioners' appeal restates its arguments made before the Board, arguing that SCE&G's cost estimates for construction and operation are inadequate.[113] Joint Petitioners' "cost" challenge is twofold: it argues that SCE&G's cost estimates fail to take into account "recent rapid increases" in the costs of inputs for construction, and also that the cost estimate is based on an unrealistic schedule, and inappropriately assumes a completed, certified design for the AP1000.[114]

The Board held that Joint Petitioners' challenges to SCE&G's cost estimates failed to raise a matter within the scope of the proceeding, and failed to demonstrate a genuine dispute with the application. The Board observed that neither SCE&G nor Joint Petitioners identified an environmentally preferable alternative and that, in the absence of such an alternative, no cost-benefit analysis is required.[115] The Board relied on the *Midland* case, in which the Atomic Safety and Licensing Appeal Board held that it is inappropriate for the agency to consider

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[112] *See* LBP-09-2, 69 NRC at 111-12.

[113] *See* Joint Petitioners' Appeal at 30.

[114] *See* Joint Petition at 26, 42-46.

[115] *See* LBP-09-2, 69 NRC at 112.

economic costs when no environmentally preferable alternative has been identified.[116] The Appeal Board stated:

> [N]either NEPA nor any other statute gives us the authority to reject an applicant's proposal solely because an alternative might prove less costly financially. Monetary considerations come into play in only the opposite fashion — i.e., if an alternative to the applicant's proposal is environmentally preferable, then we must determine whether the environmental benefits conferred by that alternative are worthwhile enough to outweigh any additional cost needed to achieve them.[117]

In view of today's ruling with respect to Subpart 3B of this contention, it would be premature to find that the *Midland* ruling applies to the circumstances of this case. The admissibility of Subpart B of Joint Petitioners' contention relating to SCE&G's analysis of demand-side management practices is still subject to further consideration by the Board. If Subpart B is admitted, it would then be further explored in the hearing process. We cannot, therefore, say with certainty at this time that all parties have failed to identify an environmentally preferable alternative. We therefore *reverse* the Board's ruling on Contentions 3F and 3G.

Should the Board admit Subpart B of Contention 3, the rationale set forth in *Midland* will not be applicable to this case, and, contrary to the Board's conclusion, Subparts F and G will not necessarily be excluded pursuant to 10 C.F.R. § 2.309(f)(1)(iii) and (iv). In that circumstance,

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[116] *Consumers Power Co.* (Midland Plant, Units 1 and 2), ALAB-458, 7 NRC 155, 162 (1978). The Board also cited a recent decision in the *Shearon Harris* COL case, relying on *Midland* to reject a similar contention. *See* LBP-09-2, 69 NRC at 111 & n.102 (citing *Shearon Harris*, LBP-08-21, 68 NRC at 576-77).

[117] *Midland*, ALAB-458, 7 NRC at 163 n.25. *See also id.* at 162-63 & nn.21-24.

the Board should consider whether Joint Petitioners' claims raised in connection with Subparts 3F and 3G otherwise articulate an admissible contention.[118]

In summary, we find that the Board erred in excluding Subpart B of Contention 3, regarding Joint Petitioners' challenges to SCE&G's demand-side management analysis. Because the Board erred in excluding Subpart 3B, we find that it similarly erred in its legal rationale for excluding Joint Petitioners' claims regarding SCE&G's estimates of construction and operating costs, set forth in Subparts F and G, respectively. We *reverse* the Board's decision to reject those portions of Contention 3, and *remand* those issues to the Board for reconsideration, as delineated above. We have identified no error in the Board's decision to reject the balance of Contention 3, and we decline to disturb its ruling further.

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[118] Should the Board exclude Subpart 3B as inadmissible, however, its stated rationale for Subparts 3F and 3G would form a valid basis for excluding these claims.

III. CONCLUSION

For the reasons set forth above, we *affirm in part, and reverse in part*, the Board's denial of the petitions to intervene, and *remand* the case to the Board for further proceedings consistent with this Memorandum and Order.[119]

IT IS SO ORDERED.

For the Commission

(NRC Seal)

/RA/

Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, Maryland,
this 7th day of January, 2010.

[119] The Board denied as moot the request of the South Carolina Office of Regulatory Staff (SC ORS) to participate in the proceeding pursuant to 10 C.F.R. § 2.315(c). *See* LBP-09-2, 69 NRC at 92. In view of our decision today, if the Board determines that any of the remanded portions of Contention 3 are, in fact, admissible, it is directed to provide SC ORS the opportunity to participate in the proceeding on those issues.

Chairman Jaczko, dissenting:

I disagree with the majority's continued adherence to a policy of ignoring terrorism when conducting environmental reviews for facilities located outside the Ninth Circuit. On this issue, I respectfully disagree with the majority decision. As I explained in detail in my dissent in *Oyster Creek*, 64 NRC 124, 135 (2007), I believe that the agency should have a consistent, nationwide approach to the consideration of terrorism under NEPA. As we conduct terrorism reviews under NEPA for some facilities, but not others, we create a disparity in the information provided to the public. I see no reason to provide this important information selectively, especially now that our experience demonstrates we can prepare timely environmental analysis of potential terrorist events and provide valuable information to the public while protecting sensitive security information. Fundamentally, we cannot reconcile a policy that denies this information to a significant portion of the public with our agency commitment to transparency.