

CCNPP3COLA PEmails

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Sent: Thursday, July 14, 2011 8:56 AM
To: Norman Meadow
Subject: Board Decision on DEIS contention 10
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I forgot to send this one. Here is the "ruling" on the DEIS contention 10.

Thanks

Laura

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

Before Administrative Judges:

Ronald M. Spritzer, Chairman
 Dr. Gary S. Arnold
 Dr. William W. Sager

In the Matter of

CALVERT CLIFFS 3 NUCLEAR PROJECT,
 LLC, and UNISTAR NUCLEAR OPERATING
 SERVICES, LLC

(Combined License Application for Calvert Cliffs
 Unit 3)

Docket No. 52-016-COL

ASLBP No. 09-874-02-COL-BD01

December 28, 2010

ORDER

(Ruling on Intervenors' Proposed New Contention 10)

Before this Board is a proposed new contention, Contention 10, filed by Intervenors Nuclear Information and Resource Service, Beyond Nuclear, Public Citizen Energy Program and Southern Maryland Citizens' Alliance for Renewable Energy Solutions.¹ The Contention consists of four challenges to the Draft Environmental Impact Statement ("DEIS") issued by the NRC Staff in April 2010 pursuant to the National Environmental Policy Act ("NEPA").² For the reasons set forth below, the Board admits one aspect of this contention but declines to admit the remainder.

I. BACKGROUND

This case arises from an application by Unistar Nuclear Operating Services, LLC, and Calvert Cliffs 3 Nuclear Project, LLC, ("Applicants") for a combined license ("COL"), pursuant to

¹ See Submission of Contention 10 by Joint Intervenors (June 25, 2010) at 1, 18 [hereinafter Contention 10].

² 42 U.S.C. § 4321 et seq.

10 C.F.R. Part 52, Subpart C, to construct and operate a U.S. Evolutionary Power Reactor (“U.S. EPR”), designated Unit 3, to be located at the Calvert Cliffs site in Lusby, Calvert County, Maryland. Applicants submitted this combined license application (“COLA”) for Calvert Cliffs Nuclear Power Plant, Unit 3 (“Calvert Cliffs Unit 3”) to the NRC in two parts on July 13, 2007, and March 14, 2008.³ The application was accepted and docketed by the NRC on January 25, 2008, and June 3, 2008,⁴ but was subsequently revised and supplemented by the Applicants.

A notice of hearing and opportunity to petition for leave to intervene on the COLA for Calvert Cliffs Unit 3 was published in the Federal Register on September 26, 2008.⁵ On November 19, 2008, Intervenors filed a timely request for a hearing and Petition to Intervene,⁶ and on December 2, 2008 this Board was established to preside over the proceeding.⁷ On March 24, 2009, the Board issued a Memorandum and Order, in which it found that the Intervenors had standing, admitted them as parties, admitted their first contention as pleaded, admitted their second and seventh contentions as modified by the Board, and granted their

³ See Letter from George Vanderheyden, UniStar President and CEO, to Document Control Desk, U.S. NRC (Mar. 14, 2008) at 2 (ADAMS Accession No. ML080990114) [hereinafter Vanderheyden Letter]; Letter from R.M. Krich, UniStar Senior Vice President, Regulatory Affairs, to Document Control Desk, U.S. NRC (July 13, 2007) at 1 (ADAMS Accession No. ML071980292). The original applicants were Constellation Generation Group, LLC, and UniStar Nuclear Operating Services, LLC. However, by letter on August 1, 2008, Constellation Generation Group, LLC, withdrew as an applicant and was replaced by Calvert Cliffs 3 Nuclear Project, LLC. See Letter from George Vanderheyden, UniStar President and CEO, to Document Control Desk, U.S. NRC (Aug. 1, 2008) at 1 (ADAMS Accession No. ML082770641) (referring to Revision 3 of the COLA).

⁴ See Letter from John Rycyna, Project Manager, Office of New Reactors, U.S. NRC, to George Vanderheyden, UniStar President and CEO (June 3, 2008) at 1 (ADAMS Accession No. ML081510149); Vanderheyden Letter at 2.

⁵ See 73 Fed. Reg. 55,876 (Sept. 26, 2008).

⁶ See Petition to Intervene in Docket No. 52-016, Calvert Cliffs-3 Nuclear Power Plant Combined Construction and License Application (Nov. 19, 2008) at 52.

⁷ See 73 Fed. Reg. 74,531 (Dec. 8, 2008).

request for a hearing.⁸ The Board also determined that Intervenors' remaining proposed contentions were inadmissible.⁹

On July 30, 2009 the Board granted Applicants' and the NRC Staff's Motion for Summary Disposition of Joint Intervenors' Contention 2, thus dismissing Contention 2 from the proceeding.¹⁰ In addition, in its April 5, 2010 order the Board also granted Applicants' and the NRC Staff's Motion for Summary Disposition of Joint Intervenors' Contention 7.¹¹

In April 2010, the NRC Staff issued the DEIS for the proposed Calvert Cliffs Unit 3.¹² Intervenors filed proposed Contention 10 on June 25, 2010, challenging the adequacy of the NRC Staff's analyses of the need for power, energy alternatives, and costs. See Contention 10 at 1. Applicants and the NRC Staff timely filed their respective responses to Intervenors' Submission of Contention 10 on July 20, 2010,¹³ and Intervenors timely submitted their reply on July 27, 2010.¹⁴

⁸ See id. at 231–32.

⁹ See id. at 231.

¹⁰ See LBP-09-15, 70 NRC 198, 205 (2009).

¹¹ Id. at 1.

¹² See 75 Fed. Reg. 20,867 (Apr. 21, 2010); Division of Site and Environmental Review, Office of New Reactors, Environmental Impact Statement for the Combined License (COL) for Calvert Cliffs Nuclear Power Plant Unit 3, Draft Report for Comment, NUREG-1936 (Apr. 2010) (ADAMS Accession Nos. ML101000012 and ML101000013) [hereinafter DEIS].

¹³ See Applicants' Response to Proposed Contention 10 (July 20, 2010) at 1 [hereinafter Applicants' Response]; NRC Staff Answer to Joint Intervenors' New Contention 10 (July 20, 2010) at 27 [hereinafter NRC Staff Answer].

¹⁴ See Joint Intervenor's [sic] Reply to NRC Staff's and Applicant's [sic] Responses to Submission of Contention 10 (July 27, 2010) at 16 [hereinafter Intervenors' Reply].

II. DISCUSSION

Contention 10 states:

The Draft Environmental Impact Statement (DEIS) is inadequate to meet the requirements of 10 CFR 51.71(d) or provide reasonable support for the NRC's decision on issuance of a construction/operating license for the proposed Calvert Cliffs-3 nuclear reactor because its analyses of Need for Power, Energy Alternatives and Cost/Benefit analysis (Chapters 8, 9 and 10) are flawed and based on inaccurate, irrelevant and/or outdated information.

Id.

Intervenors present four arguments in support of Contention 10:

A. The DEIS's Analysis of Need for Power is Inadequate and Based on Faulty and Outdated Information.

B. The DEIS's Discussion of Energy Alternatives is Inadequate, Faulty and Misleading.

C. The DEIS's Discussion of a Combination of Alternatives is Inadequate and Faulty.

D. The DEIS's Discussion of Costs Both Understates Likely Costs and Disputes Cost Estimates in the Applicants' ER, Calling into Question the ER's discussion of Calvert Cliffs-3 vs. Alternatives.

See id. at 2, 6, 9, 11.

Each of Intervenors' arguments concerns a sufficiently distinct issue that we will divide Contention 10 into four separate contentions, referred to below as Contentions 10A–D.

A. Contention 10A: The Need for Power Analysis in the DEIS is "Inadequate and Based on Faulty and Outdated Information."

Chapter 8 of the DEIS, entitled "Need for Power," contains the NRC Staff's analysis of the need for the proposed Calvert Cliffs Unit 3 reactor. The DEIS concludes that there is a need for at least as much baseload power as would be generated by the proposed new unit. See DEIS at 8-1. Intervenors attack this conclusion for three reasons. First, they allege that,

because of the economic recession as well as demand side management and legislative changes, electric power demand in Maryland has dropped significantly. They argue that the DEIS fails to acknowledge, much less take into account, these significant changes that have reduced the need for power, and thus may have reduced or eliminated the need for Unit 3. Contention 10 at 2–6.

Intervenors also claim that the DEIS underestimates the potential for demand-side management to reduce the demand for power. Intervenors state that “[t]he most glaring flaw in the DEIS analysis of demand-side programs is that its discussion is limited to the actions of the utility BGE. In fact, it is asserted, there are 13 electric utilities in the state of Maryland, and demand-side actions taken by the other 12 (as required by Maryland law) will also act to reduce electrical demand in the state with a goal of an overall 15% per capita reduction in electricity consumption by 2015.” Id. at 5–6 (footnote omitted).

Intervenors further argue that the need for power analysis should have focused on a larger geographic area. Id. at 2. According to Intervenors, the DEIS attempts to justify the need for an additional reactor at Calvert Cliffs by maintaining that Maryland is an electricity importer and that the state’s electrical supply is considerably below its current demand. Id. at 4. Intervenors acknowledge that this might be true, but they claim it is irrelevant to the question whether a new reactor is needed because (1) Maryland is part of a regional power grid that includes 13 states, and as long as sufficient power is generated within the region to meet the needs of the participant states, Maryland has no need to produce more power within its borders; and (2) Unit 3 will be a merchant power plant that can sell power to whomever it chooses, without regard to State boundaries, so it is uncertain whether it will play any role in lessening the power generation deficit in Maryland. Id. at 4–5.

The NRC Staff and the Applicants argue that Contention 10A is nontimely and inadmissible.¹⁵ We conclude that the first argument in support of Contention 10A is timely, but the second and third arguments are not. We further find that the one timely argument in support of Contention 10A is not admissible, because the sources and documents upon which Intervenors rely fail to support a legally sufficient challenge to the need for power analysis in the DEIS. We accordingly will not admit Contention 10A.

1. Timeliness of Contention 10A

a. General Considerations

Contentions 10A–D are new NEPA contentions filed in response to a new NRC Staff NEPA document, the DEIS.¹⁶ The requirements for determining the timeliness of such a new NEPA contention are set forth in 10 C.F.R. § 2.309(f)(2), but 10 C.F.R. § 2.309(c) is also potentially relevant given that it provides criteria for boards to apply in deciding whether to admit “nontimely filings.” We will first summarize the relevant provisions in general terms. We will then apply them to Contentions 10A–D.

Section 2.309(f)(2) states that “[o]n issues arising under the National Environmental Policy Act, the petitioner shall file contentions based on the applicant’s environmental report.” It

¹⁵ See Applicants’ Response at 4–12; NRC Staff Answer at 6–14.

¹⁶ “The centerpiece of environmental regulation in the United States, NEPA requires federal agencies to pause before committing resources to a project and consider the likely environmental impacts of the preferred course of action as well as reasonable alternatives.” New Mexico ex rel. Richardson v. Bureau of Land Mgmt., 565 F.3d 683, 703 (10th Cir. 2009) (citing 42 U.S.C. § 4331(b) (congressional declaration of national environmental policy); U.S. Dep’t of Transp. v. Pub. Citizen, 541 U.S. 752, 756–57 (2004); Marsh v. Or. Natural Res. Council, 490 U.S. 360, 371 (1989); Forest Guardians v. U.S. Forest Serv., 495 F.3d 1162, 1172 (10th Cir. 2007)). When an agency proposes a “major Federal action[] significantly affecting the quality of the human environment,” NEPA requires the preparation of an EIS concerning the proposed action. 42 U.S.C. § 4332. The requirement to prepare an EIS is a procedural mechanism designed to assure that agencies give proper consideration to the environmental consequences of their actions. See Vt. Yankee Nuclear Power v. Natural Res. Def. Council, 435 U.S. 519, 558 (1978). However, NEPA does not require agencies to “elevate environmental concerns over other appropriate considerations.” Strycker’s Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, 227 (1980).

then provides, however, that a petitioner “may amend those contentions or file new contentions if there are data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's documents.” 10 C.F.R. § 2.309(f)(2). Thus, for example, if the DEIS contains data or conclusions concerning the costs or benefits of the proposed action that differ significantly from those contained in the Environmental Report (“ER”) (an applicant’s document), the petitioner (or intervenor) may file an amended contention, or an entirely new contention, to challenge the new data or conclusions. This provision tempers the restrictive effect of the agency’s requirement that NEPA contentions be filed based on the ER by allowing petitioners or intervenors to challenge significantly different data or conclusions that appear for the first time in a NRC Staff NEPA document.

The use of the disjunctive phrase “data or conclusions” means it is sufficient that either data or conclusions in the DEIS differ significantly from those in the ER; both need not do so. Id. (emphasis added). A contention may therefore challenge a DEIS even though its ultimate conclusion on a particular issue (e.g., the need for power) is the same as that in the ER, as long as the DEIS relies on significantly different data than the ER to support the determination. The reverse is also true: a significantly different conclusion in the DEIS may be challenged even though it is based on the same information that was cited in the ER.

Also, the provision refers to “conclusions,” not “the conclusion” or “all conclusions.” Thus, even though the DEIS’s ultimate conclusion on a particular issue might be the same as that in the ER (e.g., that there is a need for additional power generating capacity), other conclusions in the DEIS related to the ultimate conclusion might be challenged if they differ significantly from those in the ER. These could also be a permissible basis for a new or amended contention, even though the ultimate conclusion remains unchanged.

Thus, if the DEIS for Unit 3 contains either data or conclusions that differ significantly from those in the ER, Intervenor may file their new contention challenging the DEIS even though both the ER and the DEIS reach the same result.

If Intervenor fails to show that the DEIS contains new data or conclusions that differ from those in the ER, Section 2.309(f)(2) provides another alternative. It allows a new contention to be filed after the initial docketing with leave of the presiding officer upon a showing that:

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

Id.

The regulations do not define or specify an exact number of days within which a new or amended contention must be filed in order to be considered “timely.” Accordingly, unless a deadline has been specified in the scheduling order for the proceeding, the determination of timeliness is subject to a reasonableness standard that depends on the facts and circumstances of each situation.¹⁷

If the filing of a proposed new contention is not authorized by either alternative in Section 2.309(f)(2), then it may be evaluated under Section 2.309(c). The Commission has held that, even if a petitioner is unable to show that the NRC Staff’s NEPA document differs significantly from the ER, it “may still be able to meet the late filed contention requirements.”¹⁸ Similarly, if a contention based on new information fails to satisfy the three-part test of Section 2.309(f)(2)(i)–(iii), it may be evaluated under Section 2.309(c).

¹⁷ See, e.g., Entergy Nuclear Vt. Yankee, LLC (Vermont Yankee Nuclear Power Station), LBP-07-15, 66 NRC 261, 266 n.11 (2007).

¹⁸ Sacramento Mun. Util. Dist. (Rancho Seco Nuclear Generating Station), CLI-93-12, 37 NRC 355, 363 (1993). Although this case was decided under a pre-2004 regulations, including 10

Section 2.309(c)(1) includes eight factors that boards must balance in evaluating nontimely intervention petitions, hearing requests, and contentions.¹⁹ In the Crow Butte proceeding, the Commission upheld the Licensing Board's finding that the petitioner demonstrated "good cause" for its late filing.²⁰ The Commission affirmed that "'[g]ood cause' is the most significant of the late-filing factors set out at 10 C.F.R. § 2.309(c)."²¹ If good cause is not shown, the board may still permit the late filing, but the petitioner must make a strong showing on the other factors.²²

C.F.R. § 2.714(a)(1)(i)–(v), there is no reason to think the result would be different under the current regulations. See also Private Fuel Storage, LLC (Independent Spent Fuel Storage Installation), LBP-00-27, 52 NRC 216, 223–24 (2000).

¹⁹ The factors are:

- (i) Good cause, if any, for the failure to file on time;
- (ii) The nature of the [petitioner's] right under the Act to be made a party to the proceeding;
- (iii) The nature and extent of the [petitioner's] property, financial or other interest in the proceeding;
- (iv) The possible effect of any order that may be entered in the proceeding on the [petitioner's] interest;
- (v) The availability of other means whereby the [petitioner's] interest will be protected;
- (vi) The extent to which the [petitioner's] interests will be represented by existing parties;
- (vii) The extent to which the [petitioner's] participation will broaden the issues or delay the proceeding; and
- (viii) The extent to which the [petitioner's] participation may reasonably be expected to assist in developing a sound record.

10 C.F.R. § 2.309(c)(1).

²⁰ Crow Butte Res., Inc. (North Trend Expansion Area), CLI-09-12, 69 NRC 535, 549 (2009).

²¹ Id. at 549 n.61.

²² See Pac. Gas and Elec. Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-1, 67 NRC 1, 5–8 (2008).

b. Timeliness of Contention 10A under 10 C.F.R. § 2.309(f)(2)

Intervenors justify filing Contention 10 under the “new data or conclusions” provision of Section 2.309(f)(2). See Contention 10 at 14. They point to extensive new data in the DEIS that was not cited in the ER:

In Chapter 8, the DEIS presents the NRC Staff’s analysis of the need for the proposed Calvert Cliffs Unit 3 reactor. While Chapter 8 reaches the same conclusion as the Environmental Report that Unit 3 is needed, it is based on a completely different set of data that are more recent than the data presented in the Environmental Report. For example, it cites a 2009 Maryland Public Service Commission decision authorizing a Certificate of Public Convenience and Necessity for Calvert Cliffs-3, a January 2010 PJM load forecast report, a 2010 Maryland Department of Natural Resources report, and other documents much more recent than those cited by Applicants in their Environmental Report. The DEIS cites these various reports and studies to show that Maryland currently suffers from an imbalance in its electrical demand and supply, with demand considerably outstripping available generation.

Id. at 2 (footnote omitted). The new information cited for the first time in the DEIS could not have been challenged in Intervenors’ hearing petition. Id. at 14. Intervenors also maintain that the new information in the DEIS is significantly different from that cited in the ER. Id. at 14–16.

They explain:

[I]n the Need for Power discussion in the Environmental Report, no documents from 2009 or 2010 are cited. A single document from 2008 is cited, and all of the other documents are from 2007 or earlier. Obviously these documents do not reflect the significant and long-lasting downturn in the U.S. economy that started during 2007, which has greatly affected electricity demand, nor the effects of Maryland’s 2008 energy efficiency law and continuing improvement in demand-side management programs.

Id. at 15. Intervenors maintain that the data presented in the DEIS, while more up-to-date than that cited in ER, is still inadequate because it ignores the reduction in the demand for power brought about by the economic recession and demand-side management. Id. at 2–3.

As another Board has warned, an intervenor that has sufficient information to file a NEPA contention but delays that filing until publication of the DEIS or FEIS does so at its peril.²³ In that case, however, the Intervenor did not contend that the NRC Staff NEPA document contained new or different data or conclusions.²⁴ In this case, we do have such a claim. We therefore must decide whether Intervenor could file Contention 10A after the DEIS was issued, based upon the provision in Section 2.309(f)(2) that permits a new contention challenging significant new data or conclusions in a NRC Staff NEPA document. We conclude that they could.

As Intervenor points out, the documents cited in the ER are primarily from 2007 or earlier. These include the Maryland Public Service Commission's ("MPSC's") Electric Supply Adequacy Report of 2007 ("MPSC 2007 Supply Adequacy Report"), and two reports prepared by the Maryland Department of Natural Resources' Power Plant Research Program ("PPRP") in 2006.²⁵ Chapter 8 shows that, although the DEIS reached the same ultimate conclusion as the ER concerning the need for power in Maryland, the DEIS cites additional information and more recent sources. Those include a 2009 MPSC decision authorizing a Certificate of Public Convenience and Necessity for Calvert Cliffs-3, a January 2010 PJM Interconnection (PJM) load forecast report, a 2010 PPRP Report, the *2009 Long-Term Reliability Assessment 2009-2018* prepared by the North American Electric Reliability Corporation's ("NERC"), and the *2009 Long Term Resource Assessment 2009-2018* prepared by the Reliability First Corporation ("RFC"). See DEIS at 8-9 to 8-11. The DEIS cites these reports and studies to show that

²³ Private Fuel Storage, LLC, LBP-00-27, 52 NRC at 223 (2000) (quoting La. Energy Servs., L.P. (Claiborne Enrichment Center), LBP-94-11, 39 NRC 205, 212 (1994)).

²⁴ Id.

²⁵ Calvert Cliffs Nuclear Power Plant Unit 3, Combined License Application Part 3: Environmental Report, at 8-9, 8-15 (Rev. 6 Sept. 2009) (ADAMS Accession Nos. ML092880898-920) [hereinafter ER].

Maryland suffers from an imbalance in its electrical demand and supply, with demand considerably outstripping available generation. Id. at 8-3 to 8-8. Intervenors are thus correct that the DEIS relies on different and more recent documents than those cited in the ER.

Even Applicants, who maintain that Contention 10A is nontimely, acknowledge that “the DEIS relies on some information that post-dates the ER.” Applicants’ Response at 5.

These post-ER differences are readily apparent when comparing equivalent sections of the ER and DEIS. For example, Section 8.2 of the ER and the same section of the DEIS concern “Power Demand.” ER Section 8.2 discusses Maryland’s dependence on power from out of State, noting that “Maryland imports over 25% of its electric energy needs.”²⁶ Quoting the MPSC 2007 Supply Adequacy Report, the ER states that “Maryland’s electric utilities and PJM forecast that electricity demand will continue to rise, albeit at a modest pace of between 1% and 2% per year, further increasing Maryland’s need for additional electricity supplies.”²⁷ The ER also cites PPRP and PJM reports as supporting “a predicted annual growth rate in demand of about 1.5% through the year 2015.” ER at 8-13.

Section 8.2 of the DEIS includes quantitative data on matters for which data were not provided in the ER. In addition, virtually all of the quantitative data in DEIS Section 8.2 are new. DEIS at 8-3. The comparison is essentially the same for Section 8.3 of the ER and the corresponding section of the DEIS, both of which concern power supply.²⁸ Again, the discussion in the ER is general and qualitative. The DEIS, however, provides more detailed quantitative information on power supply resources. The only projection of future supply in the

²⁶ Id. at 8-11 (quoting Maryland Public Service Commission, Electronic Supply Adequacy Report of 2007 2 (2007), http://www.psc.state.md.us/Intranet/Reports/2007SupplyAdequacyReport_0117207.pdf) [hereinafter MPSC 2007 Supply Adequacy Report].

²⁷ Id. (quoting MPSC 2007 Supply Adequacy Report at 2).

²⁸ See ER at 8-17; DEIS at 8-3 to 8-5.

ER extends to the “middle of the next decade,” which presumably means 2015.²⁹ DEIS Section 8.3 includes projections that extend to 2018. Id. at 8-4. Also, the sources relied on in the DEIS are again more recent than those cited in the ER. See id. at 8-3 to 8-5.

Section 8.4 of the DEIS is entitled “Assessment of Need for Power.” Id. at 8-5. Like the sections of the DEIS just discussed, it includes a substantial amount of information not included in the ER. In Section 8.4.2, the DEIS reviews the conclusions of the MPSC 2007 Report, which is also cited in ER Section 8.4.1 (“Assessment of the Need for New Capacity”). See id. at 8-6 to 8-7. But the MPSC 2007 Supply Adequacy Report, as summarized in the DEIS, concerns the State’s need for additional power, not the need for any specific facility such as Unit 3. See id. The latter question was the subject of an adjudicatory proceeding conducted by the MPSC during 2008 and 2009, the purpose of which was to determine whether the MPSC should issue a Certificate of Public Convenience and Necessity (“CPCN”) for the proposed Calvert Cliffs Unit 3.³⁰ Under Maryland law, the MPSC may issue such a Certificate “only after taking due consideration of the effect of a proposed generating station on the stability and reliability of the electrical system.” Id. at 8-5. In addition, in the CPCN proceeding applicants “must address a full range of environmental, engineering, socioeconomic, planning, and cost issues.” Id. The MPSC 2007 Supply Adequacy Report, as described in the DEIS, was broader in scope, primarily focusing on the general need for additional power in Maryland, while the CPCN proceeding focused specifically on whether the Applicant had adequately demonstrated that Unit 3 would be of benefit to the State and its citizens. See id. at 8-5 to 8-7. The ER noted that

²⁹ ER at 8-17 (quoting MPSC 2007 Supply Adequacy Report at 55).

³⁰ See Maryland Public Service Commission, Proposed Order of Hearing Examiner (2009), http://webapp.psc.state.md.us/Intranet/Casenum/submit_new.cfm?DirPath=C:\Casenum\9100-9199\9127\Item_114\&CaseN=9127\Item_114 [hereinafter Proposed Order of MPSC Hearing Examiner]. The MPSC’s procedures for conducting adjudicatory proceedings are summarized in the ER. ER at 8-5.

the MPSC would be considering the need for Calvert Cliffs Unit 3 in its CPCN proceeding, but, because that proceeding was not concluded until 2009, the MPSC's determinations concerning the need for Unit 3 were not included in the ER. See ER at 8-3 to 8-4.

The MPSC conducted an evidentiary hearing on the CPCN application in August of 2008, the hearing examiner issued his proposed order on April 28, 2009, and the MPSC issued its order granting the CPCN on June 26, 2009.³¹ The DEIS summarizes the MPSC's conclusions concerning the benefits that proposed Calvert Cliffs Unit 3 would provide to the State, as follows:

- Unit 3 would constitute a new large source of power that would be of benefit to the citizens and State of Maryland.
- The beneficial effect of Unit 3 on the stability and reliability of the electric system is supported by the evidence on the MPSC's record.
- The additional power provided by Unit 3 would lessen Maryland's dependence on fossil fuels and would reduce the State's dependence on imported electricity.
- Unit 3 would be a welcome source of baseload power designed to run continuously, which would help peak period congestion on transmission lines within Maryland to the benefit of the public.
- Unit 3 would have a positive effect on the reliability and stability of the electric system and would be a beneficial power source for Maryland and the electric grid in general.

DEIS at 8-5 to 8-6.³² No equivalent MPSC findings appear in the ER.

³¹ Proposed Order of MPSC Hearing Examiner at 1, 5; DEIS at 8-10.

³² Section 8.4.1 of the DEIS also summarizes the hearing testimony of Mr. Craig Taborsky, an engineer in the MPSC's Engineering Division:

[P]roposed Unit 3 would have a positive effect on the reliability and stability of the electric system in Maryland if it complies with all PJM requirements as the additional power supplied by the plant would be a beneficial source for Maryland and the grid in general. Mr. Taborsky noted that the plant would provide power with an alternate source, nuclear power, which would lessen Maryland's dependence on fossil fuels such as coal, oil, and natural gas. He also stated that

The DEIS also says that the MPSC rejected arguments of opponents of Unit 3 that the CPCN should not be granted and that alternative forms of generation and additional conservation measures should be used in its place to meet Maryland's need for power. Id. at 8-6.

Thus, although the DEIS reaches the same ultimate conclusion as the ER concerning the need for Unit 3, data and conclusions cited in the DEIS to support that ultimate conclusion differ from the information cited in the ER.

The remaining question is whether the differences are significant. The regulations do not define the phrase "differ significantly." In the absence of a statutory definition, courts normally define a term by its ordinary meaning.³³ The ordinary meaning of "significant" is "having meaning," "full of import," "indicative," "having or likely to have influence or effect," "deserving to be considered."³⁴

Applying this definition, much of the new data cited in the DEIS differs significantly from that cited in the ER. The NRC Staff updated the DEIS to include new and more recent data, demand projections that cover a later time period, additional and more recent sources, and the MPSC's determinations in the CPCN proceeding concerning the benefits of and need for

the plant would be beneficial in reducing the State's dependence on imported electricity, as Maryland imported approximately 30 percent of its electric power in 2006. Mr. Taborsky further noted that Maryland may face a shortage of electricity in coming years, perhaps by the year 2011 or 2012, and wholesale prices continue to increase due to congestion, especially in central Maryland. Therefore, he testified that the new nuclear unit at Calvert Cliffs would be a welcome source of baseload power designed to run continuously, which is expected to reduce peak period congestion on transmission lines within Maryland and reduce the need for imported power (MPSC 2009b).

DEIS at 8-5.

³³ See Smith v. United States, 508 U.S. 223, 228 (1993).

³⁴ Webster's Third New International Dictionary 2116 (4th ed. 1976).

Calvert Cliffs Unit 3. Not only does the DEIS contain new quantitative data, the projections of peak load growth now extend to 2018 and 2020. By contrast, the ER's projections of growth in demand, to the extent they identify a time period, extend only to 2015. Notably, the ER states that the projected start-up date for the commercial operation of Calvert Cliffs Unit 3 is December 2015. See ER at 1-7. Thus, had the DEIS cited only the time-specific demand projections in the ER, its demand analysis would not have covered the period of the proposed operation of Calvert Cliffs Unit 3 and might therefore have been vulnerable to attack as outdated and unreliable.

In addition, unlike the ER, the DEIS cites the MPSC's determinations in the CPCN proceeding that there is a need for Calvert Cliffs Unit 3 and that it complies with the State's statutory and regulatory criteria for new power generating facilities. Those determinations were not available when the ER was prepared. The NRC Staff states that it gave "particular credence to the . . . MPSC's decision to grant Unistar a CPCN for Unit 3," as well as to the 2007 Supply Adequacy Report and the reliability assessment prepared by the RFC in 2009. DEIS at 8-9. Given the significance that the NRC Staff attached to the State's determinations in the CPCN proceeding concerning the need for Calvert Cliffs Unit 3, the fact that those determinations were discussed for the first time in the DEIS is a significant difference between the information provided in that NEPA document and that provided in the ER.

Also, Intervenor's argue that, because the sources relied on in the DEIS are more recent than those cited in the ER, they should have taken into account the effects of the recession and other recent developments on the demand for power. Contention 10 at 2-3. Contention 10A is based in part on these alleged deficiencies.

In arguing that Contention 10A is nontimely, the Applicants state that "[a]lthough the DEIS relies on some information that post-dates the ER, that information supports the conclusions in the ER." Applicants' Response at 5. Even assuming this is true, it does not

make Contention 10 nontimely under Section 2.309(f)(2). Contention 10 challenges the reliability of new information the NRC Staff cited in the DEIS—including new projections of the demand for electricity and the conclusions from the State CPCN proceeding—to support the NRC Staff’s determination that Calvert Cliffs Unit 3 is necessary to meet a need for additional power. As explained in the general discussion above, Section 2.309(f)(2) permits the filing of a new or amended contention when a NRC Staff NEPA document relies upon new data, new conclusions, or both to support its ultimate determination on a particular issue. The plain language of this provision covers this situation where, although the ultimate conclusion remains the same, the DEIS and ER rely upon significantly different information to support that determination. Thus, the fact that the new information the NRC Staff cited in the DEIS is also consistent with the ER’s conclusion concerning the need for power does not make Contention 10 nontimely. There need only be a significant change in the data or conclusions underlying the NRC Staff’s ultimate conclusion, not a change in the ultimate conclusion itself.

The Applicants maintain that Contention 10A “is not based on any new data or new conclusions in the DEIS. The challenge could have been made to the ER at the time of the intervention petition.” Id. In other words, Applicants would have it that Intervenors’ attack upon the need for power analysis in the DEIS is based on previously available information that could have also been used to challenge the need for power analysis in the ER.

If Intervenors could have filed Contention 10A with their intervention petition, Section 2.309(f)(2) required that they do so. We agree with Intervenors, however, that Contention 10A could not realistically have been filed at that time. This is because Contention 10A is based primarily upon information and events that post-date the intervention petition. Some of the information Intervenors rely upon to challenge the need for power analysis in the DEIS became available after the hearing petition was filed but before the DEIS was publicly available, while other data they cite is from June of 2010, approximately two months after the

DEIS was available. See Contention 10 at 2–4. To explain why they did not file Contention 10 as a challenge to the ER, Intervenors point out that when they filed their hearing petition the impact of the recession and Maryland’s legislative changes upon electricity demand was not yet clear:

Contrary to Applicants’ argument, it would have made no sense for Joint Intervenors to have challenged the demand conclusions in the ER, since at the time there was little reason to believe electricity demand would plummet so radically and thus place a major question mark over future demand projections. Moreover, the EmPower Maryland Act, passed in April 2008, which is intended to reduce electrical demand in the state, had not yet taken effect when the ER was prepared, nor had it had time to have any impact before Joint Intervenors filed our contentions; thus it would not have been feasible for Joint Intervenors to have filed a contention based on its impact at that time. The Maryland CPCN process referred to by Applicants in their response brief also took place during 2008 (NIRS was a participant in this process), and did not address the issue of falling electricity demand as at the time this issue was only beginning to be realized.

Intervenors’ Reply at 5. This is a reasonable explanation of why Intervenors did not file Contention 10 as a challenge to the ER.

This leaves only the argument that Contention 10A should have been filed as a new contention challenging the ER promptly after the Intervenors became aware of the information upon which Contention 10A is based. At least some of that information, however, was not available until after the DEIS was issued, by which time a contention challenging the ER would have been moot. See, e.g., Contention 10 at 2–4. Furthermore, this argument confuses the requirements for filing a new contention based on new and significantly different data or conclusions in the NRC Staff’s NEPA documents with the alternative requirements for filing a new contention based on new information under Sections 2.309(f)(2)(i)–(iii). The Commission’s preamble statement accompanying the 2004 final rule that included the present version of Section 2.309(f)(2) confirms that, under the two alternative tests, the time for filing a new or amended contention is triggered by different events:

Paragraph (f)(2) addresses the standards for amending existing contentions, or submitting new contentions based upon documents or other information not available at the time that the original request for hearing/petition to intervene was

required to be filed. Paragraph (f)(2) incorporates the substance of existing § 2.714 (b)(2)(iii) with regard to new or amended environmental contentions—new or amended environmental contentions may be admitted if the petitioner shows that the new or amended contention is based on data or conclusions in the NRC's environmental documents that differ significantly from the data or conclusions in the applicant's documents. Of course, new or amended environmental [contentions] must be submitted promptly after the NRC's environmental documents are issued. For all other new or amended contentions the rule makes clear that the criteria in § 2.309(f)(2)(i) through (iii) must be satisfied for admission. Include [sic] in these standards is the requirement that it be shown that the new or amended contention has been submitted in a timely fashion based on the timing of availability of the subsequent information. See § 2.309(f)(2)(iii). This requires that the new or amended contention be filed promptly after the new information purportedly forming the basis for the new or amended contention become available.³⁵

Thus, when a new contention is filed challenging “new data or conclusions” in the NRC’s environmental documents, the timeliness of the new contention is determined based on whether it was filed promptly after the NRC’s NEPA document became publicly available, not whether it was filed promptly after the information on which the intervenor bases its challenge became publicly available. The intervenor must show that (1) the new data or conclusions in the NRC Staff NEPA document differ significantly from those in the ER, and (2) the new contention was submitted promptly after the NRC Staff NEPA document was issued to the public. If these requirements are met, the new contention is timely even if it is based on information that pre-dates the NRC Staff NEPA document.

This contrasts with the alternative basis for filing a new contention in Sections 2.309(f)(2)(i)–(iii), which requires that a new or amended contention based on material new information be filed “in a timely fashion based on the availability of the subsequent information.” Under this alternative, timeliness is determined based on the timing of the availability of the information on which the contention is based, not the timing of the NRC Staff NEPA document. Here, Intervenors base their argument for the timeliness of Contention 10A on the first test. The two tests are distinct, and therefore if the requirements of the first test are met we may not

³⁵ 69 Fed. Reg. 2,182, 2,221 (2004) (emphasis added).

impose additional requirements derived from the second test. That is what we would be doing if we accepted the Applicants' argument that Contention 10 should have been filed as a challenge to the ER.

We therefore conclude that the new information in the DEIS justifies filing the first argument in support of Contention 10A after the DEIS was issued.

We reach a different conclusion, however, with respect to the second and third arguments in support of Contention 10A. The second argument is that the DEIS underestimates the potential for demand-side management to contribute to reducing the demand for power. Intervenors argue that the DEIS focused solely on the demand-side management program of Baltimore Gas & Electric ("BG&E") and neglected to examine the programs of other Maryland utilities. Contention 10 at 5–6. Intervenors do not address, however, whether this alleged error was also in the ER, or whether it is a new issue in the DEIS. See id. In fact, the ER discussed demand side management and that discussion was also based on BG&E's program. ER at 8-14 to 8-15. This aspect of Contention 10 is therefore not based on a new conclusion or new data in the DEIS. Rather, this aspect of Contention 10 argues a point that could have been raised in a contention challenging the ER's analysis of the same issue. This argument is therefore nontimely.

The third argument in support of Contention 10A challenges the DEIS's focus on Maryland's power generation deficit, arguing that the DEIS should have examined the larger geographic area from which Maryland obtains electric power and that Calvert Cliffs Unit 3 will not be obligated to sell the electricity it generates within Maryland. See Contention 10 at 4–5. As with the second argument, however, Intervenors have not identified any significant difference between the treatment of this issue in the ER and in the DEIS. See id. The ER also emphasized Maryland's power generation deficit. ER at 8-17. Intervenors should have challenged the ER based on this alleged error, rather than waiting for the DEIS to be issued.

The first argument in support of Contention 10A is based on data or conclusions in the DEIS that differ significantly from those in the ER. Intervenor's have not demonstrated any such significant difference for the second and third arguments in support of Contention 10A, however, and we accordingly find that those arguments are not timely. The remaining discussion of Contention 10A is therefore limited to the first argument in support of Contention 10A. The second and third arguments will not be considered further in this Order, unless specifically so stated.

c. Timing of Contention 10 in relation to the public availability of the DEIS.

The next question is whether Intervenor's filed Contention 10A sufficiently promptly after the DEIS was available to the public. Because this issue also pertains to Contentions 10B, C, and D, we will analyze the issue as whether Contention 10 was filed sufficiently promptly after the public availability of the DEIS. We conclude that it was.

Intervenor's filed the new contention on June 25, 2010, which was 60 days after the date (April 26) on which they understood the DEIS was first available for public review. See Contention 10 at 16–18. They state that they had an agreement with the Applicants that a 60-day period would be allowed for filing new contentions based on the DEIS. Id. at 16. Applicants do not dispute the existence of such an agreement or otherwise argue that Contention 10 should have been filed more promptly following public availability of the DEIS. Unlike Applicants, the NRC Staff, insists that the Intervenor's should have filed Contention 10 within 30 days of the public availability of the DEIS. NRC Staff Answer at 6–7. The NRC Staff also asserts that Contention 10 was late even under a 60-day deadline. Id. at 6.

All the parties agree that Intervenor's were required to file Contention 10 reasonably promptly after the DEIS was issued.³⁶ We will have to decide, however, what this means

³⁶ See Contention 10 at 16–17; Intervenor's Reply at 2–4; NRC Staff Answer at 6–7.

because our Scheduling Order only included a specific deadline (30 days) for filing new or amended contentions based on the Final Environmental Impact Statement (“FEIS”) or the Safety Evaluation Report (“SER”), not the DEIS.³⁷ It would not have been obvious to the parties that the deadline for new contentions based on the FEIS should apply to new contentions based on the DEIS. The latter document was the first NRC Staff NEPA document the Intervenors had the opportunity to review. By contrast, although it updates the DEIS to the extent necessary to respond to significant public comments, the FEIS typically is not an entirely new NRC Staff document but rather duplicates the DEIS in large part. Thus, review of the DEIS might require a significantly greater time and resource commitment than review of the FEIS. We therefore cannot find Contention 10 nontimely based solely on the Scheduling Order. We also cannot fault Intervenors for not seeking an extension of time to file Contention 10A, given that there was no applicable deadline to extend.

In the absence of a deadline in the Scheduling Order, the determination of timeliness is subject to a reasonableness standard.³⁸ Given the agreement between the Applicants and the Intervenors and the lack of a Board order requiring an earlier deadline, in the present circumstances 60 days was reasonable. Although the NRC Staff argues for a 30-day deadline, it fails to show that the 60-day period agreed to by the Applicant and the Intervenors was unreasonable. See id. at 7. Moreover, the NRC Staff was willing to allow a longer period—75 days—for public comment on the DEIS.³⁹ We find that the 60-day period agreed to by the Intervenors and Applicant was reasonable.

³⁷ See Licensing Board Order (Establishing schedule to govern further proceedings) (Apr. 22, 2009) at 4–7 (unpublished) [hereinafter Scheduling Order].

³⁸ Cf. Entergy Nuclear Vt. Yankee, LLC, LBP-07-15, 66 NRC at 266 n.11.

³⁹ 75 Fed. Reg. 20,867, 20,868 (April 21, 2010). The comment period began to run on the date that the U.S. Environmental Protection Agency published a Notice of Filing in the Federal Register, which the NRC Staff expected would be April 23, 2010. Id. The NRC Staff could have

The NRC Staff also argues that, even if we apply a 60-day deadline, Contention 10 was not filed within 60 days of public availability of the DEIS. Id. at 6–7. Intervenors state they understood that the DEIS was first available for public review on April 26, 2010, and that they filed Contention 10 within 60 days of that date, on June 25. Contention 10 at 1, 18. The NRC Staff responds that it alerted the Board and the parties to the availability of the DEIS on April 20, 2010, by service through the Electronic Information Exchange.⁴⁰ The Intervenors reply that they received multiple messages from the NRC Staff concerning the public availability of the DEIS. The last two NRC Staff messages they received were two emails dated April 20 and, as interpreted by the Intervenors, indicated that the DEIS would be available to the public on April 26. Intervenors relied upon that date in filing Contention 10 on June 25. Id. at 16–17.

We have reviewed the NRC Staff's April 20 email messages, and it is understandable that Intervenors interpreted them to mean that the DEIS would not be publicly available until April 26. One of the messages includes a table identifying various correspondences.

Immediately below the table appears the following:

SUBJECT: NOTIFICATION OF THE ISSUANCE OF AND REQUEST FOR
COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR
THE CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT 3 COMBINED
LICENSE APPLICATION REVIEW

required that such comments be filed within 45 days, since that is the minimum comment period required under the agency's NEPA regulations. See 10 C.F.R. § 51.73 (the minimum time required for a DEIS comment period is 45 days). Evidently the NRC Staff concluded that the DEIS was of sufficient length and complexity that substantial additional time beyond the minimum 45 days would be necessary for the public to review the DEIS and prepare comments. In light of this action by the NRC Staff, it seems reasonable that Intervenors should have at least 60 days to prepare new contentions based on the DEIS. Writing a new contention is a more difficult task than submitting comments. We fail to see any sound justification for the NRC Staff's insistence on a far tighter deadline for new contentions than for public comments. The 30-day deadline that the NRC Staff argues for would actually be 15 days shorter than the minimum period required by the agency's regulations for public comment on a DEIS.

⁴⁰ Letter from James P. Biggins, Counsel for the NRC Staff, U.S. NRC, to the Board (Apr. 20, 2010) (ADAMS Accession No. ML 101100546).

Note: These documents will not be publicly available until April 26, 2010.⁴¹

The NRC Staff maintains that the phrase “[t]hese documents” actually refers to the correspondence identified in the table, not the DEIS. NRC Staff Answer at 6–7. Intervenors, however, reasonably interpreted “[t]hese documents” to include the DEIS. Contention 10 at 16–17. Therefore, assuming the NRC Staff is correct that the DEIS was actually publicly available on April 20, Intervenors had good cause for filing Contention 10 sixty-six days later, on June 25, 2010. The NRC Staff should not be able to use confusion it created to exclude an otherwise timely and admissible contention.

d. Analysis of Contention 10 under 10 C.F.R. § 2.309(c)

Assuming arguendo that we were to agree with the NRC Staff that Contention 10 was nontimely based on the public availability of the DEIS, then we would face the question whether the late filing should be permitted under the balancing test of Section 2.309(c). We will also analyze this issue with respect to Contention 10 generally.

Intervenors do not directly address the Section 2.309(c) factors. We therefore might refuse to consider the issue. However, the Intervenors failure to expressly address the late-filing criteria does not necessarily preclude the Board from doing so. Licensing boards and the Commission have considered the late-filing criteria even in cases where the factors were not fully addressed by the petitioners and/or the NRC Staff or were not addressed at all.⁴² And, although Intervenors do not directly discuss the Section 2.309(c) factors, they do argue, in both their initial filing and their reply, that any delay in filing Contention 10 should be excused by the

⁴¹ Email message from Kimberly Dent to Kimberly Dent (Apr. 20, 2010, 17:30 EDT) (ADAMS Accession No. ML1018205360) (capitalization in original).

⁴² See Crow Butte Res., Inc., CLI-09-12, 69 NRC at 549 n.61; Nuclear Mgmt. Co. (Palisades Nuclear Plant) CLI-06-17, 63 NRC 727, 732 (2006).

Board.⁴³ We have enough information, based on the timeliness arguments that the parties did present and our knowledge of the case, to address the Section 2.309(c) factors. In addition, we have already addressed the substance of three of the factors in our ruling on Intervenors' standing (see below).

The Commission has ruled that good cause is the most important of the eight factors under Section 2.309(c).⁴⁴ Intervenors have good cause for filing Contention 10 in response to the DEIS because the NRC Staff NEPA document contains data or conclusions that differ significantly from those in the ER. By defining significantly different information in the DEIS as a permissible basis for filing a new contention, the Commission has in effect concluded that such new information is good cause for filing a new contention.⁴⁵ And, even if we conclude that Intervenors did not file Contention 10 sufficiently promptly after the DEIS was issued, they have good cause for any such delay based on (1) their agreement with the Applicant that new contentions could be filed within 60-days of the public availability of the DEIS; and (2) the NRC Staff's April 20 emails, which could reasonably be interpreted as stating that the DEIS would not be publicly available until April 26.

Most of the other Section 2.309(c) criteria also favor Intervenors. Factors (ii), (iii), and (iv) weigh in favor of Intervenors, given that we have already ruled that Intervenors have standing to represent their members who live within 50 miles of the proposed new reactor.⁴⁶ Concerning the Intervenors' right to be made a party and the nature of their interest, we stated:

⁴³ See Contention 10 at 14–17; Intervenors' Reply at 2–4.

⁴⁴ Crow Butte Res., Inc., CLI-09-12, 69 NRC at 549 n.61.

⁴⁵ See Private Fuel Storage, LLC, LBP-00-27, 52 NRC at 223.

⁴⁶ LBP-09-04, 69 NRC at 177–81.

All the Joint Petitioners have members that live within 50 miles of the proposed new reactor—in some instances much closer. The affiants are concerned about the proposed new reactor’s effects upon their health and safety and the environment in which they live. An alleged injury to health and safety, shared equally by many, can form the basis for standing. Even minor radiological exposures resulting from a proposed license activity can be enough to create the requisite injury-in-fact.⁴⁷

Of course, a favorable ruling on Contention 10 will not necessarily prevent the construction or operation of Calvert Cliffs Unit 3, but such a ruling would ensure that the NRC will first accurately estimate the benefits, costs, and environmental consequences of the proposed action and its alternatives, which Intervenor contend is required under NEPA. We noted that “[f]avorable rulings on the NEPA contentions will ensure that procedures are observed that require adequate analysis of Joint Petitioners’ environmental concerns. In short, Joint Petitioners’ contentions, if proved, will afford relief from the injuries they have relied upon for standing.”⁴⁸ Our rulings on standing (as well as contention admissibility) were affirmed by the Commission on appeal.⁴⁹ Thus, the Intervenor’s rights to be made parties, the nature of their interest in the proceeding, and the effect of any order that may be entered on Intervenor’s interests have already been established.

Factors (v) and (vi) also weigh in favor of Petitioners. There is no other apparent means by which Intervenor can protect their interest in having the NRC conduct the NEPA analysis they maintain is required. Nor is there any other party that could be expected to protect that interest if we reject Contention 10. The NRC Staff, although it is responsible for the agency’s compliance with NEPA, has made clear its opposition to the Intervenor’s NEPA contentions.

⁴⁷ *Id.* at 180–81 (citations omitted).

⁴⁸ *Id.* at 187.

⁴⁹ CLI-09-20, 70 NRC __, __ (slip op. at 2) (Oct. 13, 2009).

And we can hardly expect the Applicants to challenge the NRC Staff's NEPA analysis when it supports the Applicants' interest in obtaining a license.

Factor (vii) seems to cut both ways. Contention 10 will broaden the issues in the proceeding because, at present, we have no other admitted NEPA contention. On the other hand, it is not clear that admitting Contention 10 will delay the proceeding. It could be resolved by summary disposition or by the NRC Staff addressing the issues raised by Contention 10 in the FEIS, which could render the contention moot.

Factor (viii) requires that we consider whether the Intervenor's participation can reasonably be expected to assist in developing a sound record. Intervenor has called our attention to data and reports concerning the NEPA issues they intend to litigate. They have not, however, made any proffer concerning the testimony or other evidence they might introduce at an evidentiary hearing, if one occurred. We can say, however, that there will be no record of any sort concerning the NEPA issues raised in Contention 10 if it is not admitted.

On balance, the fact that the "good cause" issue favors Intervenor, combined with the other factors that weigh in their favor, is sufficient to allow us to consider 10 (and therefore Contentions 10A-D) even if it were deemed not to be filed sufficiently promptly after the DEIS was issued.

2. Admissibility of Contention 10A

a. General Considerations

In addition to meeting timeliness requirements, Contention 10A must satisfy the requirements of 10 C.F.R. § 2.309(f)(1). See 10 C.F.R. § 2.309(a), (f)(1). An admissible contention must: (i) provide a specific statement of the legal or factual issue sought to be raised; (ii) provide a brief explanation of the basis for the contention; (iii) demonstrate that the issue raised is within the scope of the proceeding; (iv) demonstrate that the issue raised is material to the findings the NRC must make to support the action that is involved in the proceeding; (v)

provide a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at the hearing; and (vi) provide sufficient information to show 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. 10 C.F.R. § 2.309(f)(1).

b. Analysis

Contention 10A asserts that the need for power analysis is outdated and inaccurate and therefore violates NEPA. This aspect of Contention 10A includes a specific statement of the issue of law or fact Intervenor's intend to litigate and an explanation of the basis of the contention. See 10 C.F.R. § 2.309(f)(1)(i)–(ii). It falls within the scope of the proceeding because it challenges the adequacy of the NEPA analysis that the NRC must complete in order to issue the combined operating license that is the subject of this proceeding. See 10 C.F.R. § 2.309(f)(1)(iii).

The next question is whether the issue raised by Contention 10A is material to the licensing decision. See 10 C.F.R. § 2.309(f)(1)(iv). Contention 10A alleges that the DEIS's analysis of the need for power is outdated and inadequate and therefore violations NEPA. "It is . . . settled that the NRC has the burden of complying with NEPA. Thus, the adequacy of the NRC's environmental review as reflected in the adequacy of a [DEIS or FEIS] is an appropriate issue for litigation in a licensing proceeding."⁵⁰ The analysis of the need for Unit 3 is a part of the NEPA analysis that the agency must conduct. Under NEPA, the NRC must balance the

⁵⁰ Duke Power Co. (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1049 (1983).

benefits of the project against its environmental costs.⁵¹ “The assessment of need for power has historically been equated ‘with the benefits of the proposed action’ for the cost-benefit balance consideration.”⁵² If the need for power is less than the DEIS projects, then the benefits of the project might also be less, which might in turn alter the balance between the project’s benefits and its environmental costs. Thus, the accuracy and reliability of the agency’s need for power determination, as reflected in the DEIS, is material to the licensing decision. Id.

The Applicants argue, however, that “Intervenors fail to establish a genuine or material dispute with the conclusions in the DEIS” concerning the need for power. Applicants’ Response at 8–9. The Applicants maintain that when, as here, they relied in the ER on a State regulator’s determination of the need for additional power (the Maryland CPCN process), the NRC Staff’s role is limited to evaluating the State’s analysis to determine whether it satisfies the criteria in Section 8.1 of the Environmental Standard Review Plan (“ESRP”).⁵³ ESRP Section 8.1-2 provides:

⁵¹ Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-366, 5 NRC 39, 61-62 (1977). As the Appeal Board explained, a licensing board may disapprove a site for a new reactor “only upon one of two findings: (1) that, on a cost/benefit balance, some alternate site was preferable; or (2) that the environmental impacts of construction and operation at Seabrook with towers outweighed the benefits that would be derived from the facility (*i.e.*, the electric power that would be generated by it).” Id. The Appeal Board further stated that “[t]he purpose of the cost-benefit analysis called for by NEPA is to identify each significant environmental cost and to determine whether, all other factors considered, on balance the incurring of that cost is warranted. This determination necessarily involves the scrutiny of many factors; among them, offsetting benefits, available alternatives, and the possible means (and attendant costs) of reducing the environmental harm.” Id. at 62 (quoting Maine Yankee Atomic Power Co. (Maine Yankee Atomic Power Section), ALAB-161, 6 AEC 1003, 1007 (1973), remanded on other grounds, CLI-74-2, 7 AEC 2 (1974), further statement of Appeal Board views, ALAB-175, 7 AEC 62 (1974), affirmed, sub nom. Citizens for Safe Power v. NRC, 524 F.2d 1291 (D.C. Cir. 1975)).

⁵² NRC Staff Answer at 8 (quoting 68 Fed. Reg. 55,905, 55,909 (Sept. 29, 2003)).

⁵³ Applicants’ Response at 8 (citing Office of Nuclear Reactor Regulation, Environmental Standard Review Plan, NUREG-1555, at 8.1-2 (Oct. 1999) (ADAMS Accession No. ML093340205) [hereinafter ESRP]).

Affected States and/or regions are expected to prepare a need-for-power evaluation. NRC will review the evaluation and determine if it is (1) systematic, (2) comprehensive, (3) subject to confirmation, and (4) responsive to forecasting uncertainty. If the need for power evaluation is found acceptable, no additional independent review by NRC is needed, and the analysis can be the basis for ESRPs 8.2 through 8.4.

The NRC Staff found that Maryland's need for power evaluation satisfied the four criteria. DEIS at 8-8. The Intervenor did not challenge Applicants' reliance on the CPCN process in the ER, nor did they challenge the NRC Staff's application of four criteria of ESRP Section 8.1. The Applicants therefore argue that, in view of the NRC Staff's allegedly limited role in evaluation the need for power, Contention 10A fails to demonstrate a genuine dispute with the DEIS on a material issue of law or fact. Applicants' Response at 8-9.

We are not persuaded by this argument. The question here is not whether Maryland's evaluation of its need for power was acceptable at the time the evaluation was performed. Rather, the question is whether the States' evaluation can continue to serve as a basis of the NRC's evaluation of the need for power, given the information provided by Intervenor suggesting that economic conditions affecting the demand for power have changed significantly since the CPCN was issued. ESRP Section 8.1 does not directly address that question. Moreover, the ESRP is simply NRC Staff guidance, not a regulation.

In 2003—approximately four years after the ESRP was issued—the Commission addressed squarely the question of whether NEPA requires the NRC to perform its own reasonable assessment of the need for power. The Nuclear Energy Institute (“NEI”), a trade association representing the nuclear power industry, had requested that the NRC amend its regulations to remove the requirements in 10 C.F.R. Parts 2, 50, and 51 that applicants analyze, and the NRC review, alternative sites, alternative energy sources, and the need for power in proceedings involving siting, construction, and operation of nuclear power plants. NEI claimed that the regulations requiring a “need for power” analysis were imposed solely based on the structure of the 1970's electric power industry and are not specifically required by NEPA. In

addition, NEI argued that the NRC licensing process did not change the balance of power between the Federal Government and the States with regard to the construction and operation of electric power facilities, and that the NRC's assessment of environmental impacts "neither supplants nor interferes with the traditional responsibilities of States in evaluating the need for power."

In denying NEI's petition, the Commission ruled that NEI had not shown that law and/or practices had changed so much as to justify the NRC no longer taking into account the "need for power" in order to fulfill its NEPA obligations. The Commission stated:

Consistent with the petitioner's claim, in considering the need for power as part of the NEPA process, the NRC does not supplant the States, which have traditionally been responsible for assessing the need for power generating facilities, their economic feasibility and for regulating rates and services. As the petitioner noted, the NRC has acknowledged the primacy of State regulatory decisions regarding future energy options. However, this acknowledgement does not relieve the NRC from the need to perform a reasonable assessment of the need for power. Moreover, in the non-regulated environment foreseen by the petitioner, NRC consideration of the need for power may become "more, not less, crucial" (in the words of a commenter) because a State decisionmaker may no longer conduct need for power assessments.⁵⁴

Therefore, even if the NRC Staff finds that a State's evaluation satisfies the criteria of ESRP Section 8.1, this does not relieve the NRC of its obligation under NEPA to consider more recent data showing that conditions have changed materially, as Intervenors claim is true here. The NRC Staff's obligation to consider significant new information in preparing NEPA documents follows from the agency's NEPA regulations. See 10 C.F.R. § 51.92(a)(2). Thus, if significant new information becomes available, the NRC Staff must explain how it took the new information into account in determining whether the State requires additional generating capacity. Chapter 8 of the DEIS fails to acknowledge the recent downturn in the demand for electrical power alleged by Intervenors, much less explain whether or how it affected the NRC's

⁵⁴ 68 Fed. Reg. 55,905, 55,909–10 (emphasis added).

assessment of the need for power. If Intervenor have identified significant new information, then they have a plausible argument that the NRC Staff's need for power analysis violates NEPA.

The NRC Staff argues, however, that Intervenor have failed to identify significant new information relevant to the DEIS's need for power analysis. The NRC Staff maintains that "[a] short-term reduction in demand is not sufficient to necessitate an accounting in the DEIS for that changed demand. The longstanding position of the Commission is that 'inherent in any forecast of future electric power demands is a substantial margin of uncertainty.'"⁵⁵ Thus, fluctuations in demand that may occur over a period of several years, such as changes brought about by an economic recession, are not a legally sufficient ground for challenging the need for power analysis under the Commission's interpretation of NEPA requirements. We agree.

Chapter 8 of the DEIS analyzes the need for additional baseload power in Maryland and concludes that, by December 2015 and continuing thereafter, the State will need at least the additional baseload generating capacity that Calvert Cliffs Unit 3 will provide. DEIS at 8-1. Intervenor provide no quantitative projection of the long-term demand for baseload power in Maryland. Instead, Intervenor question the need for Unit 3 because of the reduced demand for power during the last several years, primarily as the result of the economic recession.

According to Intervenor,

the DEIS fails to reflect the reality that since 2006, electricity demand has actually plummeted in Maryland and throughout the PJM grid, primarily due to the recession, but also due to demand-side management programs in the region which exist to reduce electrical usage. Electrical demand has not yet reached pre-recession levels, calling into question even the January 2010 PJM demand

⁵⁵ NRC Staff Answer at 13 (quoting Carolina Power and Light Co. (Shearon Harris Nuclear Power Plant), CLI-79-5, 9 NRC 607, 609 (1979)).

forecast cited by the DEIS that projects very modest growth (1.4-1.8%/year through 2020) in the PJM region.⁵⁶

In Shearon Harris,⁵⁷ relying on a prediction of a downward turn in the growth rate for electricity in the State reported by the North Carolina Utilities Commission, the intervenor argued for a remand and reopened hearings on the question of the need for the new facility.

The Commission responded:

The general rule applicable to cases involving differences or changes in demand forecasts was stated in Niagara Mohawk Power Corporation (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347, 352–69 (1975). In that case the Appeal Board found the question was ‘not whether Niagara Mohawk will need additional generating capacity but when.’ Id. at 357. The intervenors in that case urged that the power would not be needed until 1981, the applicant urged 1979 as the date. The Board responded (id. at 365):

[W]e do not consider the difference in predicted year of need—1979 vs. 1981—a statistically meaningful distinction. If there was one thing agreed upon in the proceeding below, it is that inherent in any forecast of future electric power demands is a substantial margin of uncertainty. As with most methods of predicting the future, load forecasting involves at least as much art as science. The margin of error implicit in such predictions is at least of sufficient magnitude to encompass the two year difference between the applicant's and the intervenors' forecasts.⁵⁸

Applying this general rule, the Commission concluded that “the possible one-year slip in the need-for-power forecasts found by the NCUC Report is insufficient to order relitigation of this issue.”⁵⁹

It is true that in Shearon Harris the issue was whether the proceeding should be reopened, while here the issue is the admissibility of a new contention. But the Commission

⁵⁶ Contention 10 at 2–3 (footnote omitted). PJM manages the high-voltage electric grid and the wholesale electricity market in all or part of 13 states, including Maryland, and the District of Columbia. See PJM, Who We Are, <http://www.pjm.com/about-pjm/who-we-are.aspx>.

⁵⁷ Shearon Harris, CLI-79-5, 9 NRC at 607.

⁵⁸ Id. at 609.

⁵⁹ Id.

has subsequently followed the same general rule when reviewing the question whether a need for power contention should have been admitted. In South Carolina Electric and Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3),⁶⁰ the petition alleged that the applicant's need for power analysis in its environmental report "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."⁶¹ The Commission affirmed the Board's decision not to admit the contention for several reasons, including that

the Board reasonably concluded that Joint Petitioners' load forecast claims would call for a more detailed "need for power" analysis than the NRC requires. As we have stated:

[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.⁶²

Thus, Contention 10A may be admitted only if it actually challenges the asserted need for the additional baseload power that Calvert Cliffs Unit 3 will provide, rather than merely demanding an updated forecast based on recent fluctuations in demand. Intervenors do allege that "there appears to be no need at all for a new reactor in the PJM service area." Contention 10 at 4. If nothing more than an allegation were sufficient, Intervenors might have satisfied the Commission's requirement. But our contention admissibility rule requires more. Intervenors

⁶⁰ CLI-10-01, 71 NRC __, __ (slip op. at 1) (Jan. 7, 2010).

⁶¹ S.C. Elec. & Gas Co., CLI-10-01, 71 NRC at __ (slip op. at 18).

⁶² S.C. Elec. & Gas Co., CLI-10-01, 71 NRC at __ (slip op. at 22–23) (quoting 68 Fed. Reg. 55,905, 55,910 (Sept. 29, 2003)).

must also satisfy the requirement of Section 2.309(f)(1)(v) to provide a concise statement of the alleged facts, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at the hearing. Although a licensing board does not decide the merits or resolve conflicting evidence at the contention admissibility stage, materials cited as the basis for a contention are subject to scrutiny by the board to determine whether they actually support the facts alleged.⁶³ We may examine both the statements in the document that support the petitioner's assertions and those that do not.⁶⁴ The sources and documents cited by Intervenors must support the claim that the baseload power to be generated by Calvert Cliffs Unit 3 is not needed, rather than merely disputing the date on which that need will arise.

After reviewing the sources and documents cited by Intervenors, we conclude that they fail to support the allegation that Unit 3 is not needed. The relevant time period begins in December 2015, when, according to the current application, Calvert Cliffs Unit 3 is expected to begin operation. Intervenors' sources and documents do not undermine the DEIS's conclusion that Maryland will need the additional baseload power from Calvert Cliffs Unit 3 during that period. At most, they concern when, not whether, the additional power to be generated by Calvert Cliffs Unit 3 will be needed.

For example, Intervenors cite the January 2010 PJM Load Forecast Report⁶⁵ to support their argument that "[e]lectrical demand has not yet reached pre-recession levels, calling into

⁶³ See Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), LBP-04-18, 60 NRC 253, 265 (2004).

⁶⁴ See Yankee Atomic Elec. Co. (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 n.30, rev'd in part on other grounds, CLI-96-7, 43 NRC 235 (1996).

⁶⁵ PJM Resource Adequacy Planning Department, PJM Load Forecast Report January 2010 (2010), <http://www.pjm.com/documents/~media/reports/2010-load-forecast-report.ashx> [hereinafter January 2010 PJM Load Forecast Report].

question even the January 2010 PJM demand forecast cited by the DEIS that projects very modest growth (1.4-1.8%/year through 2020) in the PJM region.” Id. at 3 (footnote omitted). The January 2010 PJM Load Forecast Report, however, does not provide projections of baseload power demand. Instead, it contains forecasts of summer peak demand and winter peak demand for various geographic zones within the PJM RTO.⁶⁶ Intervenors fail to explain how these data are relevant to determining Maryland’s baseload power needs in December 2015 and thereafter. Furthermore, the January 2010 PJM Load Forecast Report does not predict future reductions in summer or winter peak load demand. On the contrary, the forecasts of summer peak load demand,⁶⁷ while they do show a leveling-off or downturn in demand through 2010 in various geographic zones, also project resumed increases in peak load demand after 2010. In the BG&E geographic zone,⁶⁸ for instance, the “weather normalized peak” summer demand was essentially flat between 2005 and 2010. January 2010 PJM Load Forecast Report at 6. But, according to the 2010 forecast, summer peak load demand in that geographic zone will increase without interruption between 2010 and 2025. Id. Winter peak load demand is also projected to increase during those years. Id. The forecasts predict a similar pattern for the other geographic zones within the PJM RTO. The most that we could infer based on the January 2010 PJM Load Forecast Report is that the economic recession contributed to a temporary leveling-off or downturn in winter and summer peak demand through 2010, with demand levels projected to resume their upward trend after 2010. This fails to

⁶⁶ See id. at 3–4. “RTO” stands for regional transmission organization. An RTO consists of each entity that either has a possessory interest in facilities that are used for the transmission of electrical energy in interstate commerce, or provides transmission that is a party to the PJM Transmission Owners Agreement and PJM Operating Agreement. PJM, PJM Glossary, <http://www.pjm.com/Home/Glossary.aspx>.

⁶⁷ The forecasts are presented as graphs in the January 2010 PJM Load Forecast Report. See, e.g., January 2010 PJM Load Forecast Report at 3–4.

⁶⁸ This zone is within the State of Maryland.

provide any support for Intervenors' argument that Maryland does not need the baseload power to be provided by Calvert Cliffs Unit 3.

Intervenors also cite data on the PJM website concerning the demand for power at particular times on specific days during the summer of 2010. Contention 10 at 4, nn.6, 8. They argue, on the basis of these data, that "PJM's January 2010 forecast document may significantly overstate electrical demand and that the decline in electrical demand from 2006 through 2009 is continuing." Id. at 4. As the NRC Staff point out, "Intervenors never explain how peak demand taken at specific dates . . . is relevant to the analysis of the demand for baseload power generation." NRC Staff Answer at 13 (footnote omitted). Moreover, consistent with our responsibility to examine both the information in Intervenors' sources that supports their assertions and that which does not, we have considered all the relevant information on the PJM website. The website includes a news release dated November 9, 2010, entitled "Economy Boosts Electricity Demand," which contradicts Intervenors' assertion of a continuing decline in peak load demand:

A recovering economy increased the peak demand for electricity this summer in the 13-state PJM Interconnection region. When adjusted for unusually warm weather, consumers' highest demand for electricity increased about 1 percent compared to summer 2009.

"It may seem like a small increase, but it's consistent with expected effects of economic recovery," said Michael J. Kormos, PJM senior vice president – Operations. "It's also a significant change from the reduction in peak demand experienced in 2009 and is the largest increase in weather-adjusted peak demand since 2006 when we recorded our all-time peak."

Peak demand is the greatest amount of electricity used in one hour. The power grid has to be built to handle that amount of power use. Enough resources – generation and demand response – have to be available to supply the peak demand. Power demand tends to peak in the summer in the PJM region because of the use of air conditioning.⁶⁹

⁶⁹ Economy Boosts Electricity Demand, PJM, Nov. 9, 2010, <http://www.pjm.com/~media/about-pjm/newsroom/2010-releases/20101109-economy-boosts-demand.ashx>.

Thus, the website, instead of supporting Intervenor's theory of an ongoing decline in peak load demand, contradicts that claim.

We conclude, therefore, that Intervenor has failed to cite sources or documents to support their claim that the additional baseload power to be provided by Calvert Cliffs Unit 3 will not be needed. 10 C.F.R. § 2.309(f)(1)(v). By demanding that the NRC Staff nevertheless recalculate the need for power analysis to take account of the recent short-term reduction in demand brought about by the recession, Intervenor, like the petitioners in Virgil, demand a more precise forecast of the need for power than the Commission has determined is required by NEPA.

We therefore will not admit Contention 10A.

B. Contention 10B: "The DEIS Discussion of Energy Alternatives is Inadequate, Faulty and Misleading."

Intervenor alleges that the analysis of wind power in Section 9.2.3.2 of the DEIS is "egregiously inaccurate and illogical." Contention 10 at 6. Intervenor makes several specific criticisms in support of this claim.

First, they contend that the DEIS improperly relied on a 2008 MPSC Report to conclude that "onshore wind 'yields net economic benefits, albeit on a small scale,'" but that "offshore wind, as modeled in the report, 'does not yield economic benefits.'"⁷⁰ Intervenor alleges the report was "based on outdated or faulty information," because its conclusion that offshore wind power would not yield economic benefits "would probably come as news to Bluewater Wind (owned by the utility NRG), which has proposed a 600 MW wind power project offshore of Maryland, as well as a similarly-sized offshore wind project offshore of Delaware and a 350 MW offshore wind project in New Jersey." Id. at 7 (citation omitted). Intervenor maintains that the

⁷⁰ Contention 10 at 6 (quoting DEIS at 9-20).

NRC Staff ignored these projects and generally failed to research adequately the offshore wind potential of Maryland, and of other areas of the mid-Atlantic Coast that also feed into the PJM Grid. Id. at 7–8.

Intervenors further argue that the NRC Staff “exacerbates its failure to consider relevant and up-to-date information by citing a 2007 study by Southern Company and the Georgia Institute of Technology of wind potential off the coast of Georgia as evidence that Maryland’s offshore wind potential is trivial.” Id. at 7. Relying upon a U.S. Department of Energy (“DOE”) assessment of offshore wind potential, Intervenors respond that the offshore wind potential of Maryland is rated as outstanding to superb, as is the entire coastal region of the PJM service area, while Georgia’s rating is only fair to good. Id. at 7–8. Intervenors therefore criticize the NRC Staff’s reliance on conclusions regarding the economic viability of offshore wind power in Georgia to assess the viability of offshore wind power in Maryland and other mid-Atlantic States. Id.

Intervenors also challenge the DEIS’s analysis of solar power. Id. at 8. The DEIS acknowledges, based on a DOE report, that, for flat-plate photovoltaic collectors (PV solar), “Maryland has a good, useful solar resource throughout most of the state.”⁷¹ Although the NRC Staff expresses concern with the acreage required for solar collectors, Intervenors state that PV solar collectors would be “primarily above-ground (on rooftops, parking lots, etc.) and would take up essentially zero acreage.” Id. Intervenors fault the DEIS for failing to quantify the possible contribution PV solar could make to supplying Maryland’s need for additional power generation. Id. at 8–9.

We conclude that Contention 10B is timely, but that it fails to present a genuine dispute of material fact with the DEIS.

⁷¹ Id. at 8 (quoting DEIS at 9-22).

1. Timeliness. The DEIS introduces new data and new conclusions concerning the viability of wind and solar power as alternatives to Unit 3. For the reasons explained below, the new data and conclusions are significantly different from the information provided in the ER.

As to wind power, the Intervenor note that “the DEIS cites the 2007 study on offshore wind power potential in Georgia not cited in the Environmental Report.” Id. at 15. In fact, the ER not only makes no mention of the 2007 study, it makes no mention whatsoever of offshore wind power potential in Georgia. This issue is introduced for the first time in the DEIS. The DEIS also claims that the cited conclusions in the 2007 study on offshore wind power potential in Georgia “would generally apply to a wind farm located offshore of Maryland based on similarities in the physical and regulatory environments.” DEIS at 9-22. No such statement appears in the ER. It is precisely this new conclusion that Intervenor challenge. In the next sentence, the NRC Staff states that “[f]or the preceding reasons, the review team concludes that a wind energy facility would not currently be a reasonable alternative to construction of a 1600-MW(e) nuclear power generation facility that would be operated as a baseload plant within Unistar’s ROI.” Id. Thus, the 2007 Georgia offshore wind study, and the NRC Staff’s conclusion that it is relevant to assessing the potential of offshore wind in Maryland, influenced the NRC Staff’s conclusion that wind power is not a viable alternative to Unit 3. As a result, the NRC Staff’s reliance on the 2007 study is a significant difference between the ER and the DEIS. Intervenor could not have challenged the NRC Staff’s reliance on this study until the DEIS was issued. Section 2.309(f)(2) permits them to do so now.

The DEIS also relies on a 2008 MPSC Report, not cited in the ER’s discussion of the wind alternative, to justify its conclusion that offshore wind in Maryland is not an economically viable alternative to nuclear power. DEIS at 9-20. By contrast, the ER states only that “[o]ffshore wind farms are not competitive or viable with a new nuclear reactor at the CCNPP site, and were therefore not considered in more detail.” ER at 9-12. The ER does not cite the 2008

MPSC Report, or any other study or report, to justify its failure to consider the economic viability of wind power in more detail. The DEIS, however, draws a specific conclusion concerning the economic viability of wind power and justifies that conclusion by citing the 2008 MPSC Report. The fact that the DEIS cites a specific report to justify its conclusion, rather than merely stating that the issue was not considered in detail, is another significant difference between the ER and the DEIS.

Intervenors have also identified a new and significantly different conclusion in the DEIS concerning the viability of solar power. Unlike the ER, the DEIS states that according to the DOE “Maryland has a good, useful [PV] solar resource throughout most of the state.” DEIS at 9-22. This is a significant concession because it supports Intervenors’ claim that solar power, together with wind and a backup natural gas plant, could provide a viable alternative to Unit 3.

Contention 10B is therefore based on new data and conclusions in the DEIS that differ significantly from those in the ER. It was also filed sufficiently promptly after the DEIS was issued, for reasons stated previously explained.⁷² Contention 10B is therefore timely under the 10 C.F.R. § 2.309(f)(2).

2. Admissibility. Contention 10B includes a specific statement of the issue of law or fact Intervenors intend to litigate and an explanation of the basis of the contention. It also falls within the scope of the proceeding.

Contention 10B is material to the licensing proceeding. An EIS must include a detailed statement of reasonable alternatives to a proposed action.⁷³ When considering alternatives, agencies must:

⁷² See pages 21-24, supra.

⁷³ 42 U.S.C. § 4332(2)(C)(iii); see La. Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 104 (1998).

(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

(b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

40 C.F.R. § 1502.14.

The Council on Environmental Quality (“CEQ”),⁷⁴ numerous courts, and parties to this proceeding, including the NRC Staff, acknowledge that the alternatives analysis is the “heart of the environmental impact statement.”⁷⁵ “The existence of reasonable but unexamined alternatives renders an EIS inadequate.”⁷⁶ The adequacy of the DEIS’s evaluation of alternatives is therefore a material issue in the licensing proceeding, and Contention 10B challenges that evaluation.

Intervenors have alleged facts or expert opinion to support their claim that the DEIS undervalues the potential contribution of wind and solar power to meeting Maryland’s need for additional power. In response to the NRC Staff’s reliance on the 2007 study of wind potential off the coast of Georgia, they have cited the DOE assessment to show that Maryland has greater potential than Georgia, and that the NRC Staff therefore should not have relied on the Georgia

⁷⁴ CEQ was created by NEPA in the Executive Office of the President. CEQ has promulgated regulations governing federal agency compliance with NEPA. See 40 C.F.R. §§ 1500.1–1508.28. The regulations receive substantial deference from the federal courts. See Pub. Citizen, 541 U.S. at 757; Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 355–56 (1989). The Commission has stated that “the NRC as an independent regulatory agency can be bound by CEQ’s NEPA regulations only insofar as those regulations are procedural or ministerial in nature. NRC is not bound by those portions of CEQ’s NEPA regulations which have a substantive impact on the way in which the Commission performs its regulatory functions.” 49 Fed. Reg. 9,352, 9,352 (Mar. 12, 1984). But the Commission also has an “announced policy to take account of the [CEQ regulations] voluntarily, subject to certain conditions.” 10 C.F.R. § 51.10(a).

⁷⁵ 40 C.F.R. § 1502.14; see Alaska v. Andrus, 580 F.2d 465, 474 (D.C. Cir. 1978), vacated in part as moot sub nom. W. Oil & Gas Ass’n v. Alaska, 439 U.S. 922 (1978); NRC Staff Answer at 18–19.

⁷⁶ Friends of Se.’s Future v. Morrison, 153 F.3d 1059, 1065 (9th Cir.1998).

study to analyze Maryland's offshore wind potential. Contention 10 at 7–8. To counter the NRC Staff's claim that Maryland offshore wind power does not yield economic benefits, they have cited Bluewater Wind's plans to construct a 600 MW private wind power project off the Maryland Coast. Id. at 7. To support their claim that the DEIS undervalues the potential contribution of solar power to meeting Maryland's energy needs, Intervenor's cite the statement in the DEIS that "Maryland has a good, useful [PV] solar resource throughout most of the state."⁷⁷

To be sure, Intervenor's have not established their claims on the merits. They are not required to do so at this point, however, but only to allege some facts or expert opinion that support their position. Explaining the level of support necessary for an admissible contention, the Commission observed:

Although [the contention admissibility rule] imposes on a petitioner the burden of going forward with a sufficient factual basis, it does not shift the ultimate burden of proof from the applicant to the petitioner. . . . Nor does [the rule] require a petitioner to prove its case at the contention stage. For factual disputes, a petitioner need not proffer facts in "formal affidavit or evidentiary form," [sic] sufficient "to withstand a summary disposition motion." . . . On the other hand, a petitioner "must present sufficient information to show a genuine dispute" and reasonably "indicating that a further inquiry is appropriate."⁷⁸

By quoting and citing the information described above, the Intervenor's have provided the required "concise statement" and supporting references. See 10 C.F.R. § 2.309(f)(1)(v).

There remains, however, the question whether Contention 10B reflects a genuine dispute with the DEIS on a material issue of law or fact. Although it challenges the DEIS's analysis of the viability of wind and solar power, Contention 10B does not allege that either of those energy sources could, by itself, serve as an alternative to the construction of Unit 3. See

⁷⁷ Contention 10 at 8 (quoting DEIS at 9-22).

⁷⁸ Yankee Atomic Elec. Co., CLI-96-7, 43 NRC at 249 (citations omitted) (quoting Ga. Inst. of Tech. (Georgia Tech Research Reactor), CLI-95-12, 42 N.R.C. 111, 118 (1995) (quotation errors in Yankee Atomic Elec. Co.); see also Gulf States Utilities Co. (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994).

Contention 10 at 6–9. The primary reason the DEIS did not consider either wind or solar power as a stand-alone alternative to Unit 3 is that neither of those sources was deemed capable of serving the purpose and need of the project, generating 1600 MW(e) of baseload power. DEIS at 9-20 to 9-23. Because Intervenor do not contest that basic conclusion, Contention 10B does not present a genuine dispute with the DEIS.⁷⁹ Even if Intervenor are correct that the DEIS's analysis of wind and solar power is flawed, they have provided no basis to overturn the NRC Staff's conclusion that neither source of power could, standing alone, provide a reasonable alternative to Calvert Cliffs Unit 3.

Contention 10B, however, is closely related to Contention 10C, which challenges the DEIS's analysis of a combination of power sources, including both wind and solar power, that the DEIS recognizes could furnish a viable alternative to Unit 3.

C. Contention 10C: "The DEIS Discussion of a Combination of Alternatives is Inadequate and Faulty."

In Section 9.2.4 of the DEIS, the NRC Staff acknowledged that, although individual alternatives to Calvert Cliffs Unit 3 might not be sufficient to generate Applicants' target value of 1600 MW(e) of new baseload power, a combination of alternative power sources might be a cost-effective way of meeting that objective. DEIS at 9-26. The DEIS states that, given Applicants' objective, "a fossil energy source, most likely coal or natural gas, would need to be a significant contributor to any reasonable alternative energy combination." Id. The NRC Staff also noted that there are many possible combinations of fossil energy sources and alternative power sources that might be cost-effective ways of satisfying the project's purpose. It decided

⁷⁹ The NRC may consistently with NEPA define baseload power generation as the purpose of and need for a project. See Environmental Law and Policy Center v. NRC, 470 F.3d 676, 684 (7th Cir. 2006) ("Because Exelon was a private company engaged in generating energy for the wholesale market, the Board's adoption of baseload energy generation as the purpose behind the [Early Site Permit] was not arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law.").

to focus on one combination, which included specified contributions from wind power, solar power, hydropower; biomass sources, conservation and demand-side management programs, and natural gas combined-cycle generating units (the “combined alternative”). Id. In the DEIS, the NRC Staff compared the environmental consequences of the combined alternative and two other “viable energy alternatives” to the proposed action. Id. at 9-28.⁸⁰ The NRC Staff estimated that the combined alternative would result in 4.2 million tons of carbon dioxide emissions per year, as well as the emission of other air pollutants, from the operation of the natural gas plant. Id. at 9-27. The NRC Staff concluded “from an environmental perspective, none of the viable energy alternatives are clearly preferable to construction of a new baseload power generating plant located within Unistar’s ROI.” Id. at 9-28.

Intervenors maintain that, because the NRC Staff underestimated Maryland’s wind power potential and failed to quantify its acknowledged PV solar power potential, the NRC Staff underestimated the contribution wind and solar power could make to the combined alternative. Contention 10 at 9.⁸¹ Intervenors argue that greater contributions from wind and solar power would reduce the air emissions from the combined alternative. The NRC Staff’s errors therefore allegedly undermine its analysis of the estimated air emissions from the combined alternative. Intervenors contend that the NRC Staff’s alternatives analysis is accordingly inaccurate and

⁸⁰ The other two viable energy alternatives that the Staff compared to the proposed action were the construction and operation of coal-fired or natural-gas fired combined-cycle generating units at the Calvert Cliffs site. DEIS at 9-28.

⁸¹ Intervenors also argue that, in the combined alternative, the Staff underestimated the potential contribution of demand side management. Contention 10 at 9. For the reasons previously explained, however, Intervenors’ allegations regarding demand side management are not properly before us. See supra pages 20–21. We have therefore not considered the demand side management issue in determining the admissibility of Contention 10C. The following discussion of the timeliness and admissibility of Contention 10C should be understood as limited to the allegations that the combined alternative undervalues the potential contributions of wind and solar power.

incomplete and cannot support the granting of a license for Calvert Cliffs Unit 3 until it is revised to provide a realistic comparison of viable alternatives. Id. at 9–10.

In order to focus Contention 10C on the facts alleged by Intervenors in support of the Contention, the Board has reformulated it as follows:

The DEIS discussion of a combination of alternatives is inadequate and faulty. By selecting a single alternative that under-represents potential contributions of wind and solar power, the combination alternative depends excessively on the natural gas supplement, thus unnecessarily burdening this alternative with excessive environmental impacts.

The following discussion of Contention 10C refers to the Contention as so restated.

Contention 10C is timely. In addition, we find that Contention 10C presents a genuine dispute of material fact with the combination of alternatives analysis in the DEIS and otherwise satisfies the admissibility criteria of 10 C.F.R. § 2.309(f)(1).

1. Timeliness. Contention 10C is derived from the Intervenors' challenge in Contention 10B to the NRC Staff's analysis of the potential contributions of wind and solar power. Contention 10C is therefore timely under 10 C.F.R. § 2.309(f)(2) for the reasons explained in connection with the analysis of Contention 10B.

Contention 10C is timely for another reason. The combined alternative evaluated in the ER did not include the specific information concerning the contributions from wind and solar power that is contained in the DEIS and that Intervenors challenge in Contention 10C. The ER indicated that its combined alternative would include a gas-fired power generation facility in combination with renewable power sources. The ER did not, however, define a specific combination of renewable power sources to be included in its combined alternative, much less state the specific amount of power to be contributed by each of those sources. Instead, it stated "the renewable portion of the combination alternative would be any combination of renewable technologies that could produce power equal to or less than CCNPP Unit 3 at a point when the resource was available." ER at 9-26.

By contrast, the DEIS for the first time presented a combined alternative that included specific renewable power sources and specific power contributions from those sources. The combined alternative evaluated in the DEIS included “an assumed combination of 1200 MW(e) of natural gas combined-cycle generating units at the Calvert Cliffs site and the following contributions from within UniStar’s ROI: 25 MW(e) of hydropower; 75 MW(e) from solar power; 100 MW(e) from biomass sources, including municipal solid waste; 100 MW(e) from conservation and demand-side management programs; and 100 MW(e) from wind power.” DEIS at 9-26. The NRC Staff maintains that the designated contributions from the renewable power sources were “reasonable and representative.” Id. The Intervenor contest this claim for both wind and solar power. No such contention could have been filed based on the ER because the specific contributions from wind and solar power were not identified in the ER.

For these reasons, we conclude that the DEIS included new data and conclusions concerning the combined alternative that differ significantly from the data or conclusions in the ER, as required by Section 2.309(f)(2). Contention 10C arises from the new data and conclusions in the DEIS.

Finally, Contention 10C was filed sufficiently promptly after the DEIS was issued, for reasons stated previously.⁸² Contention 10C is therefore timely under the Section 2.309(f)(2).

2. Admissibility. Contention 10C is admissible under 10 C.F.R. § 2.309(f)(1). It satisfies the first five admissibility criteria for the reasons explained concerning Contention 10B. Moreover, Contention 10C, unlike Contention 10B, challenges the analysis of an alternative that the DEIS acknowledges to be a viable source of baseload power. Because Contention 10C alleges and provides some support to show that the analysis of that viable alternative is inaccurate and incomplete, Contention 10C presents a genuine dispute of material fact with the DEIS under Section 2.309(f)(1)(vi).

⁸² See pages 21-24, supra.

Intervenors assert that, while the NRC Staff assumes a contribution from all wind power sources of only 100 MW, the proposed Bluewater Wind project alone would provide 600 MW of power. Contention 10 at 9. In addition, Intervenors maintain that more power will be produced off the nearby coasts of Delaware and New Jersey, also feeding into the same PJM grid. Id. Intervenors have also cited the DOE assessment of offshore wind potential in Maryland to support their argument that the NRC Staff, by relying on the study of wind potential off the coast of Georgia, underestimated Maryland's offshore wind power potential. Thus, according to Intervenors, the DEIS significantly underestimated the potential contribution of wind power to the combined alternative. Intervenors additionally argue that, "[b]y failing to even attempt to quantify potential power from solar photovoltaics, the DEIS has no basis whatsoever for assuming a 75 MW contribution from solar power." Id. at 10. Intervenors contend that "a feasible combination of alternatives might well include a considerably smaller natural gas plant than contemplated in the DEIS, along with a much larger contribution from renewable sources of power and demand-side programs. With proper load management, such a combination could produce reliable electricity (the goal of 'baseload' power) with lower environmental consequence and quite likely at reduced economic cost." Id.

Intervenors have provided sufficient information to show that there is a genuine dispute concerning the appropriate composition of the combined alternative described in the DEIS and its environmental consequences. This dispute is material to the licensing decision. In order to issue the license, the NRC Staff must prepare an EIS that complies with NEPA. As we have explained, the alternatives analysis is the most critical part of an EIS. Intervenors maintain that the comparison in the DEIS between a new nuclear power plant and the combined alternative violates NEPA because it is inaccurate and incomplete. They have identified information indicating that the NRC Staff might have significantly underestimated the potential contribution of wind power and solar power to the combined alternative. If Intervenors are correct, then the

DEIS's comparison of alternatives might well be incomplete or inaccurate because, by underestimating the contribution of power sources that produce little or no air emissions, it overestimates the air emissions the combined alternative would produce. The estimated level of air emissions influenced the DEIS's comparison of the combined alternative to the construction of a new nuclear power plant.

According to the NRC Staff, Contention 10C is defective because Intervenors (1) have not quantified the precise contributions from wind, solar, and other renewable power sources that they contend should be included in the combined alternative; and (2) even assuming that Intervenors' combined alternative would have reduced environmental consequences, they have not provided sufficient information to show that their suggested combination alternative would be environmentally preferable to the proposed action. NRC Staff Answer at 19–20. In effect, the NRC Staff argues that is not enough for Intervenors to show that the DEIS presents an inaccurate and incomplete comparison of alternatives. The NRC Staff claims that Intervenors must also show precisely how the combined alternative should be revised and that doing so will change the DEIS's ultimate conclusion.

Intervenors reply that, once they have identified flaws in the DEIS's analysis of alternatives,

it is perfectly reasonable to expect the NRC Staff to re-examine the document's section of Alternatives and produce a new analysis that takes the realities we have presented into account. What exactly the precise amounts of offshore and onshore wind power, solar power, energy efficiency programs, natural gas, etc. should be in this analysis are not ours to determine; they are the NRC's. But the NRC must have a factual basis for deciding what alternatives to analyze, and the DEIS does not provide such a factual basis. Instead the NRC has essentially set up a straw man: they have chosen an apparently random alternative scenario, without factual basis, and discounted it as an alternative.

Intervenors' Reply at 13.

Intervenors have the better of this argument. They have satisfied our contention admissibility requirements by identifying information to support their contention that the DEIS

contains an inaccurate or incomplete comparison of the proposed action and the combined alternative. If Intervenor's contention is upheld on the merits, they will have shown that the DEIS violates NEPA even if they have not shown precisely how the DEIS should be revised or what ultimate conclusion it should reach. Federal courts have held that inaccurate, incomplete, or misleading information in an EIS concerning the comparison of alternatives is itself sufficient to render the EIS unlawful and to compel its revision. As the court of appeals explained in Animal Defense Council v. Hodel,

The Council alleges that the EIS was so filled with misinformation and incorrect cost figures that the Bureau must revise its EIS to adequately provide the public with an informed comparison of alternatives. Where the information in the initial EIS was so incomplete or misleading that the decisionmaker and the public could not make an informed comparison of the alternatives, revision of an EIS may be necessary to provide "a reasonable, good faith, and objective presentation of the subjects required by NEPA." Johnston v. Davis, 698 F.2d 1088, 1095 (10th Cir. 1983) (revision of EIS necessary where use of artificially low discount rate resulted in unreasonable comparison of alternatives to proposed project); see also National Wildlife Federation v. Andrus, 440 F.Supp. 1245, 1254 (D.D.C. 1977) (EIS deficient where several alternatives were not treated in the EIS and the EIS did not set forth reasons why these alternatives were rejected).⁸³

Thus, if the DEIS's analysis of the combined alternative significantly underestimates the potential contribution of wind and solar power, as Intervenor maintain, then the EIS fails in one of its essential functions—to provide the public and the decision maker with accurate information comparing the proposed action and its alternatives—and, as such, it cannot support an agency decision to issue the license.

The Commission has said substantially the same thing about NEPA contentions generally, stating that, although boards should not "flyspeck" environmental documents, "petitioners may raise contentions seeking correction of significant inaccuracies and omissions

⁸³ 840 F.2d 1432, 1439 (9th Cir. 1988); see also Natural Res. Def. Council v. U.S. Forest Serv., 421 F.3d 797, 810–12 (9th Cir. 2005).

in the ER.”⁸⁴ Here Intervenor provide sufficient facts to support their claim that there are inaccuracies in the DEIS’s analysis of the combined alternative and its environmental consequences. Intervenor have, for example, identified facts to show that Maryland has significant offshore wind potential that the combined alternative ignores. They have also pointed to information indicating that Maryland has substantial solar power potential, contrasting this with the DEIS’s failure to explain why it assumed a contribution of only 75 MW(e) from solar power. In reviewing such claims of substantial inaccuracies and incompleteness, we would not be “flyspecking” the DEIS. Instead, we would be reviewing the DEIS to determine whether the information it provides is sufficient to enable the decisionmakers and the public to make an informed comparison of viable alternatives.⁸⁵

The NRC Staff’s argument is also inconsistent with NEPA’s goals of informed decisionmaking and public participation. As the Supreme Court has explained, the statutory requirement that an agency prepare an EIS

ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts; it also guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.

....

Publication of an EIS, both in draft and final form, also serves a larger informational role. It gives the public the assurance that the agency “has indeed considered environmental concerns in its decisionmaking process,” . . . and, perhaps more significantly, provides a springboard for public comment⁸⁶

⁸⁴ Sys. Energy Res., Inc. (Early Site Permit for Grand Gulf ESP Site), CLI-05-4, 61 NRC 10, 13 (2005) (citations omitted).

⁸⁵ Cf. Animal Def. Council, 840 F.2d at 1439.

⁸⁶ Robertson, 490 U.S. at 349 (quoting Baltimore Gas & Elec. Co. v. Natural Res. Def. Council, 462 U.S. 87, 97(1983)) (other citations omitted). The Commission has described the EIS requirement in similar terms, stating that its principal goals are “to force agencies to take a ‘hard look’ at the environmental consequences of a proposed project, and, by making relevant analyses openly available, to permit the public a role in the agency’s decision-making process.”

As the Court further explained, “[a]lthough these procedures are almost certain to affect the agency’s substantive decision, it is now well settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process.”⁸⁷

Thus, Intervenor’s need not prove, in order to establish a NEPA violation, that revising the DEIS to comply with NEPA will change the NRC Staff’s recommendation or the agency’s decision whether to issue the license. It is sufficient that the information which Intervenor’s maintain should have been included in the DEIS would be relevant to the ability of the agency decisionmakers and the public to assess the environmental consequences of the project, including the environmental consequences of reasonable alternatives. If Intervenor’s establish that much, they will have shown that the agency failed to comply with NEPA’s procedural requirements. It is the NRC Staff, not the Intervenor’s, that has the burden of complying with NEPA,⁸⁸ and the NRC Staff would therefore be responsible for revising the EIS if Intervenor’s prevail on Contention 10C. The NRC Staff would have to revise the alternatives analysis to include more accurate estimates of the potential contribution of wind and solar power to the combined alternative, and to provide a new estimate of the air emissions the combined alternative would produce. Thus, by alleging facts suggesting that the comparison of alternatives in the DEIS may be inaccurate or incomplete, and by citing sources and documents

La. Energy Servs., L.P., CLI-98-3, 47 NRC at 87 (citing Robertson, 490 U.S. at 349–50; Hughes River Watershed Conservancy v. Glickman, 81 F.3d 437, 443 (4th Cir.1996)).

⁸⁷ Robertson, 490 U.S. at 350; see also Lujan v. Defenders of Wildlife, 504 U.S. 555, 573 n.7 (1992) (“[U]nder our case law, one living adjacent to the site for proposed construction of a federally licensed dam has standing to challenge the licensing agency’s failure to prepare an environmental impact statement, even though he cannot establish with any certainty that the statement will cause the license to be withheld or altered, and even though the dam will not be completed for many years.”).

⁸⁸ See Vt. Yankee Nuclear Power Corp., 435 U.S. at 553.

that provide some support to their allegations, Intervenors have met their burden under 10 C.F.R. § 2.309(f)(1)(v) and (vi).

We agree with the NRC Staff that, as a general proposition, “[a]n agency’s consideration of alternatives is sufficient if it considers an appropriate range of alternatives, even if it does not consider every available alternative.”⁸⁹ In this instance, however, Intervenors cannot be accused of demanding that the NRC Staff analyze “every conceivable alternative.” On the contrary, the combined alternative is the only alternative to the proposed action that the NRC Staff determined was a viable source of baseload power and that included renewable energy sources. DEIS at 9-26, 9-28. A thorough and accurate analysis of the combined alternative is therefore particularly important to the agency’s compliance with NEPA, because it represents the only opportunity the decision-makers and the public will have to compare the proposed action to an alternative that includes renewable sources such as wind and solar power and is acknowledged to be capable of fulfilling the purpose and need of the project. As another board stated in admitting a similar contention concerning a combined alternative that also included renewable power sources,

the renewable energy parts of the combination are currently the subject of significant and focused attention as a matter of national policy, as the nation attempts to address energy policy in an age of over-reliance on foreign oil, concerns about global warming and associated negative effects of carbon sources of energy, and the recent disaster of the worst oil spill in our history in the Gulf of Mexico. Nuclear power appears to be approaching a “renaissance,” but in the preceding circumstances it is also understood that renewable fuels should also be relied on to the extent possible. In this context, and given the support that Intervenors have provided – even if not optimal at this point – it is most appropriate to permit further inquiry into the feasibility and reasonable availability under NEPA of the alternative of a combination of wind and solar energy with storage and natural gas supplementation to produce baseload power.⁹⁰

⁸⁹ NRC Staff Answer at 19 (quoting Private Fuel Storage, LLC (Independent Spent Fuel Storage Installation), LBP-03-30, 58 NRC 454, 479 (2003)).

⁹⁰ Luminant Generation Co. (Comanche Peak Nuclear Power Plant, Units 3 and 4), LPB-10-10, 71 NRC __ , __ (slip op. at 70) (June 25, 2010) (footnote omitted).

Finally, the NRC Staff argues that Intervenor have failed to provide alleged facts or expert opinion to show that a combined alternative with increased contributions from wind and solar power would fulfill the purpose and need of the project, providing baseload power. NRC Staff Answer at 20. The DEIS itself provides sufficient information on this issue, however, making further support from Intervenor unnecessary. The DEIS acknowledges that the combined alternative is a “viable energy alternative.” DEIS at 9-28. The Intervenor propose that the DEIS should consider a combined alternative that includes increased contributions from wind and solar power. They recognize, however, that the combined alternative would still include natural gas combined-cycle generating units as a back-up power source when the alternative sources are not able to generate the required amount of baseload power. See Contention 10 at 10. The DEIS does not suggest that the specific power allocations included in its combined alternative were the only ones consistent with the goal of providing baseload power. On the contrary, the DEIS acknowledges that many combinations of alternative power sources with a back-up fossil fuel energy source would be capable of providing the required amount of new baseload power. DEIS at 9-26. Intervenor are simply suggesting that the Staff explore a combination that would include greater contributions from wind and solar power. The DEIS itself supports Intervenor’s position that other combinations would be inconsistent with the combined alternative’s acknowledged capability of providing baseload power, which is sufficient to carry the Intervenor’s burden at the contention admissibility stage.

We therefore conclude that Contention 10C, as restated by the Board, is timely and admissible:

The DEIS discussion of a combination of alternatives is inadequate and faulty. By selecting a single alternative that under represents potential contributions of wind and solar power, the combination alternative depends excessively on the natural gas supplement, thus unnecessarily burdening this alternative with excessive environmental impacts.

We will admit Contention 10C.

D. Contention 10D: “The DEIS Discussion of Costs Both Understates Likely Costs and Disputes Cost Estimates in the Applicants’ ER, Calling into Question the ER’s discussion of Calvert Cliffs-3 vs. Alternatives.”

Intervenors take issue with the DEIS’s discussion concerning the projected costs associated with the construction of Calvert Cliffs Unit 3. Contention 10 at 11. Intervenors originally provided three arguments in support of their challenge to the DEIS discussion of costs, but now rely on only the second and third arguments. See id. at 11–14.

Intervenors originally asserted that the DEIS understates the cost of building Calvert Cliffs Unit 3 by relying on “overnight cost” estimates provided by Applicants and failing to account for the cost of capital.⁹¹ However, in their Reply, Intervenors withdraw this argument to the extent that it relates to “the DEIS treatment of overnight construction costs and the need for a construction cost escalation factor in conducting a proper cost-benefit analysis of the proposed Calvert Cliffs-3.” Intervenors’ Reply at 1. Intervenors explain that “[w]hile we continue to believe our analysis is correct and the DEIS and ER should have included such an escalation factor (since there is nothing in the historical record to indicate that a nuclear reactor in the U.S. ever has, or ever will be, built at its estimated cost, there is no reason to assume one will be), we agree with the Applicants and Staff that we could have raised this issue at the initial intervention stage.” Id.

Nonetheless, Intervenors reiterate in their Reply that they continue to believe that Contention 10D should be admitted. Id. at 1–2. Intervenors’ assert that the DEIS’s discussion of costs conflicts with the ER’s discussion of costs. They point out that the DEIS’s discussion of

⁹¹ Contention 10 at 11–13. The phrase “overnight costs,” or “overnight capital costs,” is commonly used to describe the financial cost of constructing a nuclear plant if one were to pay for the entire plant “overnight.” Thus, interest and potential cost escalations during the preconstruction and construction phases of the plant are generally not included in overnight cost estimates. See DEIS at 10-24 to 10-25.

costs, which Intervenor claim is too low, estimates the overnight capital costs at \$4,500-\$6,000/kW, while the ER estimates its operation costs based on two outdated studies from the DOE's website, one of which projects the overnight capital costs to be only \$1,200 to \$1,800/kW.⁹² Finally, Intervenor contend that substantially higher overnight capital costs will inevitably result in substantially higher electricity rates, thereby rendering the cost benefit analyses in the DEIS inaccurate and invalid. Contention 10 at 14.

The Board finds that Contention 10D is inadmissible. Contention 10D fails to meet the requirements of 10 C.F.R. § 2.309(f)(2) for new or amended contentions because the data from the DEIS on which the two remaining arguments in support of Contention 10D are based do not differ significantly from that contained in Applicants' documents and because the two remaining arguments were not submitted in a timely fashion once the subsequent relevant information became available. In addition, Contention 10D cannot be admitted as a nontimely contention because Intervenor's two remaining arguments in support of Contention 10D fail to satisfy the good cause requirement in 10 C.F.R. § 2.309(c) for the filing of nontimely contentions. Finally, Contention 10D does not meet the contention admissibility requirements of 10 C.F.R. § 2.309(f)(1) because each of the remaining arguments in support of Contention 10D fail to provide the factual support necessary to demonstrate a genuine dispute with the DEIS on a material issue of law or fact.

1. Timeliness. Intervenor's second argument in support of Contention 10D involves the apparent inconsistency between the estimated overnight capital costs in the ER and the DEIS. Intervenor claim that this discrepancy indicates that both the ER and DEIS overnight capital cost estimates are too low and that "Chapters Nine and Ten of the Applicants' Environmental Report are wrong and misleading, and may not serve as the basis for licensing action." Id. With

⁹² Contention 10 at 13–14. "Operation costs," or the price per kWh to produce electricity, are calculated based on various factors, including operating costs, annualized capital costs, and overnight capital costs.

regard to overnight capital costs, the ER lists the factors to be considered in calculating such costs, but provides no explicit estimate, stating that “[t]he overnight capital cost for CCNPP Unit 3, excluding contingency costs, is estimated to be [].” ER at 10-27, 10-28. However, in Section 9 of the ER, which compares the costs of nuclear energy to the costs of energy alternatives, Applicants repeatedly rely on two DOE studies that project nuclear power to be produced in the range of \$0.031 to \$0.046 per kWh, one of which is based on overnight capital costs in the \$1,200 to \$1,800 range.⁹³ In the DEIS, the NRC Staff relies on an overnight capital cost estimate of \$4,500/kW to \$6,000/kW.⁹⁴ The overnight capital cost estimate contained in the DEIS was provided to the NRC Staff by Applicants in their follow-up response to the NRC Staff Request for Additional Information (“RAI”) No. 124 on November 16, 2009.⁹⁵

Applicants argue that “UniStar has, in fact, updated the cost estimates in the ER to capture more recent studies and that it is this estimate on which the NRC based its DEIS.” See Applicants’ Response at 25. Applicants explain that “[i]n its response to NRC Request for Additional Information No. 124, UniStar estimated the cost of Unit 3 in the range of \$4500/kW to \$6000/kW (same as DEIS).” Id. (footnote omitted). Intervenors respond by acknowledging that

⁹³ See, e.g., ER at 9-29; see also U.S. Department of Energy, Business Case for New Nuclear Power Plants (2002), <http://www.ne.doe.gov/home/bc/businesscase.html> [hereinafter DOE 2002 Study]; U.S. Department of Energy, The Economic Future of Nuclear Power (2004), <http://nuclear.energy.gov/np2010/reports/NuclIndustryStudy-Summary.pdf> [hereinafter DOE 2004 Study].

⁹⁴ DEIS at 10-25. It is important to note that while the DEIS contains Applicants’ estimated overnight capital cost range of \$4,500 to \$6,000, these numbers are not relied on in the studies that are used to calculate the estimated operation costs in the DEIS. Rather, the estimated overnight capital cost range used by the studies to calculate the operation costs in the DEIS was \$1,200 to \$4,000. See id. at 10-25, 10-26. Although the updated overnight capital cost estimate in the DEIS relies on two new studies, Intervenors do not base Contention 10D on those studies and thus the Board will not consider those studies when determining the timeliness of Contention 10D.

⁹⁵ Id. at 10-25; see also Letter from Greg Gibson, UniStar Vice President of Regulatory Affairs, to U.S. NRC Document Control Desk (Nov. 16, 2009) at 2 (ADAMS Accession No. ML093220193) [hereinafter Response to RAI].

the Applicants have updated the cost estimates in their response to RAI No. 124 to reflect the new overnight capital cost estimate of \$4,500 to \$6,000/kW, but claim that such revisions are absent from the ER. Intervenors' Reply at 15–16.

The most recent revision of the ER still fails to include the updated overnight capital cost estimate of \$4,500 to \$6,000/kW. Instead, the ER continues to rely on the two DOE studies from 2002 and 2004 with overnight capital cost estimates in the \$1,200 to \$1,800/kW range, while failing to provide an explicit overnight capital cost estimate.⁹⁶ Nonetheless, as even Intervenors admit, Applicants' Response to RAI No. 124 does include the updated overnight capital cost estimate: "UNE proposes that the NRC may utilize a range of \$4500/KW to \$6000/KW for the cost of the unit. This range is reasonable for use in the EIS discussion and it corresponds well with internal financial studies." Response to RAI at 4.

Under Section 2.309(f)(2), an intervenor may file a new or amended contention "if there are data or conclusions in the NRC draft or final environmental impact statement . . . or any supplement relating thereto, that differ significantly from the data or conclusions in the applicant's documents." In this proceeding, the overnight capital cost estimate of \$4,500 to \$6,000/kW that appears in the DEIS also appears in Applicants' Response to RAI No. 124, which clearly qualifies as part of "the applicant's documents" under Section 2.309(f)(2). Thus, because the same overnight capital cost estimate—\$4,500 to \$6,000/kW—appears in both the DEIS and Applicants' documents, it cannot be said that the overnight capital cost estimates differ significantly between the DEIS and Applicants' documents. Consequently, the second argument in support of Contention 10D is nontimely under the first part of Section 2.309(f)(2).

In addition, the second argument in support of Contention 10D is nontimely under the alternative three-part timeliness test contained in Sections 2.309(f)(2)(i)–(iii). Under the third

⁹⁶ ER at 10-27, 10-28; see also DOE 2002 Study; DOE 2004 Study.

part of the alternative test set forth in Section 2.309(f)(2)(iii), an intervenor must show that “[t]he amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.” Here, Applicants’ Response to RAI No. 124, which contains the updated overnight capital cost estimates, was submitted roughly one year ago on November 16, 2009. Response to RAI at 1. In its April 22, 2009 Scheduling Order, the Board elaborated on the timeliness requirement in Section 2.309(f)(2)(iii), stating that new or amended contentions filed under this provision should be filed “promptly” after the relevant information becomes available. Scheduling Order at 6. Given that over a year has elapsed since the updated overnight capital cost estimates became available, the second argument clearly fails to meet the third prong of the alternative basis for filing a new contention under Sections 2.309(f)(2)(i)–(iii). Thus, even if the second argument in support of Contention 10D were to meet the first and second criteria of the alternative timeliness test in Section 2.309(f)(2), it would still be nontimely under the alternative timeliness test therein because it fails to meet the third requirement that a new contention be filed in a timely fashion after the information upon which it was based becomes available.

If a contention fails to meet the timeliness requirements contained in Section 2.309(f)(2), it still may be admitted by a Board if it passes the eight part balancing test contained in Section 2.309(c). See 10 C.F.R. § 2.309(c). As stated previously, the Commission has reiterated that “[g]ood cause’ is the most significant of the late-filing factors in § 2.309(c).”⁹⁷ Here, Intervenor have not identified any good cause for failing to timely file the second argument, and this is not the unusual case where the other factors listed in Section 2.309(c) so favor Intervenor that we may entertain the contention despite the lack of good cause. The second argument in support

⁹⁷ Crow Butte Res., Inc., CLI-09-12, 69 NRC at 549 n.61; see also Pac. Gas and Elec. Co., CLI-08-1, 67 NRC at 5–8.

of Contention 10D is accordingly deemed nontimely by the Board under both Section 2.309(f)(2) and Section 2.309(c).

Intervenors' third argument in support of Contention 10D relies on the first and second arguments to claim that "[s]ubstantially higher construction costs means [sic] substantially higher electricity rates." Contention 10 at 14. According to this argument, the need for a cost escalation factor (addressed in the first argument in support of Contention 10D), combined with the alleged increased overnight capital cost estimate provided in the DEIS (discussed in the second argument in support of Contention 10D) will necessarily increase operation costs, and hence undercut Applicants' cost benefit analysis. See id. Intervenors themselves admitted that the first argument in support of Contention 10D discussing the need for a cost escalation factor was nontimely when they voluntarily withdrew it. Joint Intervenor's Reply at 1. Similarly, the Board found above that the second argument in support of Contention 10D addressing the increased overnight capital cost estimate in the DEIS was nontimely. Since both of the underlying arguments upon which the third argument relies were deemed nontimely, the third argument in support of Contention 10 is also nontimely.

Thus, the second and third arguments in support of Contention 10D are both nontimely under the provisions outlined in Section 2.309(f)(2) and Section 2.309(c).

2. Admissibility. Even if the second and third arguments in support of Contention 10D were timely under Section 2.309(f)(2), or met the requirements for nontimely contentions under Section 2.309(c), Contention 10D would still be inadmissible because it fails to meet the contention admissibility standards contained in Section 2.309(f)(1).

In the second argument, Intervenors fail to provide support sufficient to demonstrate a genuine dispute of material fact with the DEIS under Sections 2.309(f)(1)(v)–(vi). The second argument is premised on the fact that the estimated overnight capital costs contained in the ER range from \$1,200 to \$1,800/kW, while the estimated overnight capital costs contained in the

DEIS range from \$4,500 to \$6,000/kW. See Contention 10 at 14. From this observation, Intervenor conclude that the projected overnight capital costs in the DEIS are “almost certainly too low and nonconservative,” and that the “outdated” overnight capital cost estimates relied on in the ER make it such that “Chapters Nine and Ten of the Applicants’ Environmental Report are wrong and misleading, and may not serve as a basis for licensing action.” Id. However, Intervenor merely assert that the overnight capital cost estimates in the ER and the substantially higher overnight capital costs in the DEIS are both too low, but fail to provide any expert or factual support for this claim, as required by Section 2.309(f)(1)(v).

Intervenor’s main evidence that the overnight capital cost estimates contained in the DEIS are too low comes from the fact that they are higher than the overnight capital cost estimates contained in the ER. In fact, the fact that the DEIS includes higher cost estimates shows nothing more than that Staff updated the cost estimates to reflect more recent information. Furthermore, even if the overnight capital cost estimates in the ER are low, this potential problem has been remedied in the DEIS since the capital cost estimates in the DEIS rely not only on the overnight capital cost studies from the ER, but also on more recent studies, including the 2007 Keystone Report and the 2009 MIT Update.⁹⁸ As it points out in its Answer, the NRC Staff’s approach to calculating the estimated overnight capital costs in the DEIS is clearly within the discretion granted by the Commission when it stated that “[d]etermination of economic benefits and costs that are tangential to environmental consequences are within a

⁹⁸ DEIS at 10-25; The Keystone Center, Nuclear Power Joint Fact-Finding (2007), http://keystone.org/files/file/about/publications/FinalReport_NuclearFactFinding6_2007.pdf [hereinafter Keystone Report]; Massachusetts Institute of Technology, Update of the MIT 2003 Future of Nuclear Power 6 (2009), <http://web.mit.edu/nuclearpower/pdf/nuclearpower-update2009.pdf> [hereinafter MIT Update].

wide area of agency discretion.”⁹⁹ In relying on the studies contained in the ER and more recent studies, the DEIS analysis is now based on an increased overnight capital cost estimate that ranges from \$1,200 to \$6,000/kW. See DEIS at 10-25 to 10-26. As a result, the second argument lacks the factual support necessary to demonstrate a genuine dispute of material fact with regard to the adequacy of the overnight cost estimates in the DEIS. Thus, the second argument fails to support the admission of Contention 10D.

Intervenors also argue that if Calvert Cliffs Unit 3 has higher overnight capital costs, then such construction cost increases will necessarily result in higher electricity rates, thus altering the cost-benefit analysis contained in the DEIS. However, this argument rests on the unsupported claim that overnight costs will exceed the values stated in the DEIS. Due to the entirely speculative nature of this claim, the third argument does not establish a material dispute with the DEIS and thus fails to support the admission of Contention 10D.

For the foregoing reasons, Contention 10D is not admitted.

⁹⁹ NRC Staff Answer at 25–26; La. Energy Servs., L.P. (National Enrichment Facility), CLI-05-28, 62 NRC 721, 726 (2005) (quoting Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-04-22, 60 NRC 125, 145 (2004)).

III. CONCLUSION

For the foregoing reasons, the Board admits Contention 10C, but declines to admit Contentions 10A, 10B, and 10D.

It is so ORDERED.

THE ATOMIC SAFETY
AND LICENSING BOARD¹⁰⁰

/RA/

Ronald M. Spritzer, Chairman
ADMINISTRATIVE JUDGE

/RA/

Dr. Gary S. Arnold
ADMINISTRATIVE JUDGE

/RA/

Dr. William W. Sager
ADMINISTRATIVE JUDGE

Rockville, Maryland
December 28, 2010

¹⁰⁰ Copies of this order were sent on this date by the agency's E-Filing system to the counsel/representatives for: (1) Intervenors Nuclear Information and Resource Services, Beyond Nuclear, Public Citizen Energy Program, and Southern Maryland Citizens Alliance for Renewable Energy Solutions; (2) UniStar Nuclear Operating Services, LLC and Calvert Cliffs-3 Nuclear Project, LLC; (3) NRC Staff; and (4) State of Maryland.

Concurring Opinion of Judge Gary S. Arnold

With respect to Contention 10A, although I agree with the conclusion of this Order, I am not entirely in agreement with the logic used by the Majority in arriving at that conclusion. My colleagues believe that the first argument in support of Contention 10A is timely; I do not. Both the Majority and I consider this Contention to be inadmissible, but in addition to the reasons provided by the Majority, I would add that it was not timely filed.

In order for a Board to even consider the admissibility of a new timely contention on the DEIS, that contention must fulfill one of the two criteria of 10 C.F.R. § 2.309 (f)(2):

On issues arising under the National Environmental Policy Act . . . [a] petitioner may amend those contentions or file new contentions if there are data or conclusions in the NRC draft or final environmental impact statement, environmental assessment, or any supplements relating thereto, that differ significantly from the data or conclusions in the applicant's documents,

otherwise,

contentions may be amended or new contentions filed after the initial filing only with leave of the presiding officer upon a showing that—

(i) The information upon which the amended or new contention is based was not previously available;

(ii) The information upon which the amended or new contention is based is materially different than information previously available; and

(iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.

To qualify under the first criterion, Intervenor must identify new data or conclusions in the DEIS that are significantly different from data or conclusions contained in earlier application documents. Unless these differences are obviously significant, Intervenor must also explain how the noted differences are significant. Regarding the current Contention, the conclusions concerning need for power in the ER and DEIS are identical.¹⁰¹ But Intervenor state that the

¹⁰¹ See Calvert Cliffs Nuclear Power Plant Unit 3, Combined License Application Part 3: Environmental Report, at 8-18 to 8-22 (Rev. 6 Sept. 2009) (ADAMS Accession Nos. 092880898–920) [hereinafter ER]; Division of Site Environmental Review, Office of New Reactors, Environmental Impact Statement for the Combined License (COL) for Calvert Cliffs

DEIS “is based on a completely different set of data that are more recent than the data presented in the Environmental Report.”¹⁰² I believe that the claim that the conclusion “is based on” new information is essential to a finding of timeliness under Section 2.309(f)(2). Intervenors cite a number of documents that were considered in the DEIS but not in the ER, but they fail to cite any specific differences in the data or to explain how any differences are significant. Contention 10 at 2. Furthermore, they do not differentiate between new information considered in the DEIS and new information upon which DEIS conclusions were based. But most importantly, although Intervenors claim that the DEIS “is based on a completely different set of data that are more recent than the data presented in the Environmental Report,” they do not identify any new or different data upon which the conclusion of the DEIS need for power analysis is based. See id. (emphasis added).

The ER states that its need for power evaluation is based on the Maryland Public Service Commission’s (“MPSC’s”) “Electric Supply Adequacy Report of 2007.”¹⁰³ The DEIS states that its need for power discussion is based upon this same document plus the MPSC’s Order granting a Certificate of Public Convenience and Necessity for proposed Unit 3 (“MPSC Order”).¹⁰⁴ Thus the significantly different data, if it exists, must be contained in the MPSC

Nuclear Power Plant Unit 3, Draft Report for Comment, NUREG-1936, at 8-8 to 8-9 (Apr. 2010) (ADAMS Accession Nos. ML101000012 and ML101000013) [hereinafter DEIS].

¹⁰² Submission of Contention 10 by Joint Intervenors (June 25, 2010) at 2 (emphasis added) [hereinafter Contention 10].

¹⁰³ See ER at 8-1. The ER states: “The assessment of power needs is based on input provided by the Maryland Public Service Commission (PSC) on the need to sustain a safe and reliable electric system in the state and reduce the state’s reliance on imported electric power.” Id. The ER later identifies the specific MPSC document as the “Electric Supply Adequacy Report of 2007.” See, e.g., id. at 8-22.

¹⁰⁴ DEIS at 8-1. The DEIS states that:

The Maryland Public Service Commission (MPSC) analyzed the need for power from a new baseload generating unit in a 2007 report (MPSC 2007) and in its

Order. However, Intervenors fail to cite to any data in this Order. They apparently assume that if a document is newer, it must necessarily contain information that is significantly different. I do not agree. The Commission has stated:

We expect our licensing boards to examine cited materials to verify that they do, in fact, support a contention. But it is not up to the boards to search through pleadings or other materials to uncover arguments and support never advanced by the petitioners themselves; boards may not simply “infer” unarticulated bases of contentions. It is a “contention’s proponent, not the licensing board,” that “is responsible for formulating the contention and providing the necessary information to satisfy the basis requirement for the admission of contentions.”¹⁰⁵

My colleagues have examined the MPSC Order and have chosen to consider the information contained therein to be significantly different. I, however, choose to determine admissibility of the Contention based primarily upon information provided by the parties. Since Intervenors have not cited to any significantly different data used to determine the need for power,¹⁰⁶ I do not believe that this requirement has been fulfilled.

The second way that a new timely contention may be proposed for the DEIS is to base that contention on new information not previously available. Intervenors advance some information as “new,” possibly to utilize this means to propose a contention. They cite the

2009 Order granting a Certificate of Public Convenience and Necessity (CPCN) to UniStar for proposed Unit 3 (MPSC 2009a). The NRC staff relied on the MPSC’s determinations to reach its conclusion that there is a need for power from proposed Unit 3 at the Calvert Cliffs site by December 2015.

Id. While the NRC Staff apparently looked at other, more recent information, this information was not used to reach the NRC Staff’s conclusion on the need for power.

¹⁰⁵ USEC Inc. (American Centrifuge Plant), CLI-06-10, 63 NRC 451, 457 (2006) (quoting Statement of Policy on Conduct of Adjudicatory Proceedings, CLI-98-12, 48 NRC 18, 22 (1998)) (citations omitted).

¹⁰⁶ Intervenors merely cite the MPSC Order as a document cited by the DEIS. They do not claim that it contains new information that is significantly different than information considered in the ER. See Contention 10 at 2

MPSC Ten-Year Plan for 2008-2017¹⁰⁷ in support of the idea that the DEIS does not adequately consider the effects of the current economic downturn. Contention 10 at 3. However, the current recession is not new, and its documentation in a new ten year plan does not make it new. They also cite to peak energy use on June 24, 2010. *Id.* at 3–4. But this new information is for the large PJM¹⁰⁸ service area, and Intervenors fail to explain how an instantaneous demand in this large service area is relevant to long-term demand within the state of Maryland.

“NEPA does not specifically call for a discussion of ‘need for power.’ Instead, the NRC’s NEPA regulations require that the benefits of the project be addressed.”¹⁰⁹ The Commission has provided guidance concerning the purpose of the need for power discussion, and has characterized such discussions as inevitably containing large uncertainties:

[L]ong-range forecasts [for future electric power demands] are especially uncertain in that they are affected by trends in usage, increasing rates, demographic changes, industrial growth or decline, the general state of the economy, etc. These factors exist even beyond the uncertainty that inheres to demand forecasts: assumptions on continued use from historical data, range of years considered, the area considered, extrapolations from usage in residential, commercial, and industrial sectors, etc.”¹¹⁰

The Commission reiterated this characterization most recently when it stated:

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.”¹¹¹

¹⁰⁷ This was mistakenly referred to by Intervenors as “Maryland Public Service Commission’s Ten-Year Plan for 2008-2018.” *See id.* at 3.

¹⁰⁸ PJM manages the high-voltage electric grid and the wholesale electricity market in all or part of 13 states, including Maryland, and the District of Columbia.

¹⁰⁹ Applicants’ Response to Proposed Contention 10 (July 20, 2010) at 9 n.8.

¹¹⁰ Carolina Power and Light Co. (Shearon Harris Nuclear Power Plant, Units 1, 2, 3, and 4), CLI-79-5, 9 NRC 607, 609–10 (1979).

¹¹¹ S.C. Elec. & Gas Co. (Virgil C. Summer Nuclear Station, Units 2 and 3), CLI-10-01, 71 NRC __, __ (Jan. 7, 2010) (slip op. at 21) (quoting 68 Fed. Reg. 55,905, 55,910 (Sept. 29, 2003)).

Under 10 C.F.R. § 2.309(f)(1)(iv), a contention must “[d]emonstrate 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.” The information contained in the MPSC Order appears to be consistent with the conclusions of both the DEIS and the ER. Given the Commission’s statements, it is difficult to understand how a contention challenging the NRC Staff’s treatment of this information could possibly pose a material challenge to the DEIS. This is especially true when Intervenors fail to identify the specific information upon which they base their claim.

I would also disagree with the Majority’s evaluation of the additional nontimely admissibility criteria contained in 10 C.F.R. § 2.309(c). The Majority finds that the confusing email received by Intervenors provides good cause for Intervenors’ failure to file on time. I disagree. Intervenors received notification of the availability of the DEIS when they were officially served with a letter of notification concerning this adjudication on April 20, 2010 by the NRC Staff.¹¹² They then chose to disregard this official notification and instead rely upon an imprecise note contained in an ambiguous email sent by someone not directly involved in this adjudication. I do not consider this to be good cause for nontimely filing.

¹¹² Letter from James P. Biggins, Counsel for the NRC Staff, U.S. NRC, to the Licensing Board (Apr. 20, 2010) (ADAMS Accession No. ML101100546).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)
)
CALVERT CLIFFS 3 NUCLEAR PROJECT, LLC.)
AND UNISTAR NUCLEAR OPERATING)
SERVICES, LLC) Docket No. 52-016-COL
)
(Calvert Cliffs 3 Nuclear Project, LLC))
(Combined License))

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing ORDER (RULING ON INTERVENORS' PROPOSED NEW CONTENTION 10) (LBP-10-24) have been served upon the following persons by Electronic Information Exchange.

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Docket No. 52-016-COL
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Dated at Rockville, Maryland
this 28th day of December 2010