

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

(Calvert Cliffs Nuclear Power Plant Unit 3)

Docket No. 52-016-COL

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

August 26, 2011

MEMORANDUM AND ORDER

(Denying Summary Judgment of Contention 10C, Denying Amended Contention 10C, and  
Deferring Ruling on Contention 1)

For the reasons set forth below, the Board denies Applicants' Motion for Summary  
Disposition of Contention 10C, denies Joint Intervenor's Amended Contention 10C, and defers  
its ruling on Contention 1 until the issuance of the Board's Initial Decision on Contention 10C.

I. BACKGROUND

This case arises from an application filed by UniStar Nuclear Operating Services, LLC  
and Calvert Cliffs 3 Nuclear Project, LLC ("Applicants") for a combined license ("COL") to  
construct and operate one U.S. Evolutionary Power Reactor ("U.S. EPR"), designated Unit 3, to  
be located at the Calvert Cliffs site in Lusby, Calvert County, Maryland.<sup>1</sup> On March 24, 2009,  
the Board issued a Memorandum and Order, in which it found that the Joint Intervenor had  
standing, admitted them as parties, admitted their first contention as pleaded, admitted their

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<sup>1</sup> See Calvert Cliffs 3 Nuclear Project, LLC, and UniStar Nuclear Operating Services, LLC Notice  
of Hearing and Opportunity To Petition for Leave To Intervene and Order Imposing Procedures  
for Access to Sensitive Unclassified Non-Safeguards Information and Safeguards Information  
for Contention Preparation on a Combined License for the Calvert Cliffs Nuclear Power Plant  
Unit 3, 73 Fed. Reg. 55,876 (Sept. 26, 2008).

second and seventh contentions as modified by the Board, and granted their request for a hearing.<sup>2</sup>

One of the contentions that the Board admitted in its March 24, 2009 Order, Contention 1, alleges that “[c]ontrary to the Atomic Energy Act [(“AEA”)] and NRC regulations, Calvert Cliffs-3 would be owned, dominated and controlled by foreign interests.”<sup>3</sup>

Applicants are domestic subsidiaries of UniStar.<sup>4</sup> From the time that Contention 1 was proposed and admitted until November 3, 2010, UniStar was owned in near-equal shares, through intermediate parent companies, by Constellation Energy Group, Inc. (“Constellation”), a U.S. corporation, and Electricite de France, S.A. (“EDF”), a French limited company.<sup>5</sup> On November 3, 2010, Applicants filed a letter with this Board stating that EDF had acquired Constellation’s 50 percent interest in UniStar, thus making EDF the sole owner of UniStar.<sup>6</sup> Based on this letter, the NRC Staff issued RAI 281, which asked UniStar to explain how it met the foreign ownership, control, or domination regulations contained in 10 C.F.R. § 50.38, given that Applicants are now 100 percent owned by UniStar, who is in turn now 100 percent owned by a foreign corporation, EDF.<sup>7</sup> On April 6, 2011, the NRC Staff issued a Determination Letter

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<sup>2</sup> See LBP-09-04, 69 NRC 170, 231–32 (2009).

<sup>3</sup> See Petition to Intervene in Docket No. 52-016, Calvert Cliffs-3 Nuclear Power Plant Combined Construction and License Application (Nov. 19, 2008) at 5 [hereinafter Petition].

<sup>4</sup> Letter from David A. Repka, Counsel for Calvert Cliffs 3 Nuclear Project, LLC and UniStar Nuclear Operating Services, LLC, to Calvert Cliffs Board (Nov. 3, 2010) at 1 [hereinafter UniStar Letter].

<sup>5</sup> Id.

<sup>6</sup> Id. On November 4, 2010, Constellation filed a Schedule 13D with the U.S. Securities and Exchange Commission confirming this transaction. Letter from David B. Matthews, Director, Division of New Reactor Licensing, Office of New Reactors, U.S. NRC, to George Vanderheyden, President and CEO, UniStar Nuclear Energy (Apr. 6, 2011) at 1 [hereinafter NRC Determination Letter].

<sup>7</sup> Email from Surinder Arora, Project Manager, Office of New Reactors, U.S. NRC, to Robert Poche (Dec. 12, 2010) at 3. On January 31, 2011, UniStar submitted its response to RAI 281,

in which it informed UniStar that it had reviewed UniStar's responses to RAI 281 and determined that UniStar's application for Calvert Cliffs Unit 3 fails to meet the foreign ownership, control, and domination requirements set out in 10 C.F.R. § 50.38.<sup>8</sup>

In light of the NRC Staff's Determination Letter, on April 18, 2011 the Board issued an Order directing the parties to show cause why the Board should not grant summary disposition as to Contention 1, deny authorization to issue the license, and terminate the proceeding.<sup>9</sup> In accordance with the Board's April 18, 2011 Order, the parties filed their responses to that Order on May 9, 2011 and their replies to the arguments contained in the responses on May 23, 2011.<sup>10</sup> In addition, the NRC Staff filed a surreply on June 2, 2011 to clarify cases cited by Applicants' in their Reply to Responses to Show Cause Order, and Applicants filed a reply to the

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along with revisions to the ownership and financial information contained in the Calvert Cliffs Unit 3 COL application. Letter from Gregory T. Gibson, Vice President, Regulatory Affairs, UniStar Nuclear Energy, LLC, to Document Control Desk, U.S. NRC (Jan. 31, 2011) at 1.

<sup>8</sup> NRC Determination Letter at 1. Although the COL applicants are UniStar Nuclear Operating Services, LLC and Calvert Cliffs 3 Nuclear Project, LLC, the NRC Staff's correspondence was directed to UniStar, their corporate parent. See id.

<sup>9</sup> Licensing Board Order (To show cause why the Board should not grant summary disposition as to Contention 1, deny authorization to issue the license, and terminate this proceeding) (Apr. 18, 2011) at 4 (unpublished) [hereinafter Show Cause Order].

<sup>10</sup> Applicants' Response to Show Cause Order (May 9, 2011) at 1 [hereinafter Applicants' Show Cause Response]; Joint Intervenor's Reply to Licensing Board Order ASLBP No. 09-874-02-COL-BD01 (May 9, 2011) at 1 [hereinafter Joint Intervenor's Show Cause Response]; Staff's Response to the Atomic Safety and Licensing Board's Show Cause Order Regarding Contention 1 (May 9, 2011) at 1 [hereinafter NRC Staff's Show Cause Response]; Applicants' Reply to Responses to Show Cause Order (May 23, 2011) at 1 [hereinafter Applicants' Show Cause Reply]; Joint Intervenor's Reply to Applicant's and NRC Staff's Responses to Licensing Board Order ASLBP No. 09-874-02-COL-BD01 (May 23, 2011) at 1 [hereinafter Joint Intervenor's Show Cause Reply]; Staff's Reply to the Applicants' and Joint Intervenor's Response to the Atomic Safety and Licensing Board's Show Cause Order (May 23, 2011) at 1 [hereinafter NRC Staff's Show Cause Reply]; see also NRC Staff's Show Cause Response, Attachment 1, Affidavit of Anneliese Simmons Concerning Contention 1 Foreign Ownership Control or Domination (May 9, 2011) at 1 [hereinafter NRC Staff Affidavit].

NRC Staff's surreply on June 13, 2011.<sup>11</sup> On July 7, 2011, the Board conducted an oral argument to discuss: "(1) the parties' responses to the Board's April 18, 2011 Order (To Show cause why the Board should not grant summary disposition as to Contention 1, deny authorization to issue the license, and terminate this proceeding); and (2) whether an evidentiary hearing should proceed on Contention 10C if the Board grants summary disposition as to Contention 1."<sup>12</sup>

At the same time that the parties were filing their responses and replies to the Board's Show Cause Order, the Final Environmental Impact Statement ("FEIS") for the COL was published by the NRC Staff.<sup>13</sup> Prompted by the release of the FEIS in this proceeding, on June 7, 2011 the NRC Staff and the Joint Intervenors filed a Joint Motion Regarding Scheduling.<sup>14</sup> In their Joint Motion, the NRC Staff and Joint Intervenors expressed confusion over which of the alternative schedules set forth in the Initial Scheduling Order<sup>15</sup> would govern the environmental portion of this proceeding, requested additional time for the filing of certain documents, and

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<sup>11</sup> NRC Staff's Motion to Allow a Surreply (June 2, 2011) at 1; Staff's Surreply to Applicants' Reply to Show Cause Order (June 2, 2011) at 1 [hereinafter NRC Staff Surreply]; Applicants' Response to NRC Staff Motion for Leave to File a Surreply (June 13, 2011) at 1 [hereinafter Applicants' Response to Surreply].

<sup>12</sup> See Licensing Board Order (Scheduling Oral Argument) (June 24, 2011) at 1 (unpublished).

<sup>13</sup> Calvert Cliffs 3 Nuclear Project, LLC and UniStar Nuclear Operating Services, LLC; Notice of Availability of the Final Environmental Impact Statement for the Combined License Application for Calvert Cliffs Nuclear Power Plant Unit 3, 76 Fed. Reg. 29,279 (May 20, 2011) [hereinafter FEIS Availability]; Environmental Impact Statement for the Combined License (COL) for Calvert Cliffs Nuclear Power Plant Unit 3, Final Report, NUREG-1936 (May 2011) (ADAMS Accession Nos. ML11129A167, ML1129A179) [hereinafter FEIS]; Joint Motion Regarding Scheduling (June 7, 2011) at 1 [hereinafter Joint Motion]; see also Applicants' Response to Joint Motion on Schedule for Contention 10C (June 16, 2011) at 1–2 (not contesting that the publication date for the FEIS in this proceeding was May 20, 2011) [hereinafter Joint Motion Response].

<sup>14</sup> Joint Motion at 1. This Motion is dated June 8, 2011, but was actually filed on June 7, 2011.

<sup>15</sup> Licensing Board Order (Establishing Schedule to Govern Further Proceedings) (Apr. 22, 2009) at 1 (unpublished) [hereinafter Initial Scheduling Order].

proposed actual dates for the schedule in this proceeding.<sup>16</sup> On June 16, 2011, Applicants' filed their Response to Joint Motion on Schedule for Contention 10C, in which they did "not object to reasonable extensions and additions to the hearing schedule," but proposed that certain filing deadlines be consolidated into a single date.<sup>17</sup>

In their Joint Motion, the NRC Staff and Joint Intervenors proposed a deadline—June 20, 2011—for the filing of Motions for Summary Disposition of Contention 10C and for the filing of new or amended environmental contentions based off of the FEIS.<sup>18</sup> Applicants did not object to NRC Staff and Joint Intervenors' proposed deadline for those filings.<sup>19</sup> In compliance with these proposed filing deadlines, on June 20, 2011, Joint Intervenors filed their Submission of Amended Contention 10C and Applicants filed their Motion for Summary Disposition of Contention 10C.<sup>20</sup> On July 11, 2011 the NRC Staff filed a response in support of Applicants' Motion for Summary Disposition of Contention 10C.<sup>21</sup> On July 15, NRC Staff and Applicants filed their respective responses to Joint Intervenors' Submission of Amended Contention 10C.<sup>22</sup>

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<sup>16</sup> Joint Motion at 1–2.

<sup>17</sup> Joint Motion Response at 1–2.

<sup>18</sup> Joint Motion at 2. This deadline was based on one of the proposed alternative schedules for environmental hearings in the Initial Scheduling Order. See Initial Scheduling Order at 6.

<sup>19</sup> See Joint Motion Response.

<sup>20</sup> Submission of Amended Contention 10C by Joint Intervenors (June 20, 2011) at 1, 11 [hereinafter Amended 10C]; Applicants' Motion for Summary Disposition of Contention 10C (June 20, 2011) at 1 [hereinafter SD 10C Motion].

<sup>21</sup> NRC Staff's Response to Applicants' Motion for Summary Disposition (July 11, 2011) [hereinafter NRC Staff Response to 10C SD]. As of the issuance of this Order, the Board has not received a response from Joint Intervenors' to Applicants' Motion for Summary Disposition of Contention 10C. However, the Board will consider the arguments made by Joint Intervenors in their Submission of Amended Contention 10C in ruling on Applicants' Motion for Summary Disposition of Contention 10C. See infra note 30 and accompanying text.

<sup>22</sup> NRC Staff Answer to Joint Intervenors' Amended Contention 10C (July 15, 2011) [hereinafter NRC Staff Amended 10C Response]; Applicants' Response to Amended Contention 10C (July 15, 2011) [hereinafter Applicants' Amended 10C Response].

Given that the Board was in receipt of Joint Intervenor's Submission of Amended Contention 10C and Applicants' Motion for Summary Disposition of Contention 10C, and that their respective proposed deadlines had lapsed, the Board eliminated those proposed deadlines from its June 24, 2011 Order Revising the Initial Schedule.<sup>23</sup>

## II. ANALYSIS

### A. Contention 10C

#### 1. Contention 10C Summary Disposition

Contention 10C alleged that the "[Draft Environmental Impact Statement ("DEIS")]  
discussion of a combination of alternatives is inadequate and faulty."<sup>24</sup> The Board, in its December 28, 2010 ruling on the admissibility of Contention 10, concluded that Contention 10C was timely and admissible, as restated by the Board:

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.<sup>25</sup>

In admitting Contention 10C, the Board acknowledged that an agency need not consider every available alternative in its National Environmental Policy Act ("NEPA") analysis, but also noted that because the combined alternative is the only alternative to the proposed action that is both a viable source of baseload power and includes renewable energy sources, "[a] thorough and accurate analysis of the combined alternative is therefore particularly important to the agency's compliance with NEPA."<sup>26</sup>

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<sup>23</sup> Licensing Board Order (Revising Initial Schedule) (June 24, 2011) at 3 (unpublished) [hereinafter Revised Initial Scheduling Order].

<sup>24</sup> Submission of Contention 10 by Joint Intervenor's (June 25, 2010) at 9.

<sup>25</sup> LBP-10-24, 72 NRC \_\_, \_\_ (slip op. at 54) (Dec. 28, 2010).

<sup>26</sup> Id. at \_\_ (slip op. at 53).

In response to the May 20, 2011 issuance of the FEIS for this proceeding,<sup>27</sup> Applicants filed a Motion for Summary Disposition of Contention 10C, claiming that “the FEIS addressed the issues raised by the Intervenor in Contention 10C and that, as a result, there exists no genuine issue as to any material fact relevant to the contention.”<sup>28</sup> On July 11, 2011 the NRC Staff submitted its Response to Applicants’ Motion for Summary Disposition, in which it stated that it had reviewed the Motion and did not oppose it.<sup>29</sup> The deadline for filing responses to Applicants’ Motion for Summary Disposition of Contention 10C has passed, and Joint Intervenor has not filed a response. However, on the same day that Applicants filed their Motion for Summary Disposition of Contention 10C, Joint Intervenor filed their Submission of Amended Contention 10C, in which they did not change the basis of Contention 10C, but rather updated the original bases of Contention 10C to reflect the additional arguments concerning these original bases now present in the FEIS.<sup>30</sup> In filing their Submission of Amended Contention 10C, Joint Intervenor argues that the basis for Contention 10C is valid and that a genuine dispute of material fact still exists regarding the wind and solar power contribution estimates in the combined alternative. Accordingly, the Board will consider the arguments raised by Joint Intervenor in their Submission of Amended Contention 10C to also be their response to UniStar’s Motion for Summary Disposition of Contention 10C.

a. Legal Standard for Summary Disposition

The standard for summary disposition motions in a proceeding such as this is set out in 10 C.F.R. § 2.1205. That Section in turn directs Boards to apply the summary disposition standards of a subpart G proceeding, which are set forth in 10 C.F.R. § 2.710(d)(2). Under 10

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<sup>27</sup> See FEIS Availability.

<sup>28</sup> SD 10C Motion at 1.

<sup>29</sup> NRC Staff Response to 10C SD at 2.

<sup>30</sup> Amended 10C at 1; see infra section II.B.

C.F.R. § 2.710(d)(2), a moving party is entitled to summary judgment if the presiding officer determines that “the filings in the proceeding . . . together with the statements of the parties . . . show that there is no genuine issue as to any material fact and that the moving party is entitled to a decision as a matter of law.”

Generally, when ruling on motions for summary disposition the Commission applies standards similar to those used by the federal courts when ruling on motions for summary judgment under Rule 56 of the Federal Rules of Civil Procedure.<sup>31</sup> The moving party bears the initial burden of demonstrating that no genuine issue as to any material fact exists and that it is entitled to judgment as a matter of law.<sup>32</sup> If the moving party fails to make the requisite showing to satisfy that initial burden, then “the Board must deny the motion—even if the opposing party chooses not to respond or its response is inadequate.”<sup>33</sup> As a result, “[n]o defense to an insufficient showing is required.”<sup>34</sup> If the moving party meets its initial burden, “[t]he opposing party must controvert any material fact properly set out in the statement of material facts that accompanies a summary disposition motion or that fact will be deemed admitted.”<sup>35</sup> In addition, because the initial burden lies on the moving party, a licensing board must view the record in the light most favorable to the non-moving part and draw all justifiable inferences in favor of the non-moving party.<sup>36</sup> As the Commission has acknowledged, “[a]t this stage, ‘the judge’s

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<sup>31</sup> See Advanced Med. Sys., Inc. (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102–03 (1993).

<sup>32</sup> 10 C.F.R. § 2.325; see also Poller v. Columbia Broad. Sys., Inc., 368 U.S. 464, 467 (1962); Advanced Med. Sys., CLI-93-22, 38 NRC at 102; Private Fuel Storage, L.L.C., (Independent Spent Fuel Storage Installation), LBP-99-32, 50 NRC 155, 158 (1999).

<sup>33</sup> Advanced Med. Sys., CLI-93-22, 38 NRC at 102.

<sup>34</sup> Cleveland Elec. Illuminating Co. (Perry Nuclear Power Plant, Units 1 and 2), ALAB-443, 6 NRC 741, 754 (1977) (internal citation omitted).

<sup>35</sup> Advanced Med. Sys., CLI-93-22, 38 NRC at 102–03.

<sup>36</sup> Id. at 102.



function is not himself to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for [hearing].’ . . . If ‘reasonable minds could differ as to the import of the evidence,’ summary disposition is not appropriate.”<sup>37</sup>

b. Board Ruling

Instead of modifying the FEIS’s estimates for the wind and solar power contributions in the combined alternative, the NRC Staff chose instead to attempt to justify its original wind and solar power estimates, 100 MW(e) and 75 MW(e), respectively, while further stating that the proposed action would be environmentally preferable even if the wind power contribution in the combined alternative was increased by a factor of four.<sup>38</sup> Although the NRC Staff has updated the FEIS to include additional information regarding wind and solar power contributions to the combined alternative, the additional information included in the FEIS fails to resolve the factual dispute concerning the reasonableness of those estimates. Moreover, that factual dispute is material to the agency’s compliance with NEPA.

i. The Dispute Concerning the Estimated Wind Power Contribution

Applicants claim that no genuine dispute of material fact now exists because the FEIS contains additional information to support the estimated 100 MW(e) wind power contribution to the combined alternative.<sup>39</sup> Specifically, Applicants claim that no genuine dispute remains because the FEIS now discusses the offshore Bluewater Wind Project (with a planned installed capacity of 450 MW(e)), as well as two onshore projects under construction (50 and 70 MW(e), respectively), and the potential for commercial wind leases under the Department of Interior’s

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<sup>37</sup> Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), CLI-10-11, 71 NRC \_\_, \_\_ (slip op. at 13) (Mar. 26, 2010) (internal citations omitted).

<sup>38</sup> See FEIS at 9-28.

<sup>39</sup> SD 10C Motion at 9–13.

“Smart from the Start” Atlantic Offshore Wind program.<sup>40</sup> In addition, in support of its 100 MW(e) wind power estimate, Applicants note that the FEIS now explains that although Maryland has a “somewhat better” wind resource than Georgia, conclusions from the Southern/GIT report, which was relied on in the DEIS, still apply to Maryland “based on similarities in the physical and regulatory environments.”<sup>41</sup>

Joint Intervenors acknowledge the inclusion of this additional information in the FEIS, but argue that it fails to resolve the underlying bases of Contention 10C. For instance, Joint Intervenors note that while the FEIS now recognizes Bluewater Wind’s offshore wind project in Delaware, it simultaneously fails to discuss the proposed 600 MW(e) Bluewater Wind project on the Maryland coast.<sup>42</sup> Similarly, Joint Intervenors also note that while the FEIS now recognizes that “Maryland has a somewhat better offshore wind resource than Georgia,” its ultimate conclusion that the findings from the Southern/GIT report are applicable to Maryland because of purportedly similar physical and regulatory environments is incorrect.<sup>43</sup> According to Joint Intervenors, the FEIS’s comparison between the wind potentials of Maryland and Georgia is still faulty because Maryland’s wind potential is almost seven times greater than Georgia’s (21,459 MW(e) and 3,164 MW(e), respectively), which is “far more than ‘a somewhat better offshore wind resource.’”<sup>44</sup> In addition, Joint Intervenors also argue that the regulatory environments of

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<sup>40</sup> Id. at 10–11 (citing FEIS at 9-20 to 9-21, 9-22 to 9-23).

<sup>41</sup> Id. at 11 (citing FEIS at 9-22).

<sup>42</sup> Amended 10C at 4. Joint Intervenors also point to a consortium of investors that has indicated interest in investing five billion dollars for offshore wind transmission lines throughout the Mid-Atlantic. Id. at 5 (citing Matthew L. Wald, Offshore Wind Power Line Wins Backing, N.Y. Times, Oct. 12, 2010, at A1, available at <http://www.nytimes.com/2010/10/12/science/earth/12wind.html>).

<sup>43</sup> Id. at 3–4.

<sup>44</sup> Id.

Maryland and Georgia's are dissimilar—Georgia's is regulated, Maryland's is deregulated.<sup>45</sup>

Thus, Joint Intervenors maintain, the FEIS's application of the Georgia wind study to Maryland on the basis that the two have similar "physical and regulatory environments" is inappropriate.<sup>46</sup>

The information that Joint Intervenors have provided questioning the adequacy of the FEIS's assessment of Maryland's wind power potential is sufficient to show that a genuine dispute still exists regarding this material fact.

Applicants maintain, however, that any increase in installed wind power would still be limited by its need to be coupled with a storage mechanism, such as a compressed air energy storage ("CAES") system, in order to serve the proposed action's purpose of providing a baseload power during times of low wind.<sup>47</sup> Given that the largest CAES plant in operation only has 290 MW(e) storage, and that there are currently are no CAES plants proposed, approved, or under construction in Maryland, the FEIS limits the wind power contribution to only 100 MW(e).<sup>48</sup>

Joint Intervenors argue, however, that "there are . . . substantial advances being made in CAES technology" and that it is feasible that a large-scale CAES system will be available before Calvert Cliffs Unit 3 becomes operational.<sup>49</sup> In support of this assertion, Joint Intervenors point to two companies, SustainX and General Compression, who have each obtained millions in

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<sup>45</sup> Id. at 5. The Board rejects the NRC Staff's claim that Joint Intervenors' discussion of the difference in the regulatory environments of Maryland and Georgia is untimely. See infra section II.A.2; NRC Staff Amended 10C Response at 20, 23–24.

<sup>46</sup> Amended 10C at 5.

<sup>47</sup> SD 10C Motion at 12–13.

<sup>48</sup> See FEIS at 9-21, 9-28 to 9-30.

<sup>49</sup> Amended 10C at 9–10.

financing to develop new CAES systems.<sup>50</sup> Specifically, SustainX has obtained some \$20 million in financing and is currently building a 1 MW(e) CAES demonstration system.<sup>51</sup> Joint Intervenor believe that such systems can be increased quickly before Calvert Cliffs Unit 3 becomes operational.<sup>52</sup> As such, Joint Intervenor have presented sufficient information to question the FEIS's statements concerning the availability of CAES systems, and hence whether the FEIS's 100 MW(e) wind power contribution estimate for the combined alternative is indeed inadequate.<sup>53</sup>

ii. The Dispute Concerning the Estimated Solar Power Contribution

With regard to potential solar power contribution estimates, Applicants argue that no genuine issue of material fact remains with regard to the selection of 75 MW(e) as the solar power contribution in the combined alternative.<sup>54</sup> As Applicants note, the FEIS states that there are no additional utility-scale solar thermal or solar photovoltaic power sources projected in the Mid-Atlantic Council (including Maryland) through the year 2035.<sup>55</sup> Furthermore, like wind

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<sup>50</sup> Id. (citing Katie Fehrenbacher, SustainX Raises \$14.4M for Air Energy Storage, GigaOM, Mar. 16, 2011, <http://gigaom.com/cleantech/sustainx-raises-14-4m-for-air-energy-storage>; Innovative Energy Storage System for Electrical Grid Developed by SustainX Receives Funding From GE, Center for Environmental Innovation and Leadership, Mar. 21, 2011, <http://www.ceileadership.org/index.php/energy-efficiency-and-renewable-energy/2145-innovative-energy-storage-system-for-electrical-grid-developed-by-sustainx-receives-funding-from-ge>; SustainX Completes \$20M Financing Round, PR Newswire, May 3, 2011, <http://www.prnewswire.com/news-releases/sustainx-completes-20m-financing-round-121176929.html>).

<sup>51</sup> Id.

<sup>52</sup> Id.

<sup>53</sup> In their responses to Amended Contention 10C, NRC Staff and Applicants assert that Joint Intervenor's arguments concerning CAES systems are untimely. Applicants' Amended 10C Response at 7–10; NRC Staff Amended 10C Response at 20, 24–26. The Board rejects these arguments. See infra section II.A.2.

<sup>54</sup> SD 10C Motion at 13.

<sup>55</sup> Id.; FEIS at 9–24.

power, the FEIS states that solar power would also need to be coupled with a storage mechanism, such as CAES systems, yet no utility-scale CAES projects have even been proposed in Maryland.<sup>56</sup> The FEIS appears to rely on these two arguments in justifying its 75 MW(e) solar power contribution estimate when it concludes that “[t]he assumed contribution from solar is smaller [than the wind power estimate of 100 MW(e)] based on the marginal solar power potential for large-scale projects in this region.”<sup>57</sup>

While Applicants rely on a study cited in the FEIS to claim that no utility-scale solar thermal or solar photovoltaic projects are scheduled in Maryland through 2035, Joint Intervenor points to “two major solar projects” in Maryland that were just announced in the past six months: a 3.7 MW(e) solar facility and a 1.2 MW(e) solar facility.<sup>58</sup> In addition, Joint Intervenor cites to the Affidavit of Scott Sklar, which references numerous articles in support of its assertion that the potential for renewable energy sources, including solar power, is vast and continues to increase.<sup>59</sup> These sources and documents, in combination with the previously mentioned information Joint Intervenor put forward defending the feasibility of large scale CAES projects in Maryland, are sufficient to show that a genuine dispute exists concerning whether the NRC Staff’s solar power contribution estimate for the combined alternative continues to be inadequate and faulty.

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<sup>56</sup> SD 10C Motion at 13–14; FEIS at 9-21.

<sup>57</sup> FEIS at 9-28.

<sup>58</sup> Amended 10C at 10. One of the articles that Joint Intervenor cites to in support describes the 3.7 MW(e) facility as “one of the largest commercially-owned solar power systems in the eastern United States.” See Solar Installation at Perdue to be One of East Coast’s Largest, RenewableEnergyWorld.com (Jan. 18, 2011) <http://www.renewableenergyworld.com/real-partner/standard-solar-inc/news/article/2011/01/solar-installation-at-perdue-to-be-one-of-east-coasts-largest>.

<sup>59</sup> Amended 10C at 10; see Amended 10C, Affidavit of Scott Sklar (June 20, 2011).

As stated in Carolina Environmental Study Group v. United States, NEPA requires that alternatives be considered “as they exist and are likely to exist,” not merely as they exist at the present time.<sup>60</sup> The NRC Staff, in the FEIS, acknowledges that “Maryland has a good, useful solar resource throughout most of the State.”<sup>61</sup> Similarly, the NRC Staff notes in the FEIS that multiple wind projects are currently both planned and under construction in Maryland and its surrounding states.<sup>62</sup> Although “remote and speculative” alternatives need not be addressed in a FEIS, the NRC Staff does have an obligation under NEPA to consider all reasonable alternatives as they are likely to exist at the completion of the proposed project.<sup>63</sup> Joint Intervenor has put forth various sources and documents to support their claim that the availability of solar and wind power continues to grow at a fast pace not just globally, but specifically in Maryland. Given that Calvert Cliffs Unit 3 will not be operational for many years, and that Applicants implied that the licensing proceeding alone for Calvert Cliffs Unit 3 could take many additional years,<sup>64</sup> NRC Staff has an obligation under NEPA to include wind and solar power estimates consistent with the likely future development of those power sources, rather than limiting the analysis to existing wind and solar power projects in Maryland.

The Board stated in admitting Contention 10C:

A thorough and accurate analysis of the combined alternative is . . . 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

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<sup>60</sup> 510 F.2d 796, 801 (D.C. Cir. 1975); see also NextEra Energy Seabrook, L.L.C. (Seabrook Station, Unit 1), LBP-11-02, 73 NRC \_\_\_, \_\_\_ (slip op. at 24–25) (Feb. 15, 2011).

<sup>61</sup> FEIS at 9-24.

<sup>62</sup> Id. at 9-20 to 9-23.

<sup>63</sup> See Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 551 (1978) (quoting NRDC v. Morton, 458 F.2d 827, 837–38 (1972)).

<sup>64</sup> Applicants’ Show Cause Response at 6–7; Tr. at 225–26.

and solar power and is acknowledged to be capable of fulfilling the purpose and need of the project.<sup>65</sup>

Rather than analyzing a different combined alternative with higher wind and solar power contribution estimates, the NRC Staff chose instead to attempt to justify its original estimates. While the NRC Staff provides some new support for the wind and solar power contribution estimates in the combined alternative, Joint Intervenors sufficiently demonstrate that genuine issues of material fact persist regarding those estimates.

iii. The Disputed Wind and Solar Power Estimates are Material to the NRC's Compliance with NEPA

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Applicants argue that “any . . . dispute related to the potential contribution of wind and solar power to the combination of energy alternatives is not material to the outcome of this proceeding.”<sup>66</sup> They base this argument on the statement in the FEIS that, even if the wind power contribution to the combined alternative was increased to 400 MW(e) of baseload power (an “unreasonable assumption” in the NRC Staff’s view), the Staff would still conclude that the environmental impacts of the combined alternative are greater than those of the proposed action and that the combined alternative is not environmentally preferable to the proposal.<sup>67</sup> Applicants also rely on a statement of their own witness—although they point to no equivalent statement in the FEIS itself—that quadrupling the solar power contribution would not change the

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<sup>65</sup> LBP-10-24, 72 NRC at \_\_ (slip op. at 53).

<sup>66</sup> SD 10C Motion at 15 (emphasis omitted).

<sup>67</sup> *Id.* at 12-13, 15; FEIS at 9-28 to 9-30. According to the FEIS, a wind contribution equivalent to 400 MW(e) of baseload power is equivalent to an installed capacity of at least 1000 to 1200 MW(e) with a 400 MW(e) CAES plant. FEIS at 9-28. The FEIS states that even with a 400 MW(e) wind power contribution, the combined alternative would still require 900 MW(e) from natural gas. *Id.* The NRC Staff also note in the FEIS that a 400 MW(e) CAES plant is larger than any CAES facility in the world, and that wind capacity of this magnitude is five times greater than the amount of offshore wind projected by the DOE for the entire U.S. by 2030. *Id.* at 9-28, 9-30.

NRC Staff's impact categorizations except that land use impacts could increase to "large."<sup>68</sup>

We rejected an equivalent argument in our ruling admitting Contention 10C. The NRC Staff argued that we should not admit Contention 10C because Intervenor failed to show that the combined alternative with an increased wind and solar contribution would be environmentally preferable to the proposed action.<sup>69</sup> Intervenor responded that, once they identified flaws in the DEIS's analysis of alternatives, it was the NRC Staff's responsibility to "produce a new analysis that takes the realities we have presented into account."<sup>70</sup> Intervenor therefore argued that they were not required to also demonstrate that correcting the NRC Staff's errors would change its conclusions.<sup>71</sup>

We agreed with Intervenor on this issue. NEPA requires that "[t]he agency . . . look at every reasonable alternative within the range dictated by the nature and scope of the proposal,"<sup>72</sup> and that it "[r]igorously explore and objectively evaluate all reasonable alternatives."<sup>73</sup> As we explained, "[f]ederal 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."<sup>74</sup> We therefore ruled that

Intervenor 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

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<sup>68</sup> SD 10C Motion at 17–18 (citing Affidavit of Dimitri Lutchenkov at ¶ 7).

<sup>69</sup> NRC Staff Answer to Joint Intervenor's New Contention 10 (July 20, 2010) at 19-20.

<sup>70</sup> Joint Intervenor's Reply to NRC Staff's and Applicant's Responses to Submission of Contention 10 (July 27, 2010) at 13.

<sup>71</sup> See id. at 12–13.

<sup>72</sup> Friends of Se.'s Future v. Morrison, 153 F.3d 1059, 1065 (9th Cir. 1998).

<sup>73</sup> 40 C.F.R. § 1502.14(a).

<sup>74</sup> LBP-10-24, 72 NRC at \_\_\_ (slip op. at 50) (citing Animal Defense Council v. Hodel, 840 F.2d 1432, 1439 (9th Cir. 1988); Natural Res. Def. Council v. U.S. Forest Serv., 421 F.3d 797, 810–12 (9th Cir. 2005)).



the agency's decision whether to issue the license. It is sufficient that the information which Intervenor 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 establish that much, they will have shown that the agency failed to comply with NEPA's procedural requirements.<sup>75</sup>

Applicants fail to address our prior ruling, much less explain why we should change it.

At bottom, they maintain that even if the FEIS's evaluation of the combined alternative understates the potential contribution of wind and solar power, thereby overstating the environmental impacts of the combined alternative by increasing the need for a natural gas supplement, no remedy is necessary because revising the FEIS would not alter the NRC Staff's conclusions. This is in substance an argument for the application of the doctrine of harmless error.<sup>76</sup> That doctrine, however, has only limited application in NEPA cases, and none where the agency has failed to take the required hard look at environmental consequences and alternatives. For example, in Wilderness Watch v. Mainella,<sup>77</sup> the Eleventh Circuit rejected an argument much like that here, where the agency maintained that it should not be required to remedy a NEPA violation because doing so would not change its conclusions. As the Court of Appeals explained:

NEPA imposes procedural requirements before decisions are made in order to ensure that those decisions take environmental consequences into account. Permitting an agency to avoid a NEPA violation through a subsequent, conclusory statement that it would not have reached a different result even with the proper analysis would significantly undermine the statutory scheme. Other circuits have only been willing to declare a NEPA violation harmless when the relevant decision makers actually engaged in significant environmental analysis prior to the decision but failed to comply with the exact procedures mandated. . . . That is not the case here. In the absence of evidence that an agency seriously

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<sup>75</sup> Id. at \_\_\_ (slip op. at 52).

<sup>76</sup> See California Wilderness Coalition v. U.S. Dept. of Energy, 631 F.3d 1072, 1105–06 (9th Cir. 2011) (finding agency error not harmless).

<sup>77</sup> 375 F.3d 1085, 1096 (11th Cir. 2004).

considered environmental impacts prior to making its decision, violations of NEPA cannot be considered harmless.<sup>78</sup>

Similarly, NEPA's requirement to thoroughly analyze reasonable alternatives cannot be avoided by conclusory, after-the-fact statements that compliance would not change the FEIS's conclusions. Contention 10C alleges far more than a mere technical violation of NEPA's requirements. The alternatives analysis is the "heart of the environmental impact statement."<sup>79</sup> The "existence of a viable but unexamined alternative renders an environmental impact statement inadequate."<sup>80</sup> Even if remedying the alleged violation would not alter the NRC Staff's conclusions, one of NEPA's primary goals is fostering informed public participation in the decision making process.<sup>81</sup> Providing the public with accurate and complete information concerning the environmental consequences of the proposed action and alternatives is essential to fulfilling that goal. Members of the public are not bound by the NRC Staff's views; they may argue for entirely different conclusions. But "[w]ithout substantive, comparative environmental impact information regarding other possible courses of action, the ability of an EIS to inform agency deliberation and facilitate public involvement would be greatly degraded."<sup>82</sup> Thus, as the Tenth Circuit observed:

A public comment period is beneficial only to the extent the public has meaningful information on which to comment, and the public did not have meaningful information on the fragmentation impacts of Alternative A-modified. Informed public input can hardly be said to occur when major impacts of the adopted alternative were never disclosed. Thus, we cannot agree that the failure

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<sup>78</sup> Id. (emphasis added).

<sup>79</sup> 40 C.F.R. § 1502.14.

<sup>80</sup> Citizens for a Better Henderson v. Hodel, 768 F.2d 1051, 1057 (9th Cir. 1985) (citations omitted).

<sup>81</sup> See Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349–350 (1989).

<sup>82</sup> New Mexico ex rel. Richardson v. Bureau of Land Management, 565 F.3d 683, 708 (10th Cir. 2009) (citation omitted).

to thoroughly analyze the environmental impacts of Alternative A-modified in a public NEPA document was harmless.<sup>83</sup>

Here also, the harmless error argument would be dubious if Intervenor prevail on Contention 10C because the FEIS fails to provide the public with detailed information concerning the environmental consequences of any combined alternative with a wind power contribution greater than 100 MW(e) or a solar power contribution greater than 75 MW(e). The FEIS does claim that a combined alternative with a 400 MW(e) wind power contribution would not be environmentally preferable to the proposed action because it would require 900 MW(e) from natural gas.<sup>84</sup> The FEIS also states that, even though increasing the wind contribution from 100 MW(e) to 400 MW(e) would decrease the natural gas contribution from 1200 MW(e) to 900 MW(e), “the impact categorizations . . . would not change, except that impacts to land use and ecology might become LARGE if onshore wind energy is used.”<sup>85</sup> But, even if the NRC Staff would not change its conclusions or categorizations,<sup>86</sup> it is likely that some actual environmental impacts—such as the FEIS’s estimates of air emissions<sup>87</sup>—would decrease if the natural gas contribution was decreased twenty-five percent from 1200 MW(e) to 900 MW(e).<sup>88</sup> The FEIS, however, provides no concrete data on the impacts of any version of the combined alternative other than the version described in the DEIS.

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<sup>83</sup> Id.

<sup>84</sup> FEIS at 9-28 to 9-30.

<sup>85</sup> Id. at 9-30.

<sup>86</sup> We understand “impact categorizations” to mean the Staff’s categorization of various impacts as “LARGE,” “MODERATE,” or “SMALL.” See id. at tbl. 9-3.

<sup>87</sup> Id.

<sup>88</sup> The difference in estimated emissions when natural gas contribution is decreased from 1600 MW(e) to 1200 MW(e) is substantial (approximately 25 percent decrease in emissions), which would seem to indicate that decreasing natural gas contribution by another 300 MW(e) would also have a significant impact on estimated emissions. See id. at 9-19, 9-29.

Thus, if we conclude following the evidentiary hearing that a combined alternative with a wind power contribution significantly greater than 100 MW(e) and/or a solar power contribution significantly greater than 75 MW(e) would be a reasonable alternative to the proposed action, it is unlikely that we could find the failure to provide a detailed analysis of that alternative to be harmless. Although NEPA does not require an agency to look at every conceivable alternative, it does require agencies to “[r]igorously explore and objectively evaluate all reasonable alternatives.”<sup>89</sup> A violation of that requirement, if proven, would deprive the public of “substantive, comparative environmental impact information regarding other possible courses of action.”<sup>90</sup> Even if the providing such information would not change the NRC Staff’s views, members of the public could use the information to argue for their own conclusions, which could be quite different from those of the NRC Staff. This would be consistent with NEPA’s goal of informed public participation. Thus, the issue raised by Contention 10C is material to the agency’s compliance with NEPA.

Applicants’ Motion for Summary Disposition of Contention 10C is denied.

## 2. Contention 10C Scope

Applicants and the NRC Staff argue that Joint Intervenors, in their Submission of Amended Contention 10C, attempt to raise additional bases in defense of Contention 10C that are untimely, unnecessary, or fail to meet the contention admissibility standards.<sup>91</sup>

The Commission has held that the scope of an admitted contention is determined by “the bases set forth in support of the contention.”<sup>92</sup> We interpret this to mean that a contention’s

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<sup>89</sup> 40 C.F.R. § 1502.14(a).

<sup>90</sup> New Mexico ex rel. Richardson v. Bureau of Land Management, 565 F.3d at 708.

<sup>91</sup> See Applicants’ Amended 10C Response at 1, 7–11; NRC Staff Amended 10C Response at 1, 7–28.

<sup>92</sup> Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-28, 56 NRC 373, 379 (2002).

scope is bounded by the “brief explanation of the basis for the contention” required by 10 C.F.R. § 2.309(f)(1)(ii). Contention 10C is based on the DEIS’s discussion of a combined alternative and how its under-representation of wind and solar power estimates unnecessarily burdened the alternative with environmental impacts by forcing it to rely heavily on the natural gas supplement. Thus, Contention 10C is based on the adequacy of wind and solar power contribution estimates and the effect that such estimates could have on the overall desirability of the combined alternative.<sup>93</sup>

Joint Intervenors provide additional facts discussing the availability of CAES systems for solar and wind power, along with the differing regulatory environments in Maryland and Georgia, in order to show that the wind and solar power contribution estimates in the FEIS are unnecessarily limited and that the NRC Staff’s continued reliance on the Southern/GIT report in the FEIS for wind power estimates is inappropriate. In doing so, Joint Intervenors are not proposing new bases for Contention 10C, but rather are merely identifying additional facts that fall within the original bases of Contention 10C. Such supplemental facts are clearly permissible, as intervenors are not required to proffer their entire evidentiary case at the contention admissibility stage,<sup>94</sup> but instead must only make “a minimal showing that material facts are in dispute, thereby demonstrating that an ‘inquiry in depth’ is appropriate.”<sup>95</sup> Furthermore, these supplemental facts address the core basis of Contention 10C—the inaccuracy of wind and solar power contribution estimates in the FEIS—and are therefore within the scope of the original contention. As such, these supplemental facts are properly before the

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<sup>93</sup> See LBP-10-24, 72 NRC at \_\_–\_\_ (slip op. at 44–54).

<sup>94</sup> Miss. Power & Light, Co. (Grand Gulf Nuclear Station, Units 1 & 2), ALAB-130, 6 AEC 423, 426 (1973).

<sup>95</sup> Gulf States Utilities Co. (River Bend Station, Unit 1), CLI-94-10, 40 NRC 43, 51 (1994) (quoting 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989) (internal citation omitted)).

Board, and the Board is justified in relying on them in its ruling concerning the summary disposition of Contention 10C.

Joint Intervenors also provide supplemental arguments concerning baseload power, Region of Interest (“ROI”), demand side management, and costs of construction. While those arguments all tangentially relate to the potential desirability of the proposed combined alternative, they fail to address the adequacy of the wind and solar power contribution estimates in the FEIS, and thus are outside the scope of Contention 10C. Additionally, arguments similar to these supplemental arguments were already distinguished from Contention 10C by the Board when it divided Contention 10 into four distinct contentions, thus reinforcing the fact that these arguments are outside the scope of Contention 10C.<sup>96</sup> As NRC Staff and Applicants note, many arguments similar to these supplemental arguments were already rejected by the Board when it found Contentions 10A, 10B, and 10D inadmissible.<sup>97</sup> Joint Intervenors’ supplemental arguments concerning baseload power, ROI, demand side management, and costs of construction are therefore outside the scope of Contention 10C, and thus were not considered by the Board in its ruling on the summary disposition of Contention 10C.

**B. Amended Contention 10C Admissibility**

The standards governing the admissibility of new and amended contentions are contained in 10 C.F.R. §§ 2.309(f)(1) and 2.309(f)(2). Under section 2.309(f)(2), a new or amended contention concerning NEPA may be filed if there are data or conclusions in the DEIS, FEIS, or any supplements relating thereto “that differ significantly from the data or

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<sup>96</sup> Contention 10 originally consisted of four parts, which the Board then chose to divide into four separate and distinct contentions because “[e]ach of Intervenors’ arguments concerns a sufficiently distinct issue.” LBP-10-24, 72 NRC at \_\_ (slip op. 4).

<sup>97</sup> See NRC Staff Amended 10C Response at 12–20; Applicants’ Amended 10C Response at 10–11; LBP-10-24, 72 NRC at \_\_–\_\_, \_\_, \_\_–\_\_ (slip op. at 20–21, 45 n.81, 60–62).

conclusions in the applicant's documents."<sup>98</sup> Otherwise, new or amended contentions may be admitted only if:

- (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.<sup>99</sup>

In addition, a new or amended contention must also meet the general contention admissibility requirements contained in 10 C.F.R. § 2.309(f)(1).

Nonetheless, as the Commission has recognized, an admitted contention contesting the DEIS can be construed as a challenge to the subsequently issued FEIS without further modification.<sup>100</sup> This concept has been referred to as the "migration tenet."<sup>101</sup> The migration tenet helps to expedite hearings by obviating the need to file and litigate the same contention up to three times—once against the ER, once against the DEIS, and one final time against the FEIS.<sup>102</sup>

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<sup>98</sup> 10 C.F.R. § 2.309(f)(2).

<sup>99</sup> 10 C.F.R. §§ 2.309(f)(2)(i)–(iii).

<sup>100</sup> Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 84 (1998) ("In this proceeding, CANT filed most of its environmental contentions on the basis of LES's ER. But by the time the various NEPA issues came before the Board on the merits, the NRC Staff had issued its FEIS. In LBP-96-25 and LBP-97-8, therefore, the Board appropriately deemed all of CANT's environmental contentions to be challenges to the FEIS."); Duke Energy Corp., CLI-02-28, 56 NRC at 383 n.44 ("[A] contention 'initially framed as a challenge to the substance of an applicant's ER analysis of particular matters would not necessarily require a late-filed revision or substitution to constitute a litigable issue statement relative to the substance of the Staff's DEIS (or final environmental impact statement) analysis of the same matter.'"); Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-23, 54 NRC 163, 172 n.3 (2001).

<sup>101</sup> Progress Energy Florida, Inc. (Combined License Application for Levy County Nuclear Power Plant, Units 1 and 2), LBP-11-01, 73 NRC \_\_, \_\_ (slip op. at 7) (Feb. 2, 2011).

<sup>102</sup> Id.

This tenet, however, applies only where, as here, the information contained in an applicant's subsequently released document is sufficiently similar to the information contained in the applicant's original document upon which the original contention was filed: "only so long as the DEIS analysis or discussion at issue is essentially in para materia with the ER analysis or discussion that is the focus of the contention."<sup>103</sup> If it is not, an intervenor may need to amend the admitted contention, or file a new contention altogether.<sup>104</sup>

Contention 10C, as admitted by the Board, challenged the DEIS's wind and solar power contribution estimates as inadequate:

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.<sup>105</sup>

When placed in juxtaposition, the similarities between the analysis and discussion of wind and solar power contribution estimates for the combined alternative in the FEIS and the DEIS are readily apparent. The FEIS discussion of combined alternatives maintains the exact same wind and solar power contribution estimates from the DEIS—100 MW(e) and 75 MW(e), respectively.<sup>106</sup> In addition, the studies referenced in the FEIS and DEIS discussions are largely identical.<sup>107</sup> The two discussions are so similar, in fact, that both Applicants and the NRC Staff seem to imply that the migration tenet is applicable here: "If the Board determines that a hearing is necessary on the combination of alternatives in the FEIS, issues concerning the amount of

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<sup>103</sup> So. Nuclear Operating Co. (Early Site Permit for Vogtle ESP Site), LBP-08-2, 67 NRC 54, 63–64 (2008).

<sup>104</sup> Id. (citing 10 C.F.R. § 2.309(f)(2); Duke Energy Corp., CLI-02-28, 56 NRC at 383).

<sup>105</sup> LBP-10-24, 72 NRC at \_\_\_ (slip op. at 54) (Dec. 28, 2010).

<sup>106</sup> FEIS at 9-28; DEIS at 9-26.

<sup>107</sup> See FEIS at 9-20 to 9-24, 9-26 to 9-30; DEIS at 9-20 to 9-23, 9-26 to 9-27.



wind and solar power in the combination of alternatives are already before the Board, and no amendment of Contention 10C is necessary or supported by the Intervenor's proposed amendment."<sup>108</sup> Therefore, because the discussions and analyses concerning wind and solar power contribution estimates in the DEIS and FEIS are sufficiently similar, the migration tenet applies and no amendment is necessary to construe Contention 10C as challenging the FEIS.

Amended Contention 10C is unnecessary, and therefore denied. Contention 10C will proceed to evidentiary hearing according to the schedule outlined in the Board's Revised Initial Scheduling Order.<sup>109</sup>

C. Contention 1 Summary Disposition

The Board will defer ruling on the pending summary disposition of Contention 1 until the issuance of its partial initial decision on Contention 10C.

In its March 24, 2009 Order on Joint Intervenor's standing and contentions, the Board admitted Contention 1.<sup>110</sup> Contention 1 alleges that "[c]ontrary to the Atomic Energy Act and NRC Regulations, Calvert Cliffs-3 would be owned, dominated and controlled by foreign interests."<sup>111</sup> Under section 103(d) of the Atomic Energy Act ("AEA") the NRC is prohibited from issuing a reactor license to "any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government."<sup>112</sup> Likewise, 10 C.F.R. § 50.28 states that, "[a]ny person who is a citizen, national, or agent of a foreign country, or any corporation, or other entity which the Commission knows or has reason to believe is owned, controlled, or dominated by an alien, a foreign

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<sup>108</sup> NRC Staff Amended 10C Response at 9; see also Applicants' Amended 10C Response at 6.

<sup>109</sup> See Revised Initial Scheduling Order at 4.

<sup>110</sup> LBP-09-04, 69 NRC at 192.

<sup>111</sup> See Petition at 5.

<sup>112</sup> 42 U.S.C. § 2133(d).

corporation, or a foreign government, shall be ineligible to apply for and obtain a license.” In addition, 10 C.F.R. § 52.75, which specifically applies to applications for combined licenses under 10 C.F.R. Part 52, Subpart C, “[a]ny person except one excluded by § 50.28 of this chapter may file an application for a combined license for a nuclear power facility.”

As discussed previously, Applicants are 100 percent owned by UniStar, who is in turn now 100 percent owned by a foreign corporation, EDF.<sup>113</sup> In its Determination Letter, the NRC Staff cited three bases underlying its determination that UniStar’s application, as revised, fails to meet the requirements of 10 C.F.R. § 50.38: “(1) UniStar is 100 percent owned by a foreign corporation (EDF), which is 85 percent owned by the French Government; (2) EDF has the power to exercise foreign ownership, control, or domination over UniStar; and (3) the Negation Action Plan submitted by UniStar does not negate the foreign ownership, control or domination issues discussed above.”<sup>114</sup> Based on the NRC Staff’s Determination Letter, the Board issued an Order directing the parties to show cause why the Board should not grant summary disposition of Contention 1, deny authorization to issue the license, and terminate the proceeding.<sup>115</sup> The parties timely filed their responses and replies to the Boards’ Show Cause Order, and on July 7, 2011 the Board heard oral argument regarding whether summary disposition of Contention 1 should be granted, along with related case management issues.<sup>116</sup>

Joint Intervenors believe that the Board should grant summary disposition as to Contention 1, deny authorization to issue the license in this proceeding, and terminate this

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<sup>113</sup> See supra notes 6–7 and accompanying text.

<sup>114</sup> NRC Determination Letter at 1.

<sup>115</sup> Show Cause Order at 1.

<sup>116</sup> See Applicants’ Show Cause Response; Joint Intervenors’ Show Cause Response; NRC Staff’s Show Cause Response; Applicants’ Show Cause Reply; Joint Intervenors’ Show Cause Reply; NRC Staff’s Show Cause Reply; Tr. at 181–82; see also NRC Staff Affidavit; NRC Staff Surreply; Applicants’ Response to Surreply. The applicable standard for summary disposition is discussed previously in section II.A.1.a. See supra section II.A.1.a.

proceeding.<sup>117</sup> Joint Intervenors believe that UniStar's recent acquisition of Constellation's 50 percent interest in Calvert Cliffs Unit 3 renders Applicants ineligible to receive, or even apply for, a COL under both the AEA and NRC regulations.<sup>118</sup> Joint Intervenors also caution that giving Applicants additional time to find an American partner in order to potentially comply with the foreign ownership, control, or domination regulations contained in the AEA and NRC regulations could lead to a delayed "open-ended proceeding."<sup>119</sup> They claim this is particularly disturbing given that "the Applicant provides no information whatsoever as to whether it has identified a potential partner(s); whether it has been or currently is in any negotiations with a potential partner(s); or any type of time frame at all as to when a partner may be expected to join with Applicant."<sup>120</sup>

NRC Staff does not oppose the Board's proposal to grant summary disposition as to Contention 1, and agrees that the Board could deny authorization to issue the license and terminate this proceeding if it wished to.<sup>121</sup> However, the NRC Staff also points out that the Board may instead prefer to hold Contention 1 in abeyance until "such time as the Applicant

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<sup>117</sup> Joint Intervenors' Show Cause Response at 1.

<sup>118</sup> Id. Given that Applicants are ineligible, Joint Intervenors believe that the NRC regulations neither require nor allow the NRC Staff to continue reviewing the COL application for an ineligible applicant, and that as such, NRC Staff funds would be better used for other issues. Id. at 2. In making this argument, Joint Intervenors appear to imply that the Board should direct the NRC Staff to discontinue their review of UniStar's entire COL application. However, it is well established that Boards do not have the authority to direct the NRC Staff's regulatory reviews. See Duke Energy Corp. (Catawba Nuclear Station, Units 1 and 2), CLI-04-6, 59 NRC 62, 74 (2004).

<sup>119</sup> Joint Intervenors' Show Cause Response at 3–4.

<sup>120</sup> Id.

<sup>121</sup> NRC Staff's Show Cause Response at 1, 10.

amends its application to address the foreign ownership issue and the Staff concludes its review of the amended application.”<sup>122</sup>

According to the NRC Staff, Applicants are currently 100 percent owned by a foreign corporation, EDF.<sup>123</sup> In compliance with the Standard Review Plan (“SRP”) on Foreign Ownership, Control or Domination,<sup>124</sup> the NRC Staff reviewed the Applicants’ response to RAI 281 to determine if EDF had the power, whether or not exercised, to direct or decide matters affecting the management or operations of the applicant.<sup>125</sup> Based on their review, the NRC Staff found that “EDF exercises both direct and indirect influence over the applicant in the governance structure,” and thus is owned, controlled, or dominated by a foreign interest as set forth in the SRP.<sup>126</sup> Specifically, the NRC Staff found that: (1) EDF, as the sole owner of UniStar, “exercises extensive and broad authority over UniStar and the intermediate companies”; (2) “[n]on U.S. Citizen representatives of EDF sit on the boards of directors of all the intermediate companies from the parent to the licensee”; and (3) “EDF has the authority to appoint managers and key officers for all the intermediate authorities.”<sup>127</sup> Consequently, the NRC Staff does not oppose summary disposition of Contention 1.<sup>128</sup>

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<sup>122</sup> Id. at 11.

<sup>123</sup> Id. at 7.

<sup>124</sup> Final Standard Review Plan on Foreign Ownership, Control or Domination, 64 Fed. Reg. 52,355, 52,358 (Sept. 28, 1999).

<sup>125</sup> NRC Staff’s Show Cause Response at 7.

<sup>126</sup> Id.

<sup>127</sup> Id.; see also NRC Staff Affidavit. In both their Determination Letter and their Response to the Board’s Show Cause Order Regarding Contention 1, the NRC Staff cited the inadequacies in UniStar’s Negation Action Plan as an additional reason why UniStar fails to meet the foreign ownership, control, or domination requirements contained in 10 C.F.R. § 50.38. NRC Determination Letter at 1; NRC Staff’s Show Cause Response at 7–10. However, NRC Staff later stated that because 100 percent foreign ownership alone bars the issuance of a license according to the SRP, a Negation Action Plan for such an ownership situation would be

Even if the Board does choose to grant summary disposition of Contention 1, the NRC Staff notes that the Board is not required to terminate the proceeding, and may instead wish to either move ahead to evidentiary hearing on the remaining environmental contention or hold Contention 1 in abeyance.<sup>129</sup> According to the NRC Staff, “[a]t this point it is not known what degree of foreign ownership may be present for CCNNP3 [sic] in the event UniStar obtains a domestic partner and amends its application.”<sup>130</sup> Thus, “even if the Board were to find the license could not issue with the current application, the issue may come before the Board again after a domestic partner is obtained.”<sup>131</sup>

Applicants contend that summary disposition as to Contention 1 should not be granted, authorization to issue the license should not be denied, and the proceeding should not be terminated.<sup>132</sup> Applicants reiterate that they are committed to finding a U.S. partner prior to receiving a COL, as they stated in their April 26, 2011 letter regarding the NRC Staff Determination Letter.<sup>133</sup> Consequently, Applicants maintain that any foreign ownership, control, or domination concerns can be addressed when they find a U.S. partner and amend their COL accordingly.<sup>134</sup> Until then, Applicants urge that the matter is not ripe and a decision on the matter would amount to a mere advisory opinion, which contradicts the fundamental notion of

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ineffective and have no chance of bringing a COL application in compliance with 10 C.F.R. § 50.38. Tr. at 198.

<sup>128</sup> NRC Staff’s Show Cause Response at 1, 6–7.

<sup>129</sup> See id. at 10–11 (citing Progress Energy Florida, Inc. (Levy County Nuclear Power Plant, Units 1 and 2), LBP-10-20, 72 NRC \_\_\_\_ (slip op.) (Nov. 18, 2010)).

<sup>130</sup> Id. at 11.

<sup>131</sup> Id.

<sup>132</sup> Tr. at 221.

<sup>133</sup> Applicants’ Show Cause Response at 7–8.

<sup>134</sup> Id. at 8, 13.

judicial economy.<sup>135</sup> Similarly, Applicants argue that the Board should not deny authorization of the license or terminate the proceeding because “[a]pplicants are routinely entitled to an opportunity to address any deficiency perceived in the application” and “[t]here is no need to formally ‘deny authorization’ to issue a COL . . . where the NRC Staff has already indicated that ‘a license will not be issued unless the requirements of 10 C.F.R. § 50.38 are met.’”<sup>136</sup>

The Board agrees with Applicants that “[a]pplicants are routinely entitled to an opportunity to address any deficiency perceived in the application.”<sup>137</sup> If Boards denied authorizations to issue a license and terminated proceedings anytime a deficiency arose in an application, proceedings would likely devolve into an endless cycle of terminations and re-openings, thus causing excessive delays in the licensing process.

However, while applicants are entitled an opportunity to fix deficiencies in their applications, they are not entitled an open-ended amount of time in which to do so. The Commission has repeatedly stressed the importance of expediting proceedings, through both its regulations and policies. In 10 C.F.R. § 2.329(b)(1) and 2.332(c)(1), the regulations reiterate that one of the fundamental purposes of both the prehearing conference and the scheduling order is “[e]xpediting the disposition of the proceeding.”<sup>138</sup> The Commission’s Statement on the Conduct of Agency Adjudications reaffirmed the importance of expediting proceedings when it stated that “applicants for a license are . . . entitled to a prompt resolution of disputes

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<sup>135</sup> Id. at 8, 10, 13.

<sup>136</sup> Id. at 11–12 (quoting Letter from David B. Matthews, Director, Division of New Reactor Licensing, to George Vanderheyden, President and CEO, UniStar Nuclear Energy (Apr. 6, 2011) at 1). In addition, Applicants urge that Contention 1 was written around a different set of circumstances than exist currently, and thus Contention 1 is moot because Joint Intervenor never updated or amended Contention 1 to reflect EDF’s 100 percent ownership of UniStar. Id. at 9.

<sup>137</sup> Id. at 11.

<sup>138</sup> 10 C.F.R. §§ 2.329(b)(1), 2.332(c)(1).

concerning their applications” and thus that one of the Commission’s main objectives is “to avoid unnecessary delays in the NRC’s review and hearing processes.”<sup>139</sup>

The need to avoid open-ended timelines for curing application deficiencies is especially true, where, as here, the Board is confronted with a contention concerning such a fundamental element of Applicants’ application. Unlike other deficiencies, which may impair an applicant’s ability to obtain a license, failure to comply with the foreign ownership, control, or domination requirements of 10 C.F.R. § 50.38 and § 52.75 plainly renders an entity ineligible to obtain or even apply for a COL.<sup>140</sup>

Applicants have to date provided no evidence to the Board or other parties indicating that a deal with a potential U.S. partner is imminent, even though roughly ten months have passed since EDF acquired Constellation’s 50 percent interest in UniStar.<sup>141</sup> As Applicants stated at the July 7, 2011 oral argument, “I think we have nothing definite. I think that it’s a little more than open-ended. Discussions are ongoing and I think that’s an accurate statement, but we have no details that we can share.”<sup>142</sup> In fact, Applicants even went as far as to suggest the possibility that UniStar might not be able to secure a U.S. partner until after January of 2013, noting that “the adjudication can stay open, frankly, as long as it takes.”<sup>143</sup> The stark challenges of finding a U.S. partner for Calvert Cliffs Unit 3 during the current economic climate are readily apparent.<sup>144</sup> Given Applicants’ lack of evidence concerning potential U.S. partners, the amount

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<sup>139</sup> Policy on Conduct of Adjudicatory Proceedings; Policy Statement, 63 Fed. Reg. 41,872, 41,873 (Aug. 5, 1998). The Commission’s Statement does not differentiate between whether the dispute is resolved in favor or against an applicant.

<sup>140</sup> 10 C.F.R. §§ 50.38, 52.75.

<sup>141</sup> See UniStar Letter.

<sup>142</sup> Tr. 224–25.

<sup>143</sup> Id. at 226.

<sup>144</sup> See Applicants’ Show Cause Response at 6–7.

of time that has elapsed since EDF acquired 100 percent ownership of UniStar, and the current economic climate, it appears that Applicants seek an unlimited amount of time in which to resolve the deficiency indicated in Contention 1, which is inconsistent with the Commission's regulations and policies.<sup>145</sup>

The Board will defer its ruling on Contention 1 until the issuance of the Board's Partial Initial Decision on Contention 10C. At the time the Board issues its Partial Initial Decision on Contention 10C it will also issue its decision whether summary disposition should be granted as to Contention 1.<sup>146</sup> Deferring judgment on Contention 1 until that date will give Applicants ample time—roughly a year and a half from the date on which EDF acquired a 100 percent interest in UniStar—to find a U.S. partner for Calvert Cliffs Unit 3, while also avoiding the type of open-ended proceeding which the Commission's regulations and policies clearly seek to avoid.

### III. CONCLUSION

For the foregoing reasons, the Board hereby denies Applicants' Motion for Summary Disposition of Contention 10C and Joint Intervenors' Amended Contention 10C. The Board's ruling on whether summary disposition of Contention 1 should be granted is deferred until the issuance of the Board's Initial Decision on Contention 10C, as explained above.

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<sup>145</sup> See supra notes 138–39 and accompanying text.

<sup>146</sup> Should the Board determine that an evidentiary hearing on Contention 1 is required, the Board will set an appropriate schedule for such a hearing.



It is so ORDERED.

THE ATOMIC SAFETY  
AND LICENSING BOARD<sup>147</sup>

/RA/

Ronald M. Spritzer, Chairman  
ADMINISTRATIVE JUDGE

/RA/

Gary S. Arnold  
ADMINISTRATIVE JUDGE

/RA/

William W. Sager  
ADMINISTRATIVE JUDGE

Rockville, Maryland  
August 26, 2011

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<sup>147</sup> Copies of this order were sent on this date by the agency's E-Filing system to the counsel/representatives for: (1) Joint 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.

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 Licensing Board **MEMORANDUM AND ORDER (Denying Summary Judgment of Contention 10C, Denying Amended Contention 10C, and Deferring Ruling on Contention 1)**, have been served upon the following persons by Electronic Information Exchange.

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Docket No. 52-016-COL

**MEMORANDUM AND ORDER (Denying Summary Judgment of Contention 10C,  
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Docket Nos. 52-016-COL

**MEMORANDUM AND ORDER (Denying Summary Judgment of Contention 10C,  
Denying Amended Contention 10C, and Deferring Ruling on Contention 1)**

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[Original signed by Linda D. Lewis ]  
Office of the Secretary of the Commission

Dated at Rockville, Maryland  
this 26<sup>th</sup> day of August 2011