UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT

No. 06-1442

Environmental Law and Policy Center, Blue Ridge Environmental Defense League, Nuclear Energy Information Service, Nuclear Information and Resource Service, and Public Citizen,

Petitioners,

v.

United States Nuclear Regulatory Commission and the United States of America,

Respondents.

Petition for Review

Pursuant to 42 U.S.C. § 2239(b), 28 U.S.C. §§ 2342-2344, and 5 U.S.C. §§ 701-706, Petitioners Environmental Law and Policy Center, Blue Ridge Environmental Defense League, Nuclear Energy Information Service, Nuclear Information and Resource Service, and Public Citizen hereby petition for review of three final orders of the United States Nuclear Regulatory Commission and its Atomic Safety and Licensing Board ("Board"). These orders were issued in a proceeding concerning Exelon Generating Company's application for an Early Site Permit ("ESP") (Docket No. 52-007) to license and approve a new nuclear power plant near Clinton, Illinois.

The orders for which Petitioners seek review by this Court are:

- *In re Exelon Generation Company, LLC* (Early Site Permit for Clinton ESP), CLI-05-29, Memorandum and Order (denying Intervenors' Petition for Review) (Dec. 12, 2005) (*see* Attachment 1). This Nuclear Regulatory Commission Order made final the previous orders issued by the Board, thereby providing this Court with subject matter jurisdiction pursuant to 42 U.S.C. § 2239(b) and 28 U.S.C. § 2342.
- *In re Exelon Generation Company, LLC* (Early Site Permit for Clinton ESP), LBP 04-17, Memorandum and Order (ruling on Standing and Contentions) (August 6, 2004) (*see* Attachment 2). In this Order, the Board granted Intervenors' Motion to Intervene, but improperly limited the scope of Intervenors' Environmental Contention 3.1 (the "Clean Energy Alternatives Contention") by excluding energy efficiency alternatives.
- *In re Exelon Generation Company, LLC* (Early Site Permit for Clinton ESP), LBP 05-19, Memorandum and Order (denying Intervenors' Motion to Amend Environmental Contention 3.1 and granting Applicant's Motion for Summary Disposition Regarding Contention 3.1) (July 28, 2005) (*see* Attachment 3).

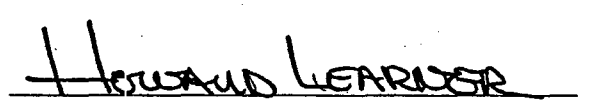
Petitioners contend that the Nuclear Regulatory Commission and its Board failed to require the rigorous and objective analysis of all reasonable alternatives to the proposal for new nuclear power, as required by the National Environmental Policy Act, 42 U.S.C. §§ 4321-4347, the Atomic Energy Act, 42 U.S.C. §§ 2011-2259, the Administrative Procedure Act, 5 U.S.C. §§ 701-706, and those statutes' implementing regulations. In particular, by defining an impermissibly narrow

purpose for the contemplated project, excluding energy efficiency alternatives, and ignoring genuine disputes of material fact and law regarding the comparative environmental impacts and costs of clean energy alternatives and nuclear power, the Nuclear Regulatory Commission's and its Board's Orders were arbitrary and capricious, an abuse of discretion, and contrary to law.

Petitioners respectfully request that the Court vacate the challenged orders and remand to the Nuclear Regulatory Commission and its Board for a hearing on Petitioners' Clean Energy Alternatives Contention in accordance with the statutes and rules cited above. Venue is proper in the United States Court of Appeals for the Seventh Circuit under 28 U.S.C. § 2343, as Petitioner Environmental Law & Policy Center's principal office is located in this judicial circuit.

Dated: February 8, 2006

Respectfully submitted,



Howard A. Learner
Shannon Fisk
Brad Klein
Environmental Law & Policy Center
35 East Wacker Drive, Suite 1300
Chicago, Illinois 60601
(312) 673-6500
(312) 795-3730 (fax)
Counsel for Petitioners

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United States Nuclear Regulatory Commission and the United States of America,

Respondents.

Certificate of Service

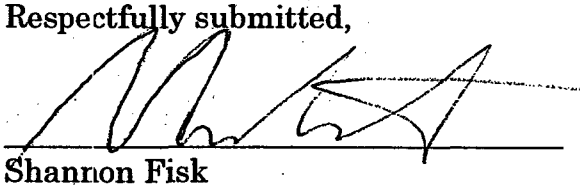
I, Shannon Fisk, hereby certify that copies of the foregoing Petition for Review have been filed with the Clerk of the United States Court of Appeals for the Seventh Circuit and served on the following by U.S. mail, first class, on this 8th day of February, 2006.

Ann P. Hodgdon, Esq.
Mauri T. Lemoncelli, Esq.
Darani M. Reddick, Esq.
Office of the General Counsel
U.S. Nuclear Regulatory Commission
Mail Stop – O – 15 D21
Washington, DC 20555-0001

Thomas S. O'Neill, Esq.
Associate General Counsel
Exelon Nuclear
4300 Winfield Rd.
Warrenville, IL 60555

Steven P. Frantz, Esq.
Paul M. Bessette, Esq.
Alex S. Polonsky, Esq.
Annette M. Simon, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Ave., NW
Washington, DC 20004

Respectfully submitted,



Shannon Fisk
Environmental Law & Policy Center
35 East Wacker Drive, Suite 1300
Chicago, Illinois 60601
(312) 673-6500
(312) 795-3730 (fax)
Counsel for Petitioners

Dated: February 8, 2006

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

RAS 10820 DOCKETED 12/12/05

COMMISSIONERS: SERVED 12/12/05

Nils J. Diaz, Chairman
Edward McGaffigan
Jeffery S. Merrifield
Gregory B. Jaczko
Peter B. Lyons

In the Matter of	)	
EXELON GENERATION COMPANY, LLC	)	Docket No. 52-007-ESP
(Early Site Permit for Clinton ESP Site)	)	

CLI-05-29

MEMORANDUM AND ORDER

Intervenors (Environmental Law and Policy Center, Blue Ridge Environmental Defense League, Nuclear Energy Information Service, Nuclear Information Resource Service, and Public Citizen) seek Commission review of a Licensing Board decision granting summary disposition of the last remaining contested issue in this early site permit (ESP) proceeding – relating to alternative energy sources – and refusing to admit for hearing an amended contention.[1] We deny review.

I. BACKGROUND

In 2003, Exelon filed an application for an ESP for a new nuclear power reactor at the site of an existing reactor in DeWitt County, Illinois. Exelon's environmental report identified the purpose of the project as providing baseload power.[2] The environmental report examined non-

[1] LBP-05-19, 62 NRC 134 (2005).

[2] *See* Exelon Generation Company, Environmental Report for the EGC Early Site Permit, at 9.2.1 (2003).

nuclear power sources, such as wind, natural gas and coal, as "alternatives" to the project.[3] It noted that NRC regulations do not require a discussion of the "need for power,"[4] although it included a discussion of the related issue of the "no action alternative."[5]

A special "Contentions" Board admitted a single contention, Contention 3.1, which challenged Exelon's analysis of alternatives.[6] That contention asserted that the environmental report failed to consider a combination of "clean" energy alternatives that would generate an equal amount of power and failed to consider energy conservation as an "alternative" to building a new power plant. In admitting the contention, the "Contentions" Board narrowed it to include only alternatives that would generate power; the Board did not include energy conservation or efficiency as an alternative.[7] Such an inquiry, the "Contentions" Board reasoned, "essentially equates to a 'need for power' analysis that is outside the scope of this proceeding."[8] Intervenors sought interlocutory Commission review on the energy efficiency issue, but the Commission turned down the petition without reaching the merits.[9]

In 2004, in response to an NRC staff request for additional information (RAI), Exelon submitted additional analysis on the subject of alternative technologies for generating power. The analysis considered combinations of wind and solar technology with coal and natural gas fueled facilities that could generate baseload power equivalent to the proposed nuclear facility.

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[3] *See id.*, ch. 9.

[4] *See* 10 C.F.R. 52.17(a)(2).

[5] *See* Environmental Report, 9.1-1.

[6] LBP-04-17, 60 NRC 229, 252 (2004).

[7] *Id.* at 245-46.

[8] *Id.*

[9] CLI-04-31, 60 NRC 461 (2004).

Some months later, when the NRC staff issued its draft environmental impact statement (DEIS), the staff included as alternatives the combination technology facilities that Exelon had analyzed in its RAI response. The DEIS reached two conclusions that intervenors now challenge. First, the DEIS said that "wind and solar power, alone or in combination with other alternatives, are not reasonable alternatives to the proposed ESP facility."[10] (The DEIS found that any reasonable alternative would have to be primarily fossil fuel fired.[11]) Second, the DEIS concluded that the environmental impacts of a new nuclear facility at the site would be no more than any reasonable combination of power generation technologies because the combination would necessarily involve fossil fuel technologies.[12]

Exelon moved for summary disposition of Contention 3.1. Exelon maintained that its RAI response had cured the original environmental report's claimed failure to analyze alternative power sources.[13] The NRC staff supported Exelon's motion for summary disposition. Intervenors opposed it, and they also moved to amend their contention to include a challenge to the "alternatives" analysis in the RAI response and in the NRC staff's DEIS.[14] In addition, they reasserted their previous argument that the National Environmental Policy Act (NEPA) requires the NRC to consider energy conservation as an alternative to the proposed project.

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[10] LBP-05-19, 62 NRC at 149, citing NUREG 1815, Environmental Impact Statement for an Early Site Permit (ESP) at the Exelon ESP Site, Draft Report for Comment, at 8-16 to 8-18. The DEIS found that solar power would require more land than is available at the Clinton site. DEIS at 8-18. And the DEIS pointed out that the closest region in Illinois with sufficient winds to make a wind farm practicable is 25 miles north of the Clinton site. *Id.* at 8-17. The DEIS also noted that the intermittent nature of wind power and the lack of adequate storage technologies limit wind as a source of baseload power. *Id.*

[11] DEIS at 8-22.

[12] *Id.*

[13] *See* Exelon's Motion for Summary Disposition of Contention 3.1 (Mar. 17, 2005).

[14] *See* Intervenor's Motion to Amend Contention 3.1 (Apr. 22, 2005). *See also* DEIS.

The Board, however, agreed with Exelon (and the NRC staff) that the additional information in Exelon's RAI response cured the omissions described in Contention 3.1.[15] The Board declined to revisit the "Contentions" Board's earlier ruling that a NEPA inquiry into energy conservation was outside the scope of this proceeding.[16] The Board also held that intervenors' proposed amended contention did not raise material issues of fact warranting an evidentiary hearing.[17]

II. DISCUSSION

In deciding whether to accept review of a Board decision, the Commission grants review, in its discretion, where the petition for review raises a substantial issue of law, a clearly erroneous finding of fact, or a prejudicial procedural error.[18] Here, intervenors' petition for review raises a series of detailed and complex questions. In our view, the Board's comprehensive, 57-page decision provides adequate answers to those questions. We see no basis for further Commission review. Consequently, we will instead briefly discuss the chief reasons why we find the Board's decision persuasive.[19]

A. *Energy Efficiency as an "Alternative."*

At the outset of this proceeding, the special "Contentions" Board found that a provision in

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[15] *See* LBP-05-19, 62 NRC at 181-83.

[16] *See id.* at 156-60.

[17] *See id.* at 160-79.

[18] *See* 10 C.F.R. § 2.341(b)(4).

[19] Intervenors (*e.g.*, Pet. 2-3) and Exelon (*e.g.*, Exelon Answer, at 2-3) argue this case as if we should decide whether the Board may have rendered "clearly erroneous" findings of fact. But the Board held no evidentiary hearing and made no "findings of fact" as such. This case was decided on summary disposition, and on the inadmissability of intervenors' late contention. This Board decision warrants considerable deference, however. The Board heard from the parties at oral argument, worked with the record over a period of many months, and issued a lengthy and thorough opinion.

our regulations that an ESP applicant need not discuss "benefits," such as "need for power," precluded any need for Exelon to discuss energy efficiency.[20] In their motion to amend their contention, intervenors again raised an energy efficiency claim. In rejecting intervenors' amended contention, the Board elaborated on the reasons why NEPA did not require analysis of the energy efficiency "alternative."[21] First, the Board reiterated that energy efficiency is a surrogate for the "need for power," an inquiry our regulations expressly declare unnecessary.[22] Second, the Board said that alternatives (like energy efficiency) that would not achieve Exelon's goal (providing additional power to sell on the market) were outside the scope of alternatives that require consideration in an ESP proceeding.[23]

These reasons are sufficient to eliminate further consideration of energy efficiency from the environmental analysis here. We agree with the Board that energy conservation or efficiency – or, as it is sometimes called, "demand side management" – is not a reasonable alternative that would advance the goals of the Exelon project.[24] Intervenors complain that the Board "blindly adopted" Exelon's goal of creating baseload power in defining the scope of the

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[20] *See* LBP-04-17, 60 NRC at 245-46.

[21] *See* LBP-05-19, 62 NRC at 156-60.

[22] See *id.* at 159, citing 10 C.F.R. §§ 52.17(a)(2), 52.18.

[23] *See id.* at 156-58.

[24] Arguably, the parties and the Board need not have considered alternative energy sources at all. In *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), *et al.*, CLI-05-17, 62 NRC 5 (2005), we held that licensing boards conducting "mandatory hearings" in ESP cases must consider alternate *sites*, not alternate energy sources. *Id.* at 48. As indicated in our prior decision, a Board need not address alternate energy sources in a mandatory ESP hearing, consistent with 10 C.F.R. §§52.17(a)(2) and 52.18. Similarly, an ESP applicant need not address alternate energy sources in its environmental report. However, when (as here) an ESP applicant chooses to address alternate energy sources and to obtain agency consideration of its alternate energy source assessment, that issue becomes material to the adjudication and is appropriate for litigation on properly-grounded contentions.

project.[25] Energy efficiency would be a possible "alternative" to the project only if the project's purpose was recast (as intervenors would have it) as meeting "future energy needs in the area."[26] But, as the Board indicated, Exelon has a limited purpose – selling electricity; it is not "engaged in the whole panoply of electric industry functions."[27]

The Board cited extensive case law supporting the proposition that a reviewing agency should take into account the applicant's goals for the project.[28] The lead case is *Citizens Against Burlington v. Busey*,[29] where the D.C. Circuit held that "[a]n agency cannot redefine the goals of the proposal that arouses the call for action; it must evaluate the alternative ways of achieving its goals, shaped by the application at issue and by the function that the agency plays in the decisional process."[30] "When the purpose is to accomplish one thing," the court said in *City of Burlington*, "it makes no sense to consider the alternative ways by which another thing might be achieved."[31]

Here, the Board rightly stressed that neither the NRC nor Exelon has the mission (or power) to implement a general societal interest in "energy efficiency."[32] As the Board indicated, all that is before the NRC is Exelon's application for an ESP for a potential nuclear plant to

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[25] Pet. 11.

[26] *Id.*

[27] LBP-05-19, 62 NRC at 152.

[28] *See id.* at 156-58.

[29] 938 F.2d 190 (D.C. Cir. 1991), *cert. denied*, 502 U.S. 994 (1991).

[30] *Id.* at 199. *Accord Hydro Resources, Inc.*, CLI-01-4, 53 NRC 31, 55-56 (2001).

[31] *Citizens Against Burlington*, 938 F.2d at 195. As an example the court said that requiring the NRC to discuss "imports of hydropower from Quebec" as an alternative to locating a nuclear reactor in Vermont would reduce the EIS to "frivolous boilerplate." *Id.* at 195.

[32] LBP-05-19, 62 NRC at 152, 156-60.

generate additional power to sell on the open market: Exelon's "sole business is that of the generation of electricity and the sale of energy and capacity .. at wholesale. [It] has no transmission or distribution system of its own and no direct link to the ultimate consumer."[33] Thus, while it makes some sense to inquire into various non-nuclear options for generating power – and Exelon and the NRC staff have done so – the NEPA "rule of reason" does not demand an analysis of what the Board called the "general goal" of energy efficiency.[34]

Trying to demonstrate a flaw in the Board's legal analysis, intervenors point to a few cases where reviewing courts indicated that an agency may not define a project's goal too narrowly. But intervenors' cases do not undercut the Board's result in this case.

For example, *Simmons v. U.S. Army Corps of Engineers*[35] involved an application by the City of Marion, Illinois, for Army Corps of Engineers' approval of a new reservoir to provide water to both Marion and a nearby water district. Stating that NEPA requires a look at "alternative means to accomplish the general goal of an action," the Seventh Circuit rebuked the Army for its "wholesale acceptance" of the city's proposal to build a single reservoir.[36] The court held that the Army should also have considered the "not absurd" alternative of supplying water "from two or more sources."[37] In our case, though, where the problem is supplying additional power, Exelon and the NRC staff indisputably already *have* examined various power sources as alternatives to Exelon's proposed nuclear plant – including fossil, solar, wind, and "combined" technologies. To require consideration of conservation as well would ignore entirely the purpose

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[33] *Id.* at 152.

[34] *See id.* at 159.

[35] 120 F.3d 664 (7th Cir. 1997).

[36] *Id.* at 669.

[37] *Id.*

of Exelon's proposed facility – producing more power. It would be as if in *Simmons* the Seventh Circuit ordered the Army not only to consider alternate ways to supply more water but also to examine whether Marion and the water district could reduce their need for water by prohibiting lawn-watering or requiring low-flow toilets. Nothing in *Simmons* requires a NEPA inquiry so far afield from the original proposal.

Another of intervenors' authorities, *Colorado Environmental Coalition v. Dombeck*,[38] serves them no better. In that case, the applicant wanted, over the objection of the Colorado Environmental Coalition, to expand a ski area on United States Forest Service land in Vail, Colorado. Although the Tenth Circuit stated as a general principle that the agency cannot blindly adopt an applicant's articulated purpose, it rejected the Coalition's argument that the Forest Service should have considered the Coalition's proposed "conservation biology alternative," which would not have significantly increased the terrain available for skiing. The court said that the agency's alternatives analysis, which focused only on those alternatives that would increase the area available for skiing, was adequate under NEPA.[39]

The same is true here. Just as it was reasonable in *Colorado Environmental Coalition* to confine the NEPA "alternatives" inquiry to potential ski areas, it is reasonable here to confine the inquiry to potential sources of power. Exelon and the NRC staff were not obliged to examine general efficiency or conservation proposals that would do nothing to satisfy this particular

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[38] 185 F.3d 1162 (10th Cir. 1989).

[39] *Colorado Environmental Coalition* is different from our case in that the Forest Service apparently had within its power the option to implement a conservation biology alternative on land under its control. The NRC, of course, has no means to enforce energy efficiency in Illinois. Neither, to all appearances, does Exelon. Intervenors maintain that because Commonwealth Edison, a public utility in Illinois, is a subsidiary of the same parent company as Exelon's parent company, Exelon in fact is in a position to implement energy efficiency programs. *See* Pet. 14-15. But intervenors made no showing that Exelon has a peculiar ability to influence its sister corporation, Commonwealth Edison, or that the conservation proposals that intervenors favor – such as tax incentives by the state and federal governments – lay within Exelon's (or Commonwealth Edison's) purview.

project's goals.

B. Information in the DEIS

The remainder of Intervenors' petition for review claims, in essence, that the Board erred in ordering summary disposition, and in rejecting intervenors' proposed amendment of their petition, in the face of material issues of fact. We disagree. Intervenors overlook their obligation under our pleading regulations to offer "specific" contentions on "material" issues, supported by "alleged facts or expert opinion."[40] NRC contention-pleading rules are "strict by design,"[41] and contemplate "a clear statement as to the basis for the contentions and the submission of ... supporting information and references to specific documents and sources which establish the validity of the contention."[42] Mere "notice pleading" does not suffice. [43]

The Board's decision considered each of intervenors' claims, point-by-point, and thoroughly explained why they fell short of raising a material issue requiring further litigation. It is not necessary for us to recapitulate the Board's reasoning in detail.

At the outset, it is worthwhile to list several aspects of the record that provided the underpinnings of the Board's "materiality" analysis:

- In order to satisfy the purpose of the project, and thus to constitute a reasonable alternative, the combined facility must be able to generate power in the amount of 2180 MW at all times.[44]
- Because wind and solar power cannot reliably generate power at all times the

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[40] *See* 10 C.F.R. § 2.309(f).

[41] *Dominion Nuclear Connecticut, Inc.* (Millstone Power Station), Units 2 & 3), CLI-01-24, 54 NRC 349, 358 (2001).

[42] *Arizona Public Service Co.* (Palo Verde Nuclear Generating Station, Units 1, 2 & 3), CLI-91-12, 34 NRC 149, 155-56 (1991).

[43] *See Duke Energy Corp.* (McGuire Nuclear Station, Units 1 & 2; Catawba Nuclear Station, Units 1 & 2), CLI-03-17, 58 NRC 419, 428 (2003).

[44] *See* LBP-05-19, 62 NRC at 157-58.

fossil-fueled portions of the facility would have to have a capacity of 2180 MW.[45]

- Due to the impacts of fossil-fueled facilities, a combination of wind and solar with a 2180 MW fossil-fueled facility is not environmentally preferable to the proposed nuclear power plant.[46]

- The DEIS found that the wind or solar *portions* of the analyzed combination facility would have no environmental impacts.[47]

With these considerations in mind, we turn now to the specific "materiality" points intervenors raise in their petition for review.

1. Number of Areas Affected

Intervenors claim that the Board ought to have recognized that an alternative that (as the NRC's DEIS found) has "small" impacts on fewer resources must be environmentally preferable to an alternative that has "small" impacts on a greater number of resources.[48] In the DEIS, the staff looked at the impact of the various energy-generating alternatives on a range of environmental resources, characterizing the impacts on those resources as "small," moderate," or "large." While the impacts for both the proposed nuclear plant and the "clean" alternatives that intervenors prefer were characterized as "small" in most areas, intervenors argue that the sheer number of resources affected – greater for nuclear power plants – determines which alternative is environmentally preferable.

But as the Board pointed out, the DEIS did not compare the proposed nuclear facility to an exclusively solar- or wind-powered facility – such facilities cannot reliably supply power at all times – but to a combination facility that would generate baseload power equivalent to a nuclear

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[45] See *id.* at 165 ("there are undoubtedly times at night (no solar power production) when the wind will not be blowing").

[46] *See id. at* 166, 170.

[47] *See id.* at 172.

[48] Pet. 15-16.

power plant's power production.[49] Combination facilities are powered (in part) by fossil fuel technologies and it was that aspect of such facilities that tilted the environmental analysis away from the combination facility.[50] Because a solely wind- or solar-powered facility could not satisfy the project's purpose, there was no need to compare the impact of such facilities to the impact of the proposed nuclear plant. And, most significantly, despite our pleading rule requiring factual or expert support for contentions, intervenors "presented no impact analyses whatsoever to support their proposition that because one or another alternative has numerically more areas impacted, the overall environmental impact is greater."[51] As the Board concluded, this portion of intervenors' contention amounts to "bare assertion."[52]

The Board therefore reasonably rejected intervenors' "comparative impacts" claims, and we see no basis for examining the issue further.

2. Overstatement of Environmental Impact of a "Combination" Facility

Intervenors argue that although the DEIS examined a facility that could "combine" technologies to create the desired amount of baseload power, it overestimated the environmental impact of such a combination.[53] Specifically, intervenors argue that: (1) the Board's decision rested on a "faulty premise" that natural gas would have greater environmental impact than nuclear power; (2) the "combination" the staff used should have allocated a greater proportion to wind power; and (3) the Board should have acknowledged that a facility having a full 2180 MW of fossil fuel-fired capacity *with an additional* wind or solar component would have

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[49] *See* LBP-05-19, 62 NRC at 169-71.

[50] *See id.*

[51] *Id.* at 172.

[52] *Id.*

[53] Pet. 20-22.

greater benefits because the wind or solar component could produce additional power even if the fossil fuel component were operating at capacity.

Again, though, intervenors' position comes down to "bare assertion lacking any support and the requisite specificity."[54] Intervenors point to a number of scenarios and supposed environmental effects, but in the end they offer "nothing ... to indicate that any of these effects have been even superficially analyzed by them to support their assertion."[55] And, as the Board held, intervenors' various claims fail to come to grips with fundamental points that can't be disputed: solar and wind power, by definition, are not always available; in combination plants the fossil-fired components certainly will run some of the time; and the DEIS gave full credit (it assumed *no* adverse environmental impacts) to wind and solar components of a combined plant.[56]

There may, of course, be mistakes in the DEIS, but in an NRC adjudication, it is intervenors' burden to show their significance and materiality. "Our boards do not sit to 'flyspeck' environmental documents or to add details or nuances. If the ER (or EIS) on its face 'comes to grips with all important considerations' nothing more need be done."[57] Intervenors' "environmental impact" claims are for the most part not specific and not grounded in fact or expert opinion. The claims do not suggest significant environmental oversights that warrant further inquiry at an evidentiary hearing.

3. Failure to Conduct a Cost-Benefit Analysis

Intervenors argue that the Board ought to have found a genuine material dispute

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[54] LBP-05-19, 62 NRC at 172.

[55] *Id.* at 173.

[56] *See id.* at 171.

[57] *Systems Energy Resources, Inc.* (Early Site Permit for Grand Gulf Site), CLI-05-4, 61 NRC 10, 13 (2005).

regarding the comparative cost of nuclear power and clean energy alternatives.[58] The Board found as a matter of law that no disputes concerning the relative costs of nuclear power versus other technologies could raise a material dispute.[59] The Board held that an economics-driven cost comparison among alternative technologies is a matter that our regulations postpone until the construction permit/operating license stage.[60]

The Board was correct that a cost-benefit comparison among the technological alternatives does not raise a material issue in an ESP proceeding. On the same day as the Board's decision, we issued our decision in CLI-05-17 (regarding issues to be considered at "mandatory hearings"). There, we expressly stated that because an ESP is only a "partial" construction permit and because our regulations expressly postpone any "benefits" analysis until later – when there are concrete plans actually to build and operate a nuclear power plant – the Board cannot perform a NEPA cost-benefit analysis in an ESP proceeding.[61] As permitted by our regulations, Exelon's Environmental Report did not include a "need for power" analysis – *i.e.*, the benefits of a nuclear plant – but deferred the issue until the future combined license proceeding. There is no apparent reason to analyze the "cost" side of the cost-benefit balance until it comes time – in the combined license proceeding – to consider benefits.

Intervenors argue that the granting of an early site permit constitutes a "major federal action" that requires a full NEPA analysis now, including a weighing of costs versus benefits. They argue that putting off this decision until Exelon applies for a combined license would "risk

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[58] Pet. 17-20.

[59] *See* LBP-05-19, 62 NRC at 168-69.

[60] *See id.* at 167, citing 10 C.F.R. §§ 52.17(a)(2), 52.18.

[61] *See* 62 NRC at 47.

... *post hoc* rationalization."[62] This argument amounts to an impermissible collateral attack on our ESP regulations, which permit (and appear to encourage) deferral of the cost-benefit analysis.[63] Our regulations make obvious sense. The various factors affecting economic costs and benefits could change dramatically between the time that an early site permit is granted and a combined license is sought. There is no reason to require a cost-benefit analysis at the preliminary ESP stage of power plant licensing.

Intervenors point out that the regulation merely states that a discussion of benefits is not *necessary* at this time, but appears not to *prohibit* that discussion.[64] This argument is true, but it does not help intervenors here. At the most it means that Exelon might have included a cost-benefit analysis at this stage, opening the door to litigation on that subject. That would resolve cost-benefit issues at this stage, but the analysis would still be subject to revision at the combined license stage to reflect changes in technology and economic factors. But Exelon chose not to perform the analysis, and it is not intervenors' prerogative to introduce the issue at this juncture.

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[62] Pet. 19.

[63] *See* 10 C.F.R. § 2.335(a).

[64] *See id.*

CONCLUSION

For the foregoing reasons, the petition for review is *denied*.

IT IS SO ORDERED.

For the Commission

/RA/

Annette L. Vietti-Cook
Secretary of the Commission

Dated at Rockville, MD
this 12th day of December, 2005

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
EXELON GENERATION COMPANY, LLC	)	Docket No. 52-007-ESP
	)	
	)	
(Early Site Permit for Clinton ESP Site)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing COMMISSION MEMORANDUM AND ORDER (CLI-05-29) have been served upon the following persons by electronic mail this date, followed by deposit of paper copies in the U.S. mail, first class, and NRC internal mail.

Office of Commission Appellate Adjudication
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: ocaamail@nrc.gov

Administrative Judge
Dr. Paul B. Abramson, Chair
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: pba@nrc.gov

Administrative Judge
Dr. David L. Hetrick
8740 E. Dexter Dr.
Tucson, AZ 85715
E-mail: dlmwh@dakotacom.net

Administrative Judge
Dr. Anthony J. Baratta
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: ajb5@nrc.gov

Ann P. Hodgdon, Esq.
Mauri T. Lemoncelli, Esq.
Darani M. Reddick, Esq.
Office of the General Counsel
Mail Stop - O-15 D21
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
E-mail: aph@nrc.gov; mtl1@nrc.gov; dmr1@nrc.gov

Dave Kraft, Executive Director
Nuclear Energy Information Service
P.O. Box 1637
Evanston, IL 60204-1637
E-mail: neis@neis.org

Docket No. 52-007-ESP
COMMISSION MEMORANDUM AND ORDER
(CLI-05-29)

Paul Gunter, Director
Reactor Watchdog Project
Nuclear Information and Resource Service
1424 16th St., NW, Suite 404
Washington, DC 20036
E-mail: pgunter@nirs.org

Michele Boyd
Public Citizen
215 Pennsylvania Ave., SE
Washington, DC 20003
E-mail: mboyd@citizen.org

Howard A. Learner, Esq.
Ann Alexander, Esq.
Shannon Fisk, Esq.
Environmental Law and Policy Center
35 E. Wacker Dr., Suite 1300
Chicago, IL 60601
E-mail: hlearner@elpc.org;
aalexander@elpc.org; sfisk@elpc.org

Thomas S. O'Neill, Esq.
Associate General Counsel
Exelon Nuclear
4300 Winfield Rd.
Warrenville, IL 60555
E-mail: thomas.oneill@exeloncorp.com

Steven P. Frantz, Esq.
Paul M. Bessette, Esq.
Alex S. Polonsky, Esq.
Annette M. Simon, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Ave., NW
Washington, DC 20004
E-mail: sfrantz@morganlewis.com;
pbessette@morganlewis.com;
apolonsky@morganlewis.com;
asimon@morganlewis.com

Diane Curran, Esq.
Harmon, Curran, Spielberg
& Eisenberg, L.L.P.
1726 M Street, NW, Suite 600
Washington, DC 20036
E-mail: dcurran@harmoncurran.com

[Original signed by Adria T. Byrdsong]

Office of the Secretary of the Commission

Dated at Rockville, Maryland,
this 12th day of December 2005

RAS 8234

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

LBP-04-17
DOCKETED 08/06/04
SERVED 08/06/04

ATOMIC SAFETY AND LICENSING BOARD

Before Administrative Judges:

G. Paul Bollwerk, III, Chairman
Dr. Paul B. Abramson
Dr. Anthony J. Baratta

In the Matter of	Docket No. 52-007-ESP
EXELON GENERATION COMPANY, LLC	ASLBP No. 04-821-01-ESP
(Early Site Permit for Clinton ESP Site)	August 6, 2004

MEMORANDUM AND ORDER
(Ruling on Standing and Contentions)

Before the Licensing Board is the request of the Environmental Law and Policy Center (ELPC), the Nuclear Energy Information Service (NEIS), the Blue Ridge Environmental Defense League (BREDL), the Nuclear Information and Resource Service (NIRS), and Public Citizen (PC) (collectively Clinton Petitioners) seeking to intervene in this proceeding to challenge the application of Exelon Generation Company, LLC, (EGC) for a 10 C.F.R. Part 52 early site permit (ESP). The ESP application seeks approval of the site of the existing Clinton nuclear power station in DeWitt County, Illinois, for the possible construction of one or more new nuclear reactors. For the reasons set forth below, we find that the Clinton Petitioners have established the requisite standing to intervene in this proceeding and have submitted one admissible contention concerning the EGC application, denoted as Environmental Contention (EC) 3.1 - The Clean Energy Alternatives Contention, which is set forth in an appendix to this decision. Accordingly, we admit the Clinton Petitioners as parties to this proceeding. Additionally, we outline certain procedural and administrative rulings regarding the litigation of these admitted contentions.

I. BACKGROUND

A. EGC Early Site Permit Application

Under the Part 52 licensing process, an entity may apply for an ESP, which allows it to resolve key site-related environmental, safety, and emergency planning issues before deciding to build or choosing the design of a nuclear power facility on that site. Thus, if granted, an ESP essentially would allow an entity to "bank" a possible site for the future construction of new nuclear power generation facilities. EGC, a wholly-owned subsidiary of Exelon Ventures Company, LLC, filed an ESP application on September 25, 2003, that consists of a section on Administrative Information about EGC, a Site Safety Analysis Report (SSAR), an Environmental Report (ER), an Emergency Plan (EP), and a Site Redress Plan (SRP). The particular site for which EGC seeks to obtain an ESP is the Clinton Power Station property (Clinton), where an existing nuclear power plant has been producing electricity since 1987. See [EGC ESP] Application at 1-2 (Sept. 2003) [hereinafter Clinton ESP Application].

Two other companies, Dominion Nuclear North Anna, LLC, (DNNA) and System Energy Resources, Inc., (SERI) recently submitted ESP applications for the sites at the existing North Anna and Grand Gulf nuclear facilities. See [DNNA] North Anna [ESP] Application (Sept. 25, 2003); [SERI] Grand Gulf Site ESP Application (Oct. 16, 2003). Because of the temporal and substantive similarity of the three applications, and because these Part 52 licensing proceedings are the first of their kind, as is noted below, preliminary matters in the Part 52 licensing process concerning these applications have been afforded joint consideration by the Commission and the Licensing Board for purposes of efficiency and ensuring uniformity among the three proceedings.

B. Clinton Petitioners Hearing Request and Petition to Intervene

In response to a December 8, 2003 notice of hearing and opportunity to petition for leave to intervene regarding the EGC ESP application, 68 Fed. Reg. 69,426 (Dec. 12, 2003), on January 12, 2004, the Clinton Petitioners filed a request for hearing and petition to intervene, Hearing Request and Petition to Intervene by the [Clinton Petitioners] (Jan. 12, 2004) [hereinafter Hearing Request]. EGC and the NRC staff responded to the Clinton Petitioners' hearing request on January 26 and January 29, 2004, respectively. See [EGC] Answer to Hearing Request and Petition to Intervene filed by [Clinton Petitioners] (Jan. 26, 2004) [hereinafter EGC Hearing Request Response]; NRC Staff's Answer to Hearing Request and Petition to Intervene by the [Clinton Petitioners] (Jan. 29, 2004) [hereinafter Staff Hearing Request Response]. With one exception,[1] EGC and the staff did not challenge the Clinton Petitioners' representational standing, but noting that the Clinton Petitioners must present at least one litigable contention to be admitted as parties to this proceeding, both challenged the admissibility of one or more of the Clinton Petitioners issue statements.

C. Commission Application of Revised 10 C.F.R. Part 2 Rules of Practice and Referral of Hearing Petition

On January 28, 2004, EGC submitted a motion to apply the recently revised version of 10 C.F.R. Part 2, which permits the use of an informal hearing process for ESP applications. See [EGC] Motion to Apply New 10 C.F.R. Part 2 Rules of Adjudication (January 28, 2004); see also 69 Fed. Reg. 2182, 2188 (Jan. 14, 2004). The Clinton Petitioners opposed EGC's motion, citing a lack of fairness, effectiveness, and efficiency applying the new Part 2 to this proceeding, while the staff supported using the newly adopted procedures. See [Clinton

[1] The staff challenged NEIS representational standing because in the supporting affidavits of its members Mr. Galewsky and Ms. Lindberg, they did not state that NEIS was the sole representative they authorized to represent their interests in this proceeding. See Staff Hearing Request Response at 7.

Petitioners] Opposition to [EGC] Application for New Adjudicatory Process (Feb. 6, 2004); NRC Staff's Answer to [EGC] Motion to Apply New 10 C.F.R. Part 2 Rules of Adjudication (Feb. 12, 2004). Ultimately, in a March 2, 2004 issuance, the Commission granted the EGC motion and found that applying the new Part 2 would not result in any interruption, unwarranted delay, added burden, or unfairness in this or the other two ESP proceedings. See CLI-04-08, 59 NRC 113, 118-19 (2004). As part of that decision, the Commission also gave the Clinton Petitioners sixty days within which to file their contentions in the proceeding and referred their hearing petition to the Atomic Safety and Licensing Board Panel for further consideration. See id. at 119.

D. Post-Referral Developments

Responding to the Commission's referral, in a March 8, 2004 initial prehearing order, among other things, the Licensing Board Panel Chief Administrative Judge reaffirmed the May 3, 2004 deadline for submitting contentions and requested that each contention be placed in one or more of the following subject matter categories: (1) Administrative, (2) Site Safety Analysis, (3) Environmental, (4) Emergency Planning, or (5) Miscellaneous.[2] See Licensing Board Panel Memorandum and Order (Initial Prehearing Order) at 3-4 (Mar. 8, 2004) (unpublished). The initial prehearing order also set a May 28, 2004 deadline for EGC and staff responses to the Clinton Petitioners petition supplement and a June 4, 2004 deadline for the Clinton Petitioners to reply to the EGC and staff responses. See id. at 4. Thereafter, on March 22, 2004, this Atomic Safety and Licensing Board was established to adjudicate this ESP

[2] Because section 2.714(a)(3) of the superceded Part 2 rules permitting petitioners to supplement their hearing requests to provide standing-related information did not have an analog in the new Part 2, the Clinton Petitioners were allowed to supplement their petition with standing-related information when they filed their contentions. Further, they were permitted to make any request under section 2.309(g) regarding the selection of hearing procedures other than the Subpart L procedures that otherwise apply under the new Part 2. See Licensing Board Panel Memorandum and Order (Initial Prehearing Order) at 2 (Mar. 8, 2004) (unpublished).

proceeding.[3] See 69 Fed. Reg. 15,910 (Mar. 26, 2004). In a memorandum and order issued on the same day, the Board established a June 21, 2004 date for an initial prehearing conference for this proceeding (as well as the North Anna and Grand Gulf ESP proceedings) at the NRC's Rockville, Maryland headquarters facility.[4] See Licensing Board Memorandum and Order (Scheduling Initial Prehearing Conference) (Mar. 22, 2004) (unpublished).

The Clinton Petitioners timely filed their contentions supplement, along with a hearing petition supplement,[5] on May 3, 2004. See Contentions of [BREDL], [NIRS], [NEIS] and [PC] Regarding [ESP] Application for Site of Clinton Nuclear Power Plant (May 3, 2004) [hereinafter Contentions]; Supplemental Request for Hearing and Petition to Intervene by [Clinton Petitioners] (May 3, 2004) [hereinafter Hearing Petition Supplement]. On May 28, 2004, EGC and the staff filed their answers to the Clinton Petitioners' proposed contentions. See [EGC] Answer to Proposed Contentions (May 28, 2004) [hereinafter EGC Contentions Response];

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[3] That same day, Board establishment notices were issued for the North Anna and Grand Gulf ESP proceedings setting up two Boards with the same membership as this Board. See 69 Fed. Reg. 15,910 (Mar. 26, 2004) (North Anna proceeding); 69 Fed. Reg. 15,911 (Mar. 26, 2004) (Grand Gulf proceeding). Although the Board designation notices for these proceedings established three separate licensing boards, for simplicity we will refer to these Boards in the singular when referencing rulings that affected all three proceedings identically.

[4] The petitioners in all three ESP proceedings filed a motion on April 1, 2004, to hold separate prehearing conferences in the vicinity of each proposed ESP site, as opposed to one single prehearing conference for all three proceedings at the NRC's Rockville, Maryland headquarters. See Petitioners' Motion for Reconsideration of Memorandum and Order Scheduling Initial Prehearing Conference (Apr. 1, 2004). The Licensing Board denied this motion on the grounds that, given the similarity of the three proceedings and the location of principal counsel for all parties in the Washington, D.C. area, the most efficient and effective means for conducting the prehearing conference was to do so jointly in Rockville. See Licensing Board Memorandum and Order (Denying Motion Requesting Reconsideration of Initial Prehearing Conference Location) at 2-3 (Apr. 5, 2004) (unpublished).

[5] As part of the Clinton Petitioners' hearing request supplement, Ms. Lindberg amended her statement to give NEIS sole authority to represent her interests in this proceeding. See Supplemental Request for Hearing and Petition to Intervene by [Clinton Petitioners] (May 3, 2004) at 21. The Clinton Petitioners said nothing in their supplemental submission about hearing procedure selection under section 309(g).

NRC Staff's Response to Petitioners' Contentions Regarding the [ESP] Application for the Clinton Site (May 28, 2004) [hereinafter Staff Contentions Response]. Following a June 1, 2004 motion for extension of time to reply to the EGC and staff responses to their contentions, which the Licensing Board granted on June 3, the Clinton Petitioners filed their reply to the EGC and staff answers on June 9, 2004. See Petitioners' Motion for Extension of Time to Reply to Responses to Contentions (June 1, 2004); [EGC] Answer in Opposition to Petitioners' Motion for Extension of Time to Reply to Response to Contentions (June 2, 2004); Licensing Board Order (Granting Extension Request) (June 3, 2004); Reply in Support of [Supplemental Request] by [Clinton Petitioners] (June 9, 2004) [hereinafter Clinton Petitioners Reply].

On June 21-22, 2004, the Board conducted a two-day prehearing conference during which it heard oral presentations regarding the standing of each of the ESP petitioners and the admissibility of their contentions, which were grouped by topic into separate categories.[6] See Tr. at 1-410.

II. ANALYSIS

A. Clinton Petitioners Standing

1. Standards Governing Standing

In determining standing as of right for those seeking party status, the agency has applied contemporaneous judicial standing concepts that require a participant to establish (1) it has suffered or will suffer a distinct and palpable injury that constitutes injury-in-fact within the zones of interests arguably protected by the governing statutes (e.g., the Atomic Energy Act

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[6] As a result of the Board's concurrent consideration of the three ESP cases, today we also are issuing standing/contentions admission rulings in those cases as well. See Dominion Nuclear North Anna, LLC (Early Site Permit for North Anna ESP Site), LBP-04-18, 60 NRC __ (Aug. 6, 2004); System Energy Resources, Inc. (Early Site Permit for Grand Gulf ESP Site), LBP-04-19, 60 NRC __ (Aug. 6, 2004).

of 1954 (AEA), the National Environmental Policy Act of 1969 (NEPA)); (2) the injury is fairly traceable to the challenged action; and (3) the injury is likely to be redressed by a favorable decision. See Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-1, 43 NRC 1, 6 (1996). In this regard, in cases involving the possible construction or operation of a nuclear power reactor, proximity to the proposed facility has been considered sufficient to establish the requisite injury-in-fact. See Florida Power & Light Co. (St. Lucie Nuclear Power Plant, Units 1 and 2), CLI-89-21, 30 NRC 325, 329 (1989). Further, when an entity seeks to intervene on behalf of its members, that entity must show it has an individual member who can fulfill all the necessary standing elements and who has authorized the organization to represent his or her interests. Moreover, in assessing a petition to determine whether these elements are met, which the Board must do even though there are no objections to a petitioner's standing, the Commission has indicated that we are to "construe the petition in favor of the petitioner." Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995).

We apply these rules and guidelines in evaluating to each of the Clinton Petitioners' standing presentations.

2. ELPC

DISCUSSION: Hearing Request at 2-4, attachments 1-5; EGC Hearing Request Response at 1; Staff Hearing Request Response at 5-6; Tr. at 12-13.

RULING: ELPC is a not-for-profit organization whose members oppose the issuance of an ESP to EGC. Attached to the Clinton Petitioners hearing request are the affidavits of five ELPC members, each of whom states that ELPC is authorized to represent his or her interests. All five members reside within forty miles of the Clinton site. These individuals' asserted health,

safety, and environmental interests and their agreement to permit ELPC to represent their interests are sufficient to establish ELPC's standing to intervene in this proceeding.

3. BREDL

DISCUSSION: Hearing Request at 2-4, attachments 6-9; EGC Hearing Request Response at 1; Staff Hearing Request Response at 6; Tr. at 12-13.

RULING: BREDL is a not-for-profit organization whose members oppose the issuance of an ESP to EGC. Attached to the Clinton Petitioners hearing request are the affidavits of four BREDL members, each of whom states that BREDL is authorized to represent his or her interests. All four members reside within forty miles of the Clinton site. These individuals' asserted health, safety, and environmental interests and their agreement to permit BREDL to represent their interests are sufficient to establish BREDL's standing to intervene in this proceeding.

4. NIRS

DISCUSSION: Hearing Request at 2-4, attachments 10-11; EGC Hearing Request Response at 1; Staff Hearing Request Response at 7; Tr. at 12-13.

RULING: NIRS is a not-for-profit corporation whose members oppose the issuance of an ESP to ESC. Attached to the Clinton Petitioners hearing request are the affidavits of two NIRS members, each of whom states that NIRS is authorized to represent his or her interests. Both members reside within forty miles of the Clinton site. These individuals' asserted health, safety, and environmental interests and their agreement to permit NIRS to represent their interests are sufficient to establish NIRS's standing to intervene in this proceeding.

5. NEIS

DISCUSSION: Hearing Request at 2-4, attachments 12-13; EGC Hearing Request Response at 1; Staff Hearing Request Response at 7; Tr. at 12-13.

RULING: NEIS is a not-for-profit organization whose members oppose the issuance of an ESP to EGC. Attached to the Clinton Petitioners hearing request are the affidavits of two NEIS members, each of whom states that NEIS is authorized to represent his or her interests. Both members reside within forty miles of the Clinton site. These individuals' asserted health, safety, and environmental interests and their agreement to permit NEIS to represent their interests are sufficient to establish NEIS's standing to intervene in this proceeding.

6. PC

DISCUSSION: Hearing Request at 2-4, attachments 14-16; EGC Hearing Request Response at 1; Staff Hearing Request Response at 7-8; Tr. at 12-13.

RULING: PC is a not-for-profit organization whose members oppose the issuance of an ESP to EGC. Attached to the Clinton Petitioners hearing request are the affidavits of three PC members, each of whom states that PC is authorized to represent his or her interests. All three members reside within forty miles of the Clinton site. These individuals' asserted health, safety, and environmental interests and their agreement to permit PC to represent their interests are sufficient to establish PC's standing to intervene in this proceeding.

B. Clinton Petitioners Contentions

1. Contention Admissibility Standards

Section 2.309(f) of the Commission's rules of practice specifies the requirements that must be met if a contention is to be deemed admissible. Specifically, a contention must provide (1) a specific statement of the legal or factual issue sought to be raised; (2) a brief explanation of its basis; (3) a concise statement of the alleged facts or expert opinions, including references to specific sources and documents, that support the petitioner's position and upon which the petitioner intends to rely at hearing; and (4) sufficient information demonstrating that a genuine dispute exists in regard to a material issue of law or fact, including references to specific

portions of the application that the petitioner disputes, or in the case when the application is alleged to be deficient, the identification of such deficiencies and supporting reasons for this belief. See 10 C.F.R. § 2.309(f)(1)(i), (ii), (v), and (vi). In addition, the petitioner must demonstrate that the issue raised in the contention is both "within the scope of the proceeding" and "material to the findings the NRC must make to support the action that is involved in the proceeding." Id. § 2.309(f)(1)(iii)-(iv). Failure to comply with any of these requirements is grounds for dismissing a contention. See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), CLI-99-10, 49 NRC 318, 325 (1999); Arizona Public Service Company (Palo Verde Nuclear Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 143, 155-56 (1991).

NRC case law has further developed these requirements, as is summarized below:

a. Challenges to Statutory Requirements/Regulatory Process/Regulations

An adjudication is not the proper forum for challenging applicable statutory requirements or the basic structure of the agency's regulatory process. See Philadelphia Electric Co. (Peach Bottom Atomic Power Station, Units 2 and 3), ALAB-216, 8 AEC 13, 20, aff'd in part on other grounds, CLI-74-32, 8 AEC 217 (1974). Similarly, a contention that attacks a Commission rule, or which seeks to litigate a matter that is, or clearly is about to become, the subject of a rulemaking, is inadmissible. See 10 C.F.R. § 2.335; Potomac Electric Power Co. (Douglas Point Nuclear Generating Station, Units 1 and 2), ALAB-218, 8 AEC 79, 85, 89 (1974); see also Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Unit 2), CLI-03-14, 58 NRC 207, 218 (2003). This includes contentions that advocate stricter requirements than agency rules impose or that otherwise seek to litigate a generic determination established by a Commission rulemaking. See Florida Power and Light Company (Turkey Point Nuclear Generating Plant, Units 3 and 4), LBP-01-6, 53 NRC 138, 159 (2001); Pacific Gas and Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-93-1, 37 NRC 5, 29-30 (1993);

Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), LBP-82-106, 16 NRC 1649, 1656 (1982); see also Yankee Atomic Electric Co. (Yankee Nuclear Power Station), CLI-96-7, 43 NRC 235, 251 (1996); Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), LBP-91-19, 33 NRC 397, 410, aff'd in part and rev'd in part on other grounds, CLI-91-12, 34 NRC 149 (1991). By the same token, a contention that simply states the petitioner's views about what regulatory policy should be does not present a litigable issue. See Peach Bottom, ALAB-216, 8 AEC at 20-21 & n.33.

b. Challenges Outside Scope of Proceeding

All proffered contentions must be within the scope of the proceeding as defined by the Commission in its initial hearing notice and order referring the proceeding to the Licensing Board. See Florida Power and Light Company (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-00-23, 52 NRC 327, 329 (2000); Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-825, 22 NRC 785, 790-91 (1985). As a consequence, any contention that falls outside the specified scope of the proceeding must be rejected. See Portland General Electric Company (Trojan Nuclear Plant), ALAB-534, 9 NRC 287, 289-90 n.6 (1979).

c. Need for Adequate Factual Information or Expert Opinion

It is the petitioner's obligation to present the factual information and expert opinions necessary to support its contention. See Georgia Institute of Technology (Georgia Tech Research Reactor, Atlanta, Georgia), LBP-95-6, 41 NRC 281, 305, vacated in part and remanded on other grounds and aff'd in part, CLI-95-10, 42 NRC 1, and CLI-95-12, 42 NRC 111 (1995). Failure to provide such an explanation regarding the bases of a proffered contention requires the contention be rejected. See Palo Verde, CLI-91-12, 34 NRC at 155. In this connection, neither mere speculation nor bare or conclusory assertions, even by an expert, alleging that a matter should be considered will suffice to allow the admission of a proffered

contention. See Fansteel, Inc. (Muskogee, Oklahoma Site), CLI-03-13, 58 NRC 195, 203 (2003). If a petitioner neglects to provide the requisite support to its contentions, it is not within the Board's power to make assumptions of fact that favor the petitioner, nor may the Board supply information that is lacking. See Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), LBP-01-35, 54 NRC 403, 422 (2001); Georgia Tech Research Reactor, LBP-95-6, 41 NRC at 305.

Likewise, providing any material or document as a basis for a contention, without setting forth an explanation of its significance, is inadequate to support the admission of the contention. See Fansteel, CLI-03-13, 58 NRC at 205. Along these lines, any supporting material provided by a petitioner, including those portions of the material that are not relied upon, is subject to Board scrutiny. See Yankee Atomic Electric Company (Yankee Nuclear Power Station), LBP-96-2, 43 NRC 61, 90 (1996); rev'd in part on other grounds, CLI-96-7, 43 NRC 235 (1996). Thus, the material provided in support of a contention will be carefully examined by the Board to confirm that it does indeed supply an adequate basis for the contention. See Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Station), ALAB-919, 30 NRC 29, 48 (1989), vacated in part on other grounds and remanded, CLI-90-4, 31 NRC 333 (1990).

d. Materiality

In order to be admissible, the regulations require that all contentions assert an issue of law or fact that is material to the outcome of a licensing proceeding, meaning that, the subject matter of the contention must impact the grant or denial of a pending license application. See 10 C.F.R. § 2.309(f)(1)(iv). This requirement of materiality often dictates that any contention alleging deficiencies or errors in an application also indicate some significant link between the claimed deficiency and either the health and safety of the public or the environment. See

Yankee Nuclear, LBP-96-2, 43 NRC at 75; see also Pacific Gas & Electric Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), LBP-02-23, 56 NRC 413, 439-41(2002), petition for review denied, CLI-03-12, 58 NRC 185, 191 (2003). Agency case law further suggests this requirement of materiality mandates certain showings in specific contexts. For instance, a contention challenging whether an emergency response plan's provisions provide the requisite reasonable assurance based on the adequacy of implementing procedures for those provisions fails to present a material issue. See Louisiana Power and Light Co. (Waterford Steam Electric Station, Unit 3), ALAB-732, 17 NRC 1076, 1107 (1983).

e. Insufficient Challenges to Application

All properly formulated contentions must focus on the license application in question, challenging either specific portions of or alleged omissions from the application (including the SAR and ER) so as to establish that a genuine dispute exists with the applicant on a material issue of law or fact. See 10 C.F.R. § 2.309(f)(1)(vi). Any contention that fails directly to controvert the application or that mistakenly asserts the application does not address a relevant issue can be dismissed. See Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), LBP-93-23, 38 NRC 200, 247-48 (1993), review declined, CLI-94-2, 39 NRC 91 (1994); Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Unit 2), LBP-92-37, 36 NRC 370, 384 (1992).

2. Scope of Contentions

Although licensing boards generally are to litigate "contentions" rather than "bases," it has been recognized that "[t]he reach of a contention necessarily hinges upon its terms coupled with its stated bases." Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988), aff'd sub nom. Massachusetts v. NRC, 924 F.2d 311 (D.C. Cir.), cert. denied, 502 U.S. 899 (1991); see also 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). As outlined below, exercising our authority under 10 C.F.R. §§ 2.316, 2.319, 2.329, we have acted to further define and/or consolidate contentions when the issues sought to be raised by one or more of the petitioners appear related or when redrafting would clarify the scope of a contention.

3. Contentions Regarding Site Safety Analysis (SSA) Report

SSA 2.1 - FAILURE TO PROVIDE ADEQUATE SAFETY ASSESSMENT OF REACTOR INTERACTION

CONTENTION: The ESP application for the Clinton site fails to comply with 10 C.F.R. § 52.17 because its safety assessment does not contain an adequate analysis and evaluation of the major structures, systems, and components of the facility that bear significantly on the acceptability of the site under the radiological consequences evaluation factors identified in 10 C.F.R. § 50.34(a)(1). In particular, the safety assessment does not adequately take into account the potential effects on radiological accident consequences of co-locating new reactors with advanced designs next to an older reactor. The safety assessment should contain a comprehensive evaluation and analysis of the ways in which interaction of the old and new plants under accident conditions may exacerbate the consequences of a radiological accident. Without such an evaluation and analysis, the presiding officer cannot make a finding that, taking into consideration the site criteria in Part 100 of the regulations, the proposed reactors can be operated "without undue risk to the health and safety of the public." 10 C.F.R. § 52.21.

DISCUSSION: Contentions at 2-7; EGC Contentions Response at 8-11; Staff Contentions Response at 8-17; Tr. at 16-62.

RULING: Inadmissible, in that this contention and its supporting bases raise a matter that is not within the scope of this proceeding and/or impermissibly challenges Commission regulatory requirements. See section II.B.1. a, b.

This contention of omission alleges that the SSAR does not contain information relating to the design of the control room and equipment of the not-as-yet selected new plant; however, that information is not required to be specified at the ESP stage, which focuses upon acceptability of the site assuming the new plant falls within the applicant's submitted plant parameters envelope (PPE). It is neither possible nor necessary for the applicant to provide the requested level of detailed information about control room and equipment design at the ESP

stage of the licensing process. A challenge to the applicant's choice of control room and equipment design, which this contention posits, belongs in a proceeding under either Subparts B or C of the 10 C.F.R. Part 52 licensing process.

SSA 2.2 - FAILURE TO EVALUATE SITE SUITABILITY FOR BELOW-GRADE PLACEMENT OF REACTOR CONTAINMENT

CONTENTION: The Site Safety Analysis Report for the Clinton ESP application is inadequate because it does not evaluate the suitability of the site to locate the reactor containment below grade-level. Below-grade construction is advisable and appropriate, if not necessary, in order to maintain an adequate level of security in the post-9/11 threat environment.

DISCUSSION: Contentions at 7-12; EGC Contentions Response at 12-16; Staff Contentions Response at 17-21; Tr. at 64-115, 227-33.

RULING: Inadmissible, in that this contention and its supporting bases improperly challenge the Commission's regulatory requirements and/or raise an issue outside the scope of the proceeding. See section II.B.1.a, b above.

Petitioners would have this Board rely upon the provisions of 10 C.F.R. § 100.21(f), which require that site characteristics be such that adequate security plans and measures can be developed, to impose a new regulatory requirement to include analysis of below-grade placement in ESP applications. Because the regulations that govern an ESP application do not impose any requirement upon an applicant to select any particular plant design or surface/subsurface location, this contention improperly challenges Commission regulations.

In fact, this contention does not raise any question of site suitability, which is the focus of the ESP proceeding, but instead essentially raises a "policy" matter, i.e., whether or not a site approval hearing "today" should attempt to project future requirements or needs in the site review process. A contention that attempts to litigate the merits of below-grade reactor

placement and requires speculation about the Commission's possible future modification of the review process is not within the scope of this proceeding.

3. Environmental Contentions (EC)

EC 3.1 - THE CLEAN ENERGY ALTERNATIVES CONTENTION

CONTENTION: The Environmental Review fails to rigorously explore and objectively evaluate all reasonable alternatives. In Section 9.2 of the Environmental Report, Exelon claims to satisfy 10 C.F.R. § 51.45(b)(3), which requires a discussion of alternatives that is "sufficiently complete to aid the Commission in developing and exploring" "appropriate alternatives . . . concerning alternative uses of available resources," pursuant to the National Environmental Policy Act. However, Exelon's analysis is premised on several material legal and factual flaws that lead it to improperly reject better, lower-cost, safer, and environmentally preferable energy efficiency, renewable energy resource, distributed generation, and "clean coal" resource alternatives. Therefore, Exelon's ER does not provide the basis for the rigorous exploration and objective evaluation of all reasonable alternatives to the ESP that is required by NEPA.

DISCUSSION: Supplemental Request at 1-14; EGC Contentions Response at 17-28; Staff Contentions Response at 22-28; Clinton Petitioners Reply at 2-10; Tr. at 186-219.

RULING: Inadmissible, to the degree this contention and its supporting bases (Bases A, B, and D) raise matters outside the scope of this proceeding and/or impermissibly challenge the Commission's regulations as the contention asserts consideration of the "need for power" is required in an ER associated with an ESP. See section II.B.1.a, b above; see also 10 C.F.R. §§ 52.17(a)(2), 52.18.

Also outside the scope of this proceeding and/or an impermissible challenge to the Commission's regulation is the Clinton Petitioners' claim that EGC must consider such alternatives as energy conservation (demand side management) or other alternative generation methods that are not typically employed by independent power generators would require an analysis of energy conservation methods that essentially equates to a "need for power" analysis that is outside the scope of this proceeding and/or an impermissible challenge to the Commission's regulations. In this regard, we agree with EGC that in preparing information on any energy generation method alternative for an ER, it is appropriate for the applicant fully to

consider its own business objectives and status as an independent power provider -- as opposed to a public utility -- as it analyzes alternatives.

Finally, to the extent the contention and its bases challenge the ER discussion of the combination of coal and gas-fired generation (Basis C) and distributed gas-fired generation (Basis E3), it is inadmissible as failing adequately to challenge the ER discussion regarding those subject. See section II.B.1.e above. This contention is, however, admitted as supported by bases sufficient to raise genuine issues of material fact adequate to warrant further inquiry to the degree it alleges (a) a failure by EGC in its evaluation of the alternatives that could be used by an independent power provider in its power generation mix adequately to address a combination of wind power, solar power, natural gas-fired generation, and "clean coal" technology (Basis C); and (b) the applicant's use of potentially flawed and outdated information regarding wind and solar power generation methods (Bases E1 and E2).

A revised version of this contention incorporating this ruling is set forth in Appendix A to this memorandum and order.

EC 3.2 - THE WASTE CONFIDENCE RULE CONTENTION

CONTENTION: The Waste Confidence Rule does not apply to this proceeding and thus the Environmental Review must evaluate whether and in what time frame spent fuel generated by the proposed new Clinton 2 plant can be safely disposed of. The ER for the Clinton ESP application is deficient because it fails to discuss the environmental implications of the lack of options for permanent disposal of the irradiated fuel that will be generated by the proposed new Clinton nuclear plant if it is built and operated. Nor has the NRC made an assessment on which Exelon can rely regarding the degree of assurance now available that radioactive waste generated by the proposed reactors "can be safely disposed of [and] when such disposal or off-site storage will be available." Final Waste Confidence Decision, 49 Fed. Reg. 34,658 (August 31, 1984), citing State of Minnesota v. NRC, 602 F.2d 412 (D.C. Cir. 1979). Accordingly, the ER fails to provide a sufficient discussion of the environmental impacts of the proposed new nuclear reactors.

DISCUSSION: Supplemental Request at 14-18; EGC Contentions Response at 29-32; Staff Contentions Response at 28-33; Clinton Petitioners Reply at 10-15; Tr. at 140-80.

RULING: Inadmissible, in that this contention and its supporting bases impermissibly challenge the Commission's regulatory requirements. See section II.B.1.a above. The matters the petitioners seek to raise have been generically addressed by the Commission through the Waste Confidence Rule, the plain language of which states:

> [T]he Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century, and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the commercial high-level waste and spent fuel originating in such reactor and generated up to that time.

10 C.F.R. § 51.23(a) (emphasis added). Furthermore, when the Commission amended this rule in 1990, it clearly contemplated and intended to include waste produced by a new generation of reactors.[7]

EC 3.3 - EVEN IF THE WASTE CONFIDENCE DECISION APPLIES TO THIS PROCEEDING, IT SHOULD BE RECONSIDERED

CONTENTION: As discussed in a contention submitted separately by Petitioners in conjunction with the Environmental Law and Policy Center, Petitioners do not believe that the Waste Confidence decision applies to this proceeding. Even if the Waste Confidence Decision is found to apply to this proceeding, however, it should be reconsidered, in light of significant and pertinent unexpected events that raise substantial doubt about its continuing validity, i.e., the increased threat of terrorist attacks against U.S. facilities.

DISCUSSION: Contentions at 12-14; EGC Contentions Response at 32-34; Staff Contentions Response at 28-33; Tr. at 180-85.

RULING: Inadmissible, in that the contention and its supporting bases raise a matter that is not within the scope of this proceeding and/or impermissibly seek to challenge a Commission regulatory requirement. See section II.B.1.a, b above. Absent a showing of

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[7] See 55 Fed. Reg. 38,474, 38,504 (Sept. 18, 1990) ("The availability of a second repository would permit spent fuel to be shipped offsite well within 30 years after expiration of [the current fleet of] reactors' [operating licenses]. The same would be true of the spent fuel discharged from any new generation of reactor designs."); see also id. at 38,501-04.

"special circumstances" under 10 C.F.R. § 2.335(b), which the petitioners have not made, this matter must be addressed through Commission rulemaking.

4. Miscellaneous Contention (MC)

MC 5.1 - ILLINOIS STATE MORATORIUM STATUTE CONTENTION

CONTENTION: The Illinois state law imposing a moratorium on new nuclear plants forecloses the issuance of an ESP for Clinton 2. Exelon's ESP permit application fails to address the Illinois statute, 220 ILCS 5/8-406(c), which prohibits any new nuclear power plant within the state until such time as the Director of the Illinois Environmental Protection Agency ("IEPA") finds that the United States government has identified and approved a demonstrable techno logy or means for the disposal of high-level nuclear waste. The Director of the IEPA has, properly, not made the requisite finding, meaning that no new nuclear plant may now be built in Illinois and the issuance of an ESP is legally foreclosed.

DISCUSSION: Supplemental Request at 18-21; EGC Contentions Response at 34-38; Staff Contentions Response at 3335; Clinton Petitioners Reply at 16-18; Tr. at 379-400.

RULING: Inadmissible, in that this contention and its supporting basis raises a matter outside the scope of this proceeding and/or fails to raise a material legal or factual dispute. See section II.B.1.b, d above. This contention concerns the authority of the Director of the Illinois Environmental Protection Agency. An NRC adjudicatory proceeding is not the proper forum for seeking to litigate and resolve controversies about other governmental agencies' permitting authority. See Hydro Resources, Inc. (2929 Coors Road, Suite 101, Albuquerque, NM 87120), CLI-98-16, 48 NRC 119, 122 n.3 (1998); see also Consumers Power Co. (Palisades Nuclear Plant), LBP-79-20, 10 NRC 108, 124 (1979). In addition, the Clinton Petitioners do not contend that the Illinois State laws they cite bind this Board or the agency of which it is part, and the parties agree that issuance of an ESP will have no effect whatsoever on the rights of Illinois State agencies to enforce State laws restricting the issuance of construction authorizations or certificates of convenience and necessity, making the outcome of this ESP proceeding immaterial relative to the matter raised by this contention.

III. PROCEDURAL/ADMINISTRATIVE MATTERS

As indicated above, the Clinton Petitioners are admitted as parties to this proceeding as they each have established standing and have set forth at least one admissible contention. Below is procedural guidance for further litigating the above-admitted contentions.

Unless all parties agree that this proceeding should be conducted pursuant to 10 C.F.R. Part 2, Subpart N, this proceeding will be conducted in accordance with the procedures of 10 C.F.R. Part 2, Subparts C and L. Assuming the parties do not consent to conducting this proceeding under Subpart N, per our discussion at the end of the June 2004 prehearing conference (Tr. at 401), the parties should meet within ten days of the date of this issuance to discuss their particular claims and defenses and the possibility of settlement or resolution of any part of the proceeding and make arrangements for the required disclosures under 10 C.F.R. § 2.336(a).[8]

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[8] In this regard, among the items to be discussed is whether the staff's section 2.336(b) hearing file can be provided electronically via the NRC web site sooner than 30 days from the date of this issuance.

Relative to the staff's hearing file, in accord with 10 C.F.R. § 2.336(b), in creating and providing the hearing file for this proceeding, the staff can utilize one of two options:

1. Hard copy file. The hearing file that is submitted to the Licensing Board and the parties in hard copy must contain a chronologically numbered index of each item contained in it and each file item shall be separately tabbed in accordance with the index and be separated from the other file items by a substantial colored sheet of paper that contains the tab(s) for the immediately following item. Additionally, the items shall be housed in hole-punched three ring binders of no more than four inches in thickness.

2. Electronic file. For an electronic hearing file, the staff shall make available to the parties and the Licensing Board a list that contains the ADAMS accession number, date and title of each item so as to make the item readily retrievable from the agency's web site, www.nrc.gov., using the ADAMS "Find" function. Additionally, the staff should create a separate folder in the agency's ADAMS system, which it should label "Exelon Generation Company - 52-007-ESP Hearing File," and give James Cutchin of ASLBP and the SECY group (Office of the Secretary) viewer rights to that folder. Once created, the staff should place in that

(continued...)

The Board will oversee the discovery process through status reports and/or conferences, and expects that each of the parties will comply with the process to the maximum extent possible, with failure to do so resulting in appropriate Board sanctions.[9] In this regard, the Board will conduct a prehearing conference call to discuss initial discovery disclosures, scheduling and other matters on a date to be established by the Board in a subsequent order. Additionally, during that prehearing conference the parties should be prepared to provide

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[8](...continued)
folder copies of the ADAMS files for all the Hearing Docket materials. For documents in ADAMS packages a subfolder should be created into which the package content should be placed. The subfolder should have a title that comports with the title of the package. Thereafter, as part of its notice to the parties and the Licensing Board regarding the availability of the Hearing File materials in ADAMS, the staff should advise the Licensing Board that this process is complete and the "Hearing File" folder is available for viewing. (As an information matter for the parties, once this notice is received, the contents of the folder will be copied so as to make its contents available to an ASLBP-created ADAMS folder that will be accessible to ASLBP personnel only and into a folder that will be accessible by the parties from the NRC web site.)

If the staff thereafter provides any updates to the hearing file, it should place a copy of those items in "Exelon Generation Company - 52-007-ESP Hearing File" ADAMS folder and indicate it has done so in the notification regarding the update that is then sent to the Licensing Board and the parties. Additionally, if at any juncture the staff anticipates placing any non-public documents into the hearing file for the proceeding, it should notify the Licensing Board of that intent prior to placing those documents into the "Exelon Generation Company - 52-007-ESP Hearing File" and await further instructions regarding those documents from the Licensing Board. (Questions regarding the electronic hearing file creation process should be addressed to James Cutchin at 301-415-7397 or jmc3@nrc.gov.)

If the staff decides to utilize option two, as part of the discovery report required under this section it should give notice to the Licensing Board and the parties of that election. If any party objects to this method of providing the hearing file, it shall file a response within seven days outlining the reasons why access to an electronic hearing file will place an undue burden on that party's ability to participate in this proceeding.

[9] In this regard, when a party claims privilege and withholds information otherwise discoverable under the rules, the party shall expressly make the claim and describe the nature of what is not being disclosed to the extent that, without revealing what is sought to be protected, other parties will be able to determine the applicability of the privilege or protection. The claim and identification of privileged materials must occur within the time provided for such disclosure of the withheld materials. See 10 C.F.R. § 2.336(a)(3), (b)(5).

estimates (discussed during their meeting) regarding exactly when this case will be ready to go to hearing and the time necessary to try the admitted contention if it were to go to hearing.[10] They also should be prepared to indicate the status of any settlement negotiations relative to the admitted contention, and whether a "settlement judge" would be helpful in those discussions.

IV. CONCLUSION

For the reasons set forth above, we find that the Clinton Petitioners have established their standing to intervene and have put forth one litigable contention so as to be entitled to party status in this proceeding. The text of their admitted contention is set forth in Appendix A to this decision.

For the foregoing reasons, it is this sixth day of August, ORDERED, that:

1. Relative to the contentions specified in paragraph two below, the Clinton Petitioners hearing request is granted and these petitioners are admitted as parties to this proceeding.

2. The following petitioner contention is admitted for litigation in this proceeding: EC-3.1.

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[10] EGC and the staff also should be prepared to provide their views on how the Board should proceed relative to the "mandatory hearing" findings required of the Board under the December 2003 hearing notice. See 68 Fed. Reg. at 69,427. In this regard, we ask that these parties provide their views on the difference, if any, between what is required under this mandatory hearing proceeding and that involving the proposed Louisiana Energy Services, L.P. uranium enrichment facility relative to matters that are not the subject of admitted contentions. Compare Louisiana Energy Services, L.P. (National Enrichment Facility), CLI-04-3, 59 NRC 10, 12-13 (2004).

3. The following petitioner contentions are rejected as inadmissible for litigation in this proceeding: SAR 2.1, SAR 2.2, EC 3.2, EC 3.3, MC 5.1.

4. The parties are to take the actions required by section III above in accordance with the schedule established herein.

5. In accordance with the provisions of 10 C.F.R. § 2.311, as it rules upon intervention petitions, any appeal to the Commission from this memorandum and order must be taken within ten (10) days after it is served.

THE ATOMIC SAFETY
AND LICENSING BOARD[11]

/RA/

G. Paul Bollwerk, III
ADMINISTRATIVE JUDGE

/RA/

Paul B. Abramson
ADMINISTRATIVE JUDGE

/RA/

Anthony J. Baratta
ADMINISTRATIVE JUDGE

Rockville, Maryland

August 6, 2004

[11] Copies of this memorandum and order were sent this date by Internet e-mail transmission to counsel for (1) applicant EGC; (2) the Clinton Petitioners; and (3) the staff.

APPENDIX A

ADMITTED CONTENTION

EC 3.1 - THE CLEAN ENERGY ALTERNATIVES CONTENTION

CONTENTION: The Environmental Review fails to rigorously explore and objectively evaluate all reasonable alternatives. In Section 9.2 of the Environmental Report, Exelon claims to satisfy 10 C.F.R. § 51.45(b)(3), which requires a discussion of alternatives that is "sufficiently complete to aid the Commission in developing and exploring" "appropriate alternatives . . . concerning alternative uses of available resources," pursuant to the National Environmental Policy Act. However, Exelon's analysis is premised on several material legal and factual flaws that lead it to improperly reject the better, lower-cost, safer, and environmentally preferable wind power and solar power alternatives, and fails to address adequately a mix of these alternatives along with the gas-fired generation and "clean coal" resource alternatives. Therefore, Exelon's ER does not provide the basis for the rigorous exploration and objective evaluation of all reasonable alternatives to the ESP that is required by NEPA.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
EXELON GENERATION COMPANY, LLC	)	Docket No. 52-007-ESP
	)	
	)	
(Early Site Permit for Clinton ESP Site)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB MEMORANDUM AND ORDER (RULING ON STANDING AND CONTENTIONS) (LBP-04-17) have been served upon the following persons by deposit in the U.S. mail, first class, or through NRC internal distribution.

Office of Commission Appellate
Adjudication
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Administrative Judge
Dr. Paul B. Abramson, Chair
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Administrative Judge
Dr. David L. Hetrick
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Administrative Judge
Dr. Anthony J. Baratta
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Ann P. Hodgdon, Esq.
Tyson R. Smith, Esq.
Darani M. Reddick, Esq.
Office of the General Counsel
Mail Stop - O-15 D21
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dave Kraft, Executive Director
Nuclear Energy Information Service
P.O. Box 1637
Evanston, IL 60204-1637

Paul Gunter, Director
Reactor Watchdog Project
Nuclear Information and Resource Service
1424 16th St., NW, Suite 404
Washington, DC 20036

Michele Boyd
Public Citizen
215 Pennsylvania Ave., SE
Washington, DC 20003

Howard A. Learner, Esq.
Ann Alexander, Esq.
Shannon Fisk, Esq.
Environmental Law and Policy Center
35 E. Wacker Dr., Suite 1300
Chicago, IL 60601

Thomas S. O'Neill, Esq.
Associate General Counsel
Exelon Nuclear
4300 Winfield Rd.
Warrenville, IL 60555

Steven P. Frantz, Esq.
Paul M. Bessette, Esq.
Alex S. Polonsky, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Ave., NW
Washington, DC 20004

Diane Curran, Esq.
Harmon, Curran, Spielberg
& Eisenberg, L.L.P.
1726 M Street, NW, Suite 600
Washington, DC 20036

[Original signed by Emile L. Julian]

Office of the Secretary of the Commission

Dated at Rockville, Maryland,
this 6th day of August 2004

LBP-05-19

RAS 10202

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED 07/28/05

ATOMIC SAFETY AND LICENSING BOARD

SERVED 07/28/05

Before Administrative Judges:

Dr. Paul B. Abramson, Chairman
Dr. Anthony J. Baratta
Dr. David L. Hetrick

In the Matter of	Docket No. 52-007-ESP
EXELON GENERATION COMPANY, LLC	ASLBP No. 04-821-01-ESP
(Early Site Permit for Clinton ESP Site)	July 28, 2005

MEMORANDUM AND ORDER
(Ruling on Motion for Summary Disposition Regarding Contention 3.1
and Petition for Admission of Amended Contention)

I. INTRODUCTION

On September 25, 2003, Exelon Generation Company, LLC ("EGC" or "Applicant") submitted an application to the Nuclear Regulatory Commission (the "Agency") for a 10 C.F.R. Part 52 early site permit ("ESP"), seeking approval of its site in DeWitt County, Illinois (approximately six miles east of Clinton, Illinois, and commonly referred to as the "Clinton Site") for the possible construction of one or more new nuclear reactors in addition to those already licensed and operating thereon. This decision presents the Licensing Board's rulings in respect of: (1) Applicant's motion to dismiss the single admitted environmental contention regarding energy alternatives jointly proffered by intervenors Environmental Law and Policy Center, Blue Ridge Environmental Defense League, Nuclear Information and Resource Service, Nuclear Energy Information Service, and Public Citizen (collectively, "Intervenors"); and (2) Intervenors' motion to amend that contention in light of information made available since the filing of the original Environmental Report ("ER") by the Applicant.

Contention 3.1, the Clean Energy Alternatives Contention, as admitted, states:

> The Environmental Review fails to rigorously explore and objectively evaluate all reasonable alternatives. In Section 9.2 of the Environmental Report, Exelon claims to satisfy 10 C.F.R. § 51.45(b)(3), which requires a discussion of alternatives that is "sufficiently complete to aid the Commission in developing and exploring" "appropriate alternatives . . . concerning alternative uses of available resources," pursuant to the National Environmental Policy Act. However, Exelon's analysis is premised on several material legal and factual flaws that lead it to improperly reject the better, lower-cost, safer, and environmentally preferable wind power and solar power alternatives, and fails to address adequately a mix of these alternatives along with gas-fired generation and "clean coal" resource alternatives. Therefore, Exelon's ER does not provide the basis for the rigorous exploration and objective evaluation of all reasonable alternatives to the ESP that is required by NEPA.[1]

By letter dated September 23, 2004, the Applicant submitted additional information to the NRC Staff in response to Requests for Additional Information ("RAI"), copies of which were sent to the Intervenors.[2] That information, among other things, addressed alleged shortcomings in the ER by providing analyses of combinations of wind and solar generation with natural gas and/or clean coal-fired generation and by providing substantial new data, including responses incorporating material portions of the information Intervenors alleged in Contention 3.1 to be missing from the ER. Based in part on its RAI responses, on March 17, 2005, the Applicant moved for summary disposition of Contention 3.1, arguing, *first*, the original contention involved an asserted omission that has since been cured and therefore should now be dismissed as moot,[3] and, *second,* in light of the new analyses, and examination and weighing of updated information, there remains no genuine issue of material fact regarding

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[1] LBP-04-17, 60 NRC 229, 252 (2004).

[2] See Exelon's Motion for Summary Disposition of Contention 3.1 (Mar. 17, 2005) at 2 n.3 [hereinafter Summary Disposition Motion].

[3] See id. at 2, 13-15 (arguing contention moot because RAI response provides allegedly missing analyses, and incorporates and evaluates new and updated information, including that referred to by Intervenors).

wind and solar power and/or combinations thereof.[4]

In response, following a prehearing conference call[5] and several exchanges of motions, responses, and orders among the Board and the Parties,[6] on April 22, 2005, the Intervenors moved to amend the original contention to address the new or differing information now incorporated into the Applicant's documents and/or appearing in the Staff's Draft Environmental Impact Statement ("DEIS") regarding the Clinton ESP.[7] These proposed amendments make three general assertions: *first*, notwithstanding this Board's original Order of August 6, 2004 rejecting an essentially identical challenge raised in Intervenors' initial petition to intervene,[8] Intervenors repeat their contention that the ER, and now the DEIS, are flawed because they improperly accept a project purpose of baseload[9] power production (thereby excluding, *ab initio*, consideration of energy efficiency alternatives); *second*, Intervenors contend that, because of the Applicant and/or Staff's use of erroneous and/or outdated data, the negative environmental effects of clean energy alternatives as well as those of combinations of wind, solar, and fossil

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[4] See id. at 2.

[5] See Tr. at 450-71 (Apr. 4, 2005 Conference Call).

[6] See, e.g., Intervenors' Response to Exelon's Motion for Summary Disposition of Contention 3.1 (Apr. 6, 2005) [hereinafter Intervenors' Response to Summary Disposition Motion]; Licensing Board Memorandum and Order (Denying, Following Reconsideration, Filing Extension Request) (Mar. 30, 2005) (unpublished) [hereinafter March 30 Order]; Licensing Board Memorandum and Order (Denying Filing Extension Request) (Mar. 23, 2005) (unpublished) [hereinafter March 23 Order].

[7] See Intervenors' Motion to Amend Contention 3.1 (Apr. 22, 2005) [hereinafter Motion to Amend].

[8] See LBP-04-17, 60 NRC at 245-46.

[9] "Baseload" power plants are designed to operate continuously at a constant power level, as opposed to plants whose output is variable (either unintentionally because of variations in the energy source (e.g., solar, wind), or intentionally, where the equipment is capable, to follow the system load). System-wide fluctuations in demand are satisfied by peaking plants, which can respond to variable demand, including those caused by variations in power supplied by wind, solar, and other power suppliers whose power output varies with the natural conditions.

are overestimated while those for nuclear are underestimated, leading to an incorrect weighing of the alternatives vis-a-vis the proposed nuclear reactor(s); and, *third*, Intervenors contend that, also because of the use of erroneous and/or outdated data, the cost of power generated by wind and solar is inaccurately overestimated while that for new nuclear is underestimated, leading to an incorrect weighing of the alternatives.[10]

Before the Board, therefore, are two closely related motions whose resolution we herein treat concurrently:

(a) the March 17, 2005 Motion for Summary Disposition of Contention 3.1 submitted by the Applicant, Exelon Generation Company, LLC; and

(b) the April 22, 2005 Motion to Amend Contention 3.1 submitted by Intervenors.

For the reasons set forth in detail below, we find: (1) Intervenors' proposed Amended Contention 3.1 is inadmissible (primarily because, as discussed in depth below, they were impermissible challenges to our regulations which had been previously considered and rejected by this Board, the facts offered in support of the proposed amendment either did not differ at all or differed insignificantly from those considered by the Applicant, and because Intervenors have shown no genuine issue of material fact or law in the amended contention); (2) no genuine issue of material fact remains regarding Contention 3.1 as admitted, and the contention is

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[10] Regarding the examination of the "mix" of generation sources, EGC argues that the RAI response considers in detail these alternatives both separately and in a mix with gas-fired and coal resource alternatives. See Summary Disposition Motion at 13. EGC also continues to argue, however, that its goal is the generation of "baseload" power, and that the Board has ruled that it need only consider alternatives which can provide "baseload." See id. at 9-10. To be sure, the Board said "it is appropriate for the Applicant fully to consider its own business objectives and status as an independent power provider -- as opposed to a public utility -- as it analyzes alternatives." See LBP-04-17, 60 NRC at 246 (emphasis added). While these are EGC's stated goals and we have held that it is appropriate for EGC fully to consider its business objectives, independent of what is appropriate for the applicant, the NRC, as the agency taking the relevant "federal action," must satisfy the National Environmental Policy Act requirements to look at reasonable alternatives; thus the content of the DEIS can appropriately be examined to assure, in the context of Contention 3.1 as amended by Intervenors, that it addresses reasonable combinations. These matters are examined in depth in the body of this decision.

resolved in favor of the Applicant as moot; and (3) because no outstanding contention remains to be litigated in this proceeding, the contested portion of this proceeding is terminated.

II. BACKGROUND

Following the September 25, 2003 submission by EGC of its ESP application pursuant to Subpart A of Part 52 for an Early Site Permit for the possible construction of one or more new nuclear reactors at the Clinton Site, on December 8, 2003, the Commission issued a notice of hearing and opportunity to intervene in the EGC application, which was subsequently published in the Federal Register.[11] Under the Part 52 regulations, an application for an ESP allows the applicant and the Staff (and other interested parties) to address certain key site-related environmental, safety, and emergency planning issues before the applicant has made the decision to build or selected the specific design of a potential facility on that site.[12] The Intervenors responded to the Federal Register notice, filing with the Commission a joint request for a hearing and petition to intervene in the proceeding on the ESP application,[13] which the Commission then referred to the Atomic Safety and Licensing Board Panel for consideration.[14] On March 8, 2004, the Panel's Chief Administrative Judge issued an initial prehearing order which, among other things, established a May 3, 2004 deadline for filing contentions in this proceeding and permitted petitioners to supplement their initial petitions with additional

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[11] 68 Fed. Reg. 69,426 (Dec. 12, 2003).

[12] See 10 C.F.R. Part 52, Subpart A.

[13] See Hearing Request and Petition to Intervene By [the Intervenors] (Jan. 12, 2004). During this same time period, two other companies, Dominion Nuclear North Anna, LLC ("North Anna") and System Energy Resources, Inc. ("Grand Gulf"), also filed ESP applications. See LBP-04-17, 60 NRC at 235.

[14] See CLI-04-08, 59 NRC 113 (2004).

standing-related information.[15] Thereafter, a Licensing Board ("Standing/Contentions Board") was constituted to adjudicate preliminary matters, including contention admissibility, in this proceeding.[16]

On March 22, 2004, the Standing/Contentions Board issued a Memorandum and Order scheduling an Initial Prehearing Conference for June 21, 2004.[17] On May 3 and May 28, 2004, respectively, the Intervenors filed their contentions/supplemental petitions, and EGC and the Staff their responses.[18] On June 21-22, 2004, the Standing/Contentions Board held a two-day prehearing conference at which the Intervenors, the Applicant, and the NRC Staff gave oral presentations regarding the standing of each of the Intervenors (then Petitioners) and the admissibility of proffered contentions.[19]

In an August 6, 2004 Memorandum and Order, the Standing/Contentions Board issued its ruling on standing and contention admissibility, finding that each of the Intervenors in the Clinton application had shown standing to intervene, but admitting only one of the several proffered contentions.[20] Specifically, the Standing/Contentions Board admitted a revised

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[15] See Licensing Board Panel Memorandum and Order (Initial Prehearing Order) (Mar. 8, 2004) at 2-3 (unpublished).

[16] See 69 Fed. Reg. 15,910 (Mar. 26, 2004). To ensure efficiency and uniformity among the three ESP proceedings, three Licensing Boards, each with the same membership, were established to consider jointly preliminary matters in the ESP proceedings. See LBP-04-17, 60 NRC at 235, 236 n.3. For simplicity's sake, we will hereafter refer to this first Board in the EGC ESP proceeding as the Standing/Contentions Board. All other references to the Licensing Board in this proceeding (e.g., the Board, this Board, we) refer to the Licensing Board as reconstituted on August 6, 2004. See 69 Fed. Reg. 49,916 (Aug. 12, 2004).

[17] See Licensing Board Memorandum and Order (Scheduling Initial Prehearing Conference) (Mar. 22, 2004) (unpublished).

[18] See LBP-04-17, 60 NRC at 236-37.

[19] See id. at 237-38.

[20] See id. at 238-40, 245-46.

version of Environmental Contention ("EC") 3.1 – The Clean Energy Alternatives Contention, finding that contention admissible only to the extent that it alleged: (a) a failure by the Applicant in its evaluation of energy resource alternatives in its power generation mix adequately to address a combination of wind, solar, natural gas-fired, and "clean coal" power generation; and (b) Applicant's use of potentially flawed and/or outdated information regarding wind and solar power generation methods.[21] This revision narrowed the scope of EC 3.1 (now referred to simply as Contention 3.1) to a considerable degree,[22] as discussed further below. That same day, following its rulings on standing and contention admissibility, the membership of the Board was reconstituted, forming the current Board in this proceeding.[23]

On August 23, 2004, the Intervenors filed with the Commission a petition for interlocutory review of the Standing/Contentions Board's rejection of that portion of Contention 3.1 pertaining to energy efficiency issues.[24] The Commission issued a ruling on November 10, 2004, denying Intervenors' petition for review, and expressing no view on the merits of the claim that the Standing/Contentions Board improperly excluded energy efficiency issues.[25]

In the interim, the NRC Staff issued to the Applicant RAI E9.2-1, asking that EGC provide information to address the admitted contention. The Applicant responded to the RAI in

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[21] See id. at 246.

[22] See id. at 252; supra p. 2. Specifically, the Standing/Contentions Board rejected portions of the Intervenors' proffered Contention 3.1 pertaining to the "need for power" and "demand side management," or energy conservation, as outside the scope of the proceeding and/or an impermissible challenge to Commission's regulations, see LBP-04-17, 60 NRC at 245, and found that the Applicant need not consider alternative energy generation methods not typically used by an independent power provider, as such an analysis would essentially equate to a "need for power" analysis. See id.

[23] See 69 Fed. Reg. 49,916.

[24] See Petition of [Intervenors] for Interlocutory Review of the Licensing Board Panel's Rejection of Energy Efficiency Alternatives Contention (Aug. 23, 2004).

[25] See CLI-04-31, 60 NRC 461 (2004).

a letter to the Staff dated September 23, 2004, providing an analysis of solar and wind power and combinations of wind and solar with coal and natural gas-fired facilities that, in combination, could generate baseload power equivalent to the proposed nuclear facility.[26] Following the circulation of the Applicant's response, on October 19, 2004, this Board held a prehearing conference call to discuss, among other things, the RAI response. During that call, the Staff advised the Board that it required time to review the response in order to determine whether to issue additional RAIs, and the Intervenors stated their position that, even taking into account the RAI response, the application was still deficient relative to the claims set out in Contention 3.1.[27]

On March 2, 2005, the Staff issued its Draft Environmental Impact Statement ("DEIS") regarding the Applicant's ESP for the Clinton Site.[28] Chapter 8 of the DEIS contains an evaluation of the various alternative sources of power generation such as wind and solar, including combinations of alternatives that could generate baseload power equivalent to what would be generated by the Applicant's proposed ESP facility.[29] The Staff concluded, based in part on its review of the Applicant's ER and its RAI response, that wind and solar power, alone or in combination with other alternatives, are not reasonable alternatives to the proposed ESP facility.[30] In addition, the Staff concluded that a new nuclear unit at the Clinton Site is

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[26] See Letter from S. Frantz, Counsel for EGC, to Licensing Board (Sept. 24, 2004), Encl. 2, at 4 [hereinafter RAI Response]. Though the Applicant provided the RAI responses to the Staff on September 23, those responses were not provided to the Board or parties (or, for that matter, added to the record in this proceeding) until September 24.

[27] See Tr. at 430-449; Licensing Board Memorandum and Order (Establishing Hearing Schedule) (Oct. 27, 2004) at 1 (unpublished).

[28] See Draft Environmental Impact Statement for an Early Site Permit (ESP) at the Exelon ESP Site, NUREG-1815 (Feb. 2005) [hereinafter DEIS].

[29] See id. at ch. 8.

[30] See id. at 8-16 to 8-18.

environmentally equivalent or preferable to a coal or natural gas-fired facility, or a reasonable combination of power generation alternatives.[31]

Following the Staff's issuance of its DEIS, on March 17, 2005, the Applicant filed a motion for summary disposition of Contention 3.1 and requested that, because no other contention has been admitted in this proceeding, the Intervenors be dismissed from the proceeding.[32] Specifically, the Applicant argues that: (1) Contention 3.1 is a contention asserting an omission and, by providing the information sought by the Intervenors in that contention, the Applicant has cured the alleged omission;[33] (2) even if Contention 3.1 is not a contention of omission subject to cure, there is no genuine issue of material fact regarding wind or solar power or combinations thereof, and the Board should therefore dispose of the contention; and (3) should the Board grant summary disposition of Contention 3.1, we should also dismiss the Intervenors from the proceeding on this application given that no further contested issues will remain between the parties.[34] On April 6, 2005, the Intervenors and the Staff each submitted responses to the Applicant's motion. For their part, the Intervenors assert that neither of the Applicant's grounds for dismissal is supported by the record, in that: (1) Contention 3.1 is not a contention of omission subject to cure, and, even if the contention is so construed, those omissions have not been cured; and (2) genuine disputes of material fact remain between the parties regarding the environmental impacts and economic costs of new

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[31] See id. at 8-21 to 8-22.

[32] See Summary Disposition Motion.

[33] Following the Applicant's motion, but prior to receiving responses from the Intervenors and the Staff, we issued two orders, each of which repeated our earlier finding that Contention 3.1 is indeed a contention of omission subject to cure, and further stated that any challenge to the substance of information supplied by the Applicant in its RAI response or the Staff in its DEIS must take the form of a motion to amend Contention 3.1 or to file a new contention. See March 30 Order at 2-3; March 23 Order at 1-4.

[34] See Summary Disposition Motion at 1-3.

nuclear power versus clean energy alternatives.[35] The Staff agreed with the Applicant to the extent that it avers that Contention 3.1 is a contention of omission which has been cured and is therefore moot, and that there is no genuine issue of material fact with respect to this contention.[36]

Thereafter, on April 22, 2005, the Intervenors filed a motion to amend Contention 3.1, alleging that: (1) the energy alternatives discussions by the Applicant and the Staff wrongly accept as a project purpose the creation of baseload power, thereby improperly excluding reasonable energy efficiency alternatives; (2) the Applicant and the Staff underestimate the environmental impacts of a new nuclear facility and overestimate the impacts of clean energy alternatives, thereby incorrectly concluding that those alternatives are not preferable to new nuclear power; (3) the Applicant, on whose filings the DEIS heavily relies, improperly concludes that new nuclear power would be less costly than clean energy alternatives; and (4) the Applicant and Staff fail to adequately analyze combinations of clean energy sources, providing only an analysis that unfairly favors nuclear power.[37]

On May 6, 2005, the Applicant and the Staff each responded to the Intervenors' motion. The Applicant contends that the Board should reject amended Contention 3.1 in that Intervenors motion: (1) does not satisfy the late-filing criteria or the general contention admissibility standards set out, respectively, at 10 C.F.R. §§ 2.309(c) and (f); (2) raises issues previously rejected by this Board; (3) improperly challenges certain Commission rules and/or regulations; and (4) fails to demonstrate that a genuine dispute of a material issue of law or fact

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[35] See Intervenors' Response to Summary Disposition Motion at 1-2.

[36] See NRC Staff Answer to Exelon's Motion for Summary Disposition of Contention 3.1 (Apr. 6, 2005) at 1-2 [hereinafter Staff Response to Summary Disposition Motion]. The Staff, however, is silent on the issue of whether the Board should dismiss Intervenors from the proceeding on this Application.

[37] See Motion to Amend at 2-3.

exists relative to issues raised in the amended contention.[38] For its part, the Staff submits that each issue in the amended contention fails in some way to satisfy the Section 2.309(f) admissibility standards.[39] Finally, pursuant to a Board order,[40] on May 20, 2005, the Intervenors filed a reply in support of the motion to amend, asserting that, with regard to issues of environmental impacts, economic costs, and combinations of clean energy alternatives, the Applicant and the Staff have each failed to show that there is no genuine dispute of material fact.[41]

III. ANALYSIS OF INTERVENORS' MOTION TO AMEND CONTENTION 3.1

Before this Board are issues arising under the National Environmental Policy Act of 1969[42] ("NEPA"), including one of first impression[43] generally originating from the restructuring (deregulation) of the electric industry since the last time the Agency considered an application

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[38] See Exelon's Answer to Intervenors' Motion to Amend Contention 3.1 (May 6, 2005) at 1-2 [hereinafter Applicant Response to Motion to Amend].

[39] See NRC Staff Answer to Intervenors' Motion to Amend Contention 3.1 (May 6, 2005) [hereinafter Staff Response to Motion to Amend].

[40] See Licensing Board Order (Schedule for Intervenors' Reply) (May 10, 2005) (unpublished).

[41] See Intervenors' Reply In Support of Motion to Amend Contention 3.1 (May 20, 2005) at 11.

[42] See 42 U.S.C. §§ 4321 et seq.

[43] Though the Standing/Contentions Board, in its August 6, 2004 ruling on contention admissibility, said that it is appropriate for an Applicant to consider, in its analysis of alternatives, its own business objectives (*i.e.*, generation of baseload power), see LBP-04-17, 60 NRC at 245-46, that Board did not address the separate issue of what the Staff must appropriately examine in the context of its NEPA alternatives analysis. See supra note 10. This is the question we discuss at length in Part III.A., infra, of this ruling.

for construction of a new nuclear power plant. Our role here, vis-a-vis NEPA,[44] is to ensure that the agency has taken the requisite "hard look" at the potential environmental effects of the proposed action and its reasonable alternatives (within the general limitations and guidance discussed herein),[45] and "to ensure that the agency has adequately considered and disclosed the environmental impact of its actions . . . ."[46] Toward this end, the DEIS, and eventually the final environmental impact statement ("FEIS"), must contain a thorough, reasoned discussion of the relevant environmental considerations.[47]

The Applicant here is not the parent holding company whose subsidiaries are engaged in the whole panoply of electric industry functions; rather, it is a subsidiary that is an independent power producer ("IPP") whose sole business is that of the generation of electricity and the sale of energy and capacity (and other associated sellable generation-related commodities) at wholesale.[48] Like other IPPs, and unlike the fully integrated electric utilities that were applicants for previous nuclear power plant construction permits, the Applicant has no transmission or distribution system of its own and no direct link to the ultimate consumer.[49]

In addition, the Applicant unequivocally asserts that it is dissimilar to many other IPPs in

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[44] As stated in the hearing notice for this proceeding, see 68 Fed. Reg. at 69,427, the Board also must conduct a "mandatory hearing" in this proceeding regarding matters that were not the subject of admitted contentions, including matters relative to the Agency's NEPA obligation.

[45] See Louisiana Energy Services, L.P. (Claiborne Enrichment Center), CLI-98-3, 47 NRC 77, 87-88 (1998).

[46] Coalition on Sensible Transp., Inc. v. Dole, 826 F.2d 60, 66 (D.C. Cir. 1987) (citation omitted).

[47] See, e.g., Tongass Conservation Soc'y v. Cheney, 924 F.2d 1137, 1140 (D.C. Cir. 1991).

[48] See, e.g., Environmental Report for the Exelon Generation Company, LLC, Early Site Permit (Sept. 25, 2003) at 9-2.1, ADAMS Access. No. ML032721602 [hereinafter ER].

[49] See DEIS at 8-2 to 8-3.

that its sole business purpose is the generation of baseload power.[50] Thus, while other IPPs might well include in their business purposes the ownership and operation of wind or solar or geothermal powerplants, whose capability to generate energy varies with natural elements, EGC states its business purpose does not include generation technologies that cannot generate at full design capacity on a continuous basis. A significant issue in this proceeding, therefore, is the question of the extent to which the NEPA analysis should (or must) consider alternative power generation methodologies that cannot generate baseload power.

Intervenors' proffered Amended Contention 3.1 reads as follows:

> Amended Contention 3.1: The Clean Energy Alternatives Contention
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> The Draft Environmental Impact Statement and Additional Filings by Exelon Fail To Rigorously Explore and Objectively Evaluate All Reasonable Alternatives. **Basis:** There are several serious shortcomings in the discussions of alternatives provided in the Draft EIS and Exelon filings. First, the discussions are flawed because they accept a project purpose – the creation of baseload power – that has not been evaluated and that improperly excludes reasonable energy efficiency alternatives. Second, the Draft EIS and Exelon filings overestimate the environmental impacts of clean energy alternatives and underestimate the impacts of new nuclear power to incorrectly conclude that clean energy alternatives are not environmental [sic] preferable to nuclear power. Third, the Exelon filings, which the Draft EIS heavily relies on, improperly conclude that new nuclear power would be less costly than clean energy alternatives. Fourth, the Draft EIS and Exelon filings fail to adequately analyze alternative clean energy sources in combination and instead provide an analysis that is unfairly biased in favor of nuclear power and overstates the impacts of combinations of alternatives. Each of these points demonstrates that this Amended Contention 3.1 is admissible because there continues to be "a germane [sic] dispute . . . on a material issue of law or fact" regarding the adequacy of the analysis of alternatives in this proceeding. 10 C.F.R. 2.309(f)(1)(vi).[51]

The challenges of the Intervenors can accordingly be divided into two fundamental categories: (1) those that challenge the narrowing of the scope of alternatives which must be examined; and (2) those that challenge particular data or assumptions employed by the Applicant in

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[50] See, e.g., ER at 9.2-1; RAI Response at 14.

[51] Motion to Amend at 2-3.

preparation of its ER and its responses to the Staff's RAIs and/or by the Staff in preparation of the DEIS.

The first set of challenges by the Intervenors is to the Applicant and Staff eliminating consideration of demand side management ("DSM"), or energy conservation, and to narrowing the scope of the NEPA alternatives analysis. The admissibility of these challenges hinges upon a determination of the appropriate scope of alternatives to be evaluated for an IPP whose sole business purpose is the ownership and operation of baseload power plants, and is considered in light of the body of law defining the necessary and appropriate scope of the alternatives examination.

The remaining challenges by the Intervenors reduce, at their core, to questions of the degree of precision required for, or the weight to be placed upon, analyses involving uncertain assumptions which affect certain specific elements of the environmental impacts of wind power and nuclear power, and of the relative financial costs (as opposed to environmental costs/impacts) of power generated by alternative sources when compared to the proposed new nuclear plant. Admissibility of these challenges is considered in light of the Commission precedents and regulations regarding contention admissibility, admissibility of a proposed amendment to an existing contention, and the required content of an ER or DEIS. Many of these factors are comparative in nature, requiring evaluation of whether a factor raises a genuine issue regarding a material fact, or uses or relies upon data (or makes conclusions) that differ significantly from that previously presented by the Applicant. They cannot, therefore, be evaluated in a vacuum, and must be considered against the background of the underlying analyses presented by the Applicant and by the Staff.

A. Challenges to Elimination of Demand Side Management and to Narrowing the Scope of Alternatives to Baseload Generation

1. NEPA and 10 C.F.R. Part 51 Regulations

The environmental contention at issue here arises under NEPA and the NRC regulations implementing the agency's responsibilities pursuant to that Act.[52] NEPA and the Agency's 10 C.F.R. Part 51 regulations require the Staff to consider the potential environmental effects of any proposed "major Federal action significantly affecting the quality of the human environment," as defined by NEPA.[53] In this instance, the "major Federal action" which falls under the umbrella of NEPA is the determination by the NRC to issue, to deny, or to issue with conditions, the applied-for ESP. Additional guidance on implementing NEPA is available to federal agencies in regulations adopted by the Council on Environmental Quality ("CEQ").[54] These CEQ regulations are not, however, binding on the NRC because the Agency has not expressly adopted them; nevertheless, they have been considered and relevant concepts adopted by the NRC through its own Part 51 regulations.[55]

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[52] See 42 U.S.C. §§ 4321 et seq.; 10 C.F.R. Part 51.

[53] NEPA requires that "all agencies of the Federal Government shall . . . include in every recommendation or report on . . . major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on (I) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." See 42 U.S.C. § 4332(2)(C).

[54] See 40 C.F.R. Part 1500.

[55] The United States Court of Appeals for the Third Circuit has found, in this regard, that "the CEQ guidelines are not binding on an agency that has not expressly adopted them. The NRC has acknowledged its obligation to comply with NEPA, however, by issuing regulations governing the consideration of the environmental impact of the licensing and regulatory actions of the agency." Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719, 725 (3d Cir. 1989) (citations omitted).

The NRC's Part 52, Subpart A regulations require an ESP applicant to file with its application an Environmental Report pursuant to the relevant portions of Part 51.[56] This ER must contain "a description of the proposed action, a statement of its purposes, and a description of the environment affected . . . ."[57] Generally, an ER must also, among other things, discuss: (1) the impact of the proposed action on the environment, with impacts "discussed in proportion to their significance";[58] and (2) alternatives to the proposed action, with that discussion being "sufficiently complete to aid the Commission in developing and exploring, pursuant to Section 102(2)(E) of NEPA, 'appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.'"[59] The analysis in the ER must consider and balance "the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects . . . includ[ing] consideration of the economic, technical, and other benefits and costs of the proposed action and of alternatives. . . ."[60] Notwithstanding this general guidance, for an ESP the ER "need not include an assessment of the benefits (for example, need for power) . . . ."[61] Finally, with regard to uncertainties in data or assumptions, while the analysis "shall, to the fullest extent practicable, quantify the various factors considered[, t]o the extent that there are . . . factors that

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[56] See 10 C.F.R. § 52.17.

[57] Id. § 51.45(b).

[58] Id. § 51.45(b)(1).

[59] Id. § 51.45(b)(3).

[60] Id. § 51.45(c).

[61] Id. § 52.17(a)(2) (emphasis added).

cannot be quantified, those . . . factors shall be discussed in qualitative terms. . . ."[62]

In addition, the regulations require the Staff to review the ER and to prepare a draft environmental impact statement pursuant to the applicable provisions of Part 51.[63] While the Staff may rely on the ER in preparation of its EIS, it must also "independently evaluate and be responsible for the reliability of all information used in the [DEIS]."[64] As with the ER, generally a DEIS "should also include consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives and indicate what other interests and considerations of Federal policy, including factors not related to environmental quality if applicable, are relevant to the consideration of environmental effects of the proposed action . . . ."[65] In the particular case of an application for an early site permit, however, as with the ER, the EIS "need not include an assessment of the benefits (for example, need for power) of the proposed action . . . ."[66]

2. Board Ruling

As noted above, the Intervenors have presented challenges both to the Standing/Contentions Board's exclusion of demand side management (energy efficiency) alternatives and to the Applicant and Staff narrowing the scope of alternatives considered to those that can produce baseload power. We treat these issues in reverse order.[67]

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[62] Id. § 51.45(c).

[63] Id. § 52.18.

[64] Id. § 51.70(b).

[65] Id. § 51.71(d).

[66] Id. § 52.18.

[67] As an initial matter, for the reasons discussed in Part III.B.1., infra, we need not address issues relative to the timeliness of these proffered challenges.

a. Narrowing the Scope of Alternatives to Baseload Generation

Regarding narrowing the scope of alternatives to baseload generation technologies, Intervenors' first proposed amendment to the original contention alleges that it is improper for the DEIS to accept the project purpose as "baseload power for sale on the wholesale market," and that "reliance on such a purpose is arbitrary and capricious . . . ."[68] Because no authority is proffered for this proposition, we begin by noting NEPA's requirement that federal agencies, when considering the environmental impacts of their proposed actions in their decision-making process, must take a "hard look" at the environmental impacts of a proposed action, and at reasonable alternatives to that action.[69] The inquiry is, however, more focused than this guidance might at first glance appear, as the Agency "need only discuss those alternatives that are reasonable and 'will bring about the ends' of the proposed action."[70] Toward that end, where, as here, "a federal agency is not the sponsor of the project, 'the Federal government's consideration of alternatives may accord substantial weight to the preferences of the applicant . . . in the . . . design of the project.'"[71] The Commission has determined that the Agency "may take into account the economic goals of the project's sponsor,"[72] and has further recognized

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[68] Motion to Amend at 8-9 (citations omitted). It should be noted that the Applicant's project purpose is distinct from the NRC's purpose. The NRC's purpose is shaped by its function as a regulatory agency and, from its perspective, the purpose and need for the proposed action (issuance of the ESP) "is to provide stability in the licensing process by addressing safety and environmental issues before plants are built, rather than after construction is completed." See DEIS at 1-6.

[69] See, e.g., Claiborne, CLI-98-3, 47 NRC at 87-88.

[70] Hydro Resources, Inc. (P.O. Box 15910, Rio Rancho NM 87174), CLI-01-4, 53 NRC 31, 55 (2001) (quoting Citizens Against Burlington v. Busey, 938 F.2d 190, 195 (D.C. Cir.), cert. denied, 502 U.S. 994 (1991).

[71] City of Grapevine v. Dep't of Transp., 17 F.3d 1502, 1506 (D.C. Cir. 1994) (quoting Citizens Against Burlington, 938 F.2d at 197-98).

[72] HRI, CLI-01-4, 53 NRC at 55 (emphasis added) (quotation marks and citation omitted).

that it "should take into account the needs and goals of the parties involved in the application."[73] NEPA "does not require that the agency select any particular options . . . [it] 'simply prescribes the necessary process.'"[74]

Furthermore, in urging that the NRC should look at energy conservation and a broader scope of other alternatives to the proposed nuclear facility, the Intervenors are, in essence, contending that the NEPA alternatives study should address the broad and general goal of satisfying the electricity needs toward which the proposed nuclear facility is directed. Intervenors are misguided in that belief: an agency need not consider alternative ways to achieve a general goal (such as, in the instant case, balancing the electricity supply and demand); it should, instead, focus upon evaluating the alternative means by which a particular applicant reaches its goals.[75]

Thus, in the instant case, NEPA and the decisions interpreting it advise us quite clearly that the Staff should take into account the Applicant's business purpose (goals and needs) of owning and operating baseload power plants at the Clinton Site. The Staff has indeed adopted that viewpoint, indicating that the proposal at issue is one of baseload power generation via

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[73] Id. at 55-56 (emphasis added) (citation omitted).

[74] Id. at 44 (citation omitted).

[75] As stated by the United States Court of Appeals for the District of Columbia Circuit:

> In commanding agencies to discuss "alternatives to the proposed action," however, NEPA plainly refers to alternatives to the "major *Federal* actions significantly affecting the quality of the human environment," and not to alternatives to the applicant's proposal. An agency cannot redefine the goals of the proposal that arouses the call for action; it must evaluate the alternative ways of achieving *its* goals, shaped by the application at issue and by the function that the agency plays in the decisional process. Congress did expect agencies to consider an applicant's wants when the agency formulates the goals of its own proposed action. Congress did not expect agencies to determine for the applicant what the goals of the applicant's proposal should be.

Citizens Against Burlington, 938 F.2d at 199 (emphasis in original) (citation omitted).

nuclear power, to which there are a variety of alternatives, such as via fossil fuel or a combination of varying power sources, including solar or wind with a storage device or, as discussed above, in combination with a fossil-fired plant. Those alternatives, and only those alternatives, are addressed in the DEIS.[76] In the current context, "reasonable" alternatives may be limited to those which involve power generation (as opposed to demand side management efforts such as conservation), and to those technologies which can, singly or in combination, generate baseload power.[77] Moreover, in seeking to pose an admissible challenge to the ER or DEIS discussion regarding alternatives, the burden is upon the Intervenors to propose reasonable alternatives by which baseload power could be generated,[78] and in this case the

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[76] See DEIS Sections 8.2.2, 8.2.3. The Staff takes the position that only alternatives that can generate baseload power must be considered, asserting that "any feasible alternative to the proposed action would also need to generate baseload power." Staff Response to Motion to Amend at 10. In fact, the Staff argues persuasively that "[t]he DEIS rejects clean energy alternatives [without storage devices] because they are not a viable, stand-alone alternative source of baseload power." Id. at 11. Therefore, the Staff argues, the environmental impacts of wind power, for example, by itself "are immaterial because, based on the intermittent nature of the wind resource, wind power is not a suitable source of baseload capacity." Id. (citing DEIS at 8-17).

[77] NEPA analysis may be restricted to alternatives that are "reasonable," so long as the analysis does not reduce the set of alternatives to a null set. See infra note 84. The Intervenors cite Simmons v. United States Army Corps of Eng'rs, 120 F.3d 664, 669 (7th Cir. 1997), for the proposition that an agency need not rely on an applicant's definition of the project's purpose when defining reasonable alternatives. See Intervenors' Response to Summary Disposition Motion at 3; Motion to Amend at 8. The Commission, however, adopting the approach of the District of Columbia Circuit, has directed consideration of an applicant's definition of a project purpose when formulating NEPA alternatives. HRI, CLI-01-04, 53 NRC at 55 (holding that when a project is sponsored by a private applicant, the federal agency may "accord substantial weight to the preferences of the applicant" and "take into account the 'economic goals of the project's sponsor'") (citing Citizens Against Burlington, 938 F.2d at 197; City of Grapevine, 17 F.3d at 1506). We do not view these two approaches as incompatible here, given the facts that: (a) there are several alternative ways to generate baseload power which have been examined by the Applicant; (b) the Staff has examined a multitude of alternatives, including some which cannot generate baseload power; and (c) Intervenors have failed to show that any of its proposed alternatives are even arguably competitive baseload alternatives.

[78] Cf. Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc., 435 U.S. 519, 553 (1978); see also, e.g., Morongo Band of Mission Indians v. Fed. Aviation Admin., 161

only additional reasonable alternatives suggested by Intervenors and previously admitted to this proceeding are the combinations of wind and solar with fossil, all of which have now been examined.[79]

b. Demand Side Management

The Intervenors also repeat their challenge to the Standing/Contentions Board's earlier ruling that neither the Applicant nor the Staff need examine DSM as an alternative in the NEPA analysis, in that it allegedly "constrains the alternatives in the analysis in violation of NEPA by improperly rejecting reasonable energy efficiency alternatives."[80] This argument challenging elimination of DSM from the scope of alternatives to be examined has already been determined by the Standing/Contentions Board as it relates to the ER,[81] with the Commission declining to consider Intervenors' petition for interlocutory review of that determination.[82]

Two fundamental factors caused this challenge to fail when it was first raised by the Intervenors, and hold true for our instant analysis: first, demand side management, no matter how it is characterized, remains an alternative to generation of power, and examination of such an option is nothing more than a surrogate for examination of the "need" for power which is

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F.3d 569, 576 (9th Cir. 1998) (implying that burden is on party challenging agency action to offer feasible alternatives); Olmsted Citizens for a Better Community v. United States, 793 F.2d 201, 209 (8th Cir. 1986) (same).

[79] Accordingly, any challenge by the Intervenors alleging that the Staff must analyze alternatives other than those with the capability to produce baseload power is inadmissible as outside the scope of this proceeding. See infra, Part III.B.1.; see also LBP-04-17, 60 NRC at 241.

[80] Motion to Amend at 9.

[81] See LBP-04-17, 60 NRC at 245-46.

[82] See CLI-04-31, 60 NRC 461. In declining the Intervenors' petition for interlocutory review of the Standing/Contentions Board's determination, the Commission expressed no view on the merits of the Intervenors' claim.

expressly not required pursuant to Sections 52.17(a)(2) and 52.18;[83] and, second, in the current context, because the Applicant has no business connection to the end users of its electricity and therefore no ability to implement DSM, DSM is not a "reasonable alternative" and NEPA itself, therefore, does not require its examination.[84]

Intervenors present no argument, and nothing else presented to us suggests, that the additional information submitted by the Applicant since its original ER or the content of the DEIS should, in any manner whatsoever, alter this conclusion.[85] Therefore, we repeat and confirm the earlier holding by the Standing/Contentions Board that demand side management need not be considered. This is the case for the ER, the DEIS, and the Staff's forthcoming FEIS.

For the foregoing reasons, we find: (a) no merit in the Intervenors' argument that it is

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[83] In this vein, any challenge by the Intervenors alleging a failure of the Applicant or Staff to consider DSM as an alternative constitutes an impermissible challenge to Commission regulations and is therefore inadmissible. See infra Part III.B.1; see also LBP-04-17, 60 NRC at 241.

[84] The mere elimination of this one alternative does not so narrow the scope of alternatives being examined as to run afoul of the line of cases standing for the proposition that the scope of alternatives cannot be so narrowed as to result in no alternative but the proposed action. See Citizens Against Burlington, 938 F.2d at 196 ("an agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action, and the EIS would become a foreordained formality"); City of New York v. Dep't of Transp., 715 F.2d 732, 743 (2d Cir. 1983) ("an agency will not be permitted to narrow the objective of its action artificially and thereby circumvent the requirement that relevant alternatives be considered").

[85] Specifically, the project's purpose is set forth in the EGC filings and DEIS as the production of "baseload power for sale on the wholesale market," and neither the information contained in the responses to RAIs nor that contained in the DEIS in this regard use data or reach conclusions that are "materially different" or "differ significantly" from what is stated in the Applicant's ER. Section 9.2.2 of the ER states that the "ESP application is premised on the installation of a facility that would primarily serve as a large base-load generator and that any feasible alternative would also need to be able to generate base-load power," and Section 1.1 of the Administrative Information portion of EGC's ESP Application states that the purpose of the Application is "to set aside the proposed site for future energy generation and sale on the wholesale energy market." In this regard, we note that neither the DEIS nor the subsequent EGC filings present new information – they merely repeat information set out clearly in the ESP Application, including the ER, which was filed in September 2003.

improper for the Agency to consider the business goals of the Applicant in establishing the scope of alternatives the Agency will examine; and (b) that elimination of DSM and of generation methodologies that cannot generate baseload power was fully appropriate in the instant circumstances. Those portions of Intervenors' proposed amendment are therefore inadmissible.

B. Challenges to Allegedly Erroneous and/or Outdated Data

1. Legal Standards for Contention Admissibility

Under the Commission's 10 C.F.R. Part 2 rules of practice, requests for hearings or petitions to intervene and proposed contentions must be filed within a period of time specified in 10 C.F.R. § 2.309(b). A request that should have been filed within such a time period, but was not, constitutes a "nontimely" filing which, pursuant to 10 C.F.R. § 2.309(c), will not be considered by a Licensing Board absent a showing that, based upon a balancing of eight factors, the request should be entertained. In addition to the requirement that a contention be filed within a specified period of time (or be shown to satisfy the criteria for admissibility if it is "nontimely"), a contention must satisfy the substantive admissibility criteria set out in 10 C.F.R. § 2.309(f)(1).

In addition to these general provisions, 10 C.F.R. § 2.309(f)(2) provides the process for determining the admissibility of contentions based upon information which was not available at the time the "petition was filed," and, impliedly, also deals with situations in which "new" information is added to the record. Section 2.309(f)(2) contains provisions for addressing two substantively different situations: *first*, it addresses issues arising under NEPA, providing that "[t]he petitioner may amend [previously admitted] 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" (*i.e.*, contentions based upon the content of the Staff's NEPA review document(s)); and, *second*, it focuses on contentions arising out of other new information, providing that:

> Otherwise, contentions may be amended or new contentions filed after the initial filing only with leave of the [Board] upon a showing that–
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> (i) The information upon which the amended or new contention is based was not previously available;
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> (ii) The information upon which the amended or new contention is based is materially different than information previously available; and
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> (iii) The amended or new contention has been submitted in a timely fashion based on the availability of the subsequent information.[86]

The provisions of Section 2.309(f)(2) prescribe the process for considering, among other things, the "timing" of submission of a contention; they do not eliminate the substantive requirements for the content of a new contention, or an amendment to an existing contention. Should the petitioner (or, as here, intervenor) make a sufficient showing as to the relevant portion of Section 2.309(f)(2), the proffered new or amended contention still must meet the standard admissibility requirements of Section 2.309(f)(1). Because the Standing/Contentions Board discussed the Section 2.309(f)(1) general standards for contention admissibility in a previous decision in this case, we will not repeat that discussion in depth here.[87] We note, however, that Sections 2.309(f)(1)(iv) and (vi) are particularly pertinent to the issues currently before us, the former requiring the Intervenors to demonstrate that the issue(s) raised in the contention are material to the findings the NRC must make to support the applied-for ESP, and the latter requiring the Intervenors to show that a genuine dispute as to a material issue of law or fact exists between them and the Applicant sufficient to warrant further inquiry.

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[86] 10 C.F.R. §§ 2.309(f)(2)(i)-(iii) (emphasis added).

[87] See LBP-04-17, 60 NRC at 240-43.

As an initial matter, prior to the Intervenors' filing of the motion to amend, the Board made two rulings regarding procedural matters relating to the filing of that motion. First, in a March 30, 2005 memorandum and order, we found that, based on prior agreement of the Parties, it was appropriate that new information provided by the Applicant in its RAI response need not be addressed (including by the Intervenors via a motion to admit a new or amended contention, should they so desire) until after issuance of an EIS.[88] In other words, we found it appropriate following the issuance of the Staff's DEIS that the Parties "address all additional information provided since release of the ER," including that supplied in the RAI response, and that any timeliness determinations would therefore be based upon the date the DEIS was issued.[89] Second, in a subsequent conference call, as memorialized in an April 6, 2005 memorandum, we ruled (upon a request by Intervenors) that a filing regarding a new or amended contention relative to the DEIS and/or new information provided by the Applicant would not be untimely if filed within forty-five days of issuance of the DEIS, *i.e.*, on or before April 22, 2005.[90]

In the instant case, the Intervenors filed an amended contention that raises issues regarding both parts of Section 2.309(f)(2) discussed above: as it relates to the Staff's DEIS, the contention falls under the first part of this Section, and as it relates to the Applicant's RAI response, the contention falls under the second part. The first part of Section 2.309(f)(2) is not

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[88] See March 30 Order at 3-4.

[89] See id. at 5. Therefore when addressing, infra, the questions of whether data or conclusions in the DEIS "differ significantly," or new information is "materially different," the new information/data/conclusions will be compared with that found in the Applicant's original ER, *i.e.*, prior to submitting any RAI responses or other additional information.

[90] See Tr. at 460; Licensing Board Memorandum (Clarifying March 30 Memorandum and Order; Memorializing April 4 Conference Call) (Apr. 6, 2005) at 3 (unpublished). Though the Staff issued its DEIS on March 2, 2005, it was not circulated to the Intervenors until March 8, 2005; we therefore held the forty-five day clock began on March 8. See Tr. at 456.

a new regulation; in fact, under the Commission's old Part 2 rules of practice, it appeared at 10 C.F.R. § 2.714(b)(2)(iii).[91] The Commission has stated, on more than one occasion, that the phrase "differ significantly" neither adds to or takes away from any of the admissibility requirements in either Section 2.309(c)[92] or Section 2.309(f)(1).[93] Instead, "information regarding the applicant's environmental report and the Staff's environmental review documents is relevant to the 'good-cause' factor" found at Section 2.309(c)(1)[94] which may be satisfied, generally, by a showing that (1) the information on which the contention is based is new so that the petitioner could not have presented it at an earlier time; and (2) the petitioner filed the contention promptly after learning of the new information.[95]

The second part of Section 2.309(f)(2) is, however, newly-enacted and therefore has not been the subject of prior Commission interpretation. Nonetheless, the substance of this part of Section 2.309(f)(2) bears a striking resemblance to the Commission's interpretation of the first

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[91] The Part 2 rules of practice were revised on January 14, 2004, see 69 Fed. Reg. 2,182, and the new rules apply to all proceedings noticed on or after February 13, 2004. Although the instant proceeding was noticed prior to the effectiveness date of the new Part 2, the Commission found that applying the new rules would not result in any unwarranted delay, added burden, or unfairness, and thus determined that the new Part 2 rules would apply to this proceeding. See CLI-04-08, 59 NRC at 118-19.

[92] Formerly found, in relevant part, at 10 C.F.R § 2.714(a)(1).

[93] Formerly found, in relevant part, at 10 C.F.R. § 2.714(b). In this regard, the Commission expressly has held that, in promulgating the change which adopted the "differ significantly" requirement for the predecessor to Section 2.309(f)(2), it was neither establishing an additional criterion for, nor eliminating any of the criteria set out in, the provisions of 2.714(a) [now, in relevant part, Section 2.309(c)]; rather, it held that "a showing that the Staff's environmental review documents significantly differ from the applicant's environmental report, although ordinarily sufficient to show good cause for lateness, is not by itself sufficient to make an environmental contention admissible, because the petitioner must still meet the other criteria in section 2.714(a)." Sacramento Municipal Utility District (Rancho Seco Nuclear Generating Station), CLI-93-12, 37 NRC 355, 362, 363 (1993).

[94] See id. at 362.

[95] See Texas Utilities Electric Co. (Comanche Peak Steam Electric Station, Units 1 and 2), CLI-92-12, 36 NRC 62, 69-73 (1992).

part of that Section. In the Board's view, the two requirements for a good cause showing, "new information" and "promptly filed," are analogous to the requirements of Sections 2.309(f)(2)(i) (information not previously available) and (f)(2)(iii) (submitted in a timely fashion).[96]

This leaves for interpretation what is intended by Section 2.309(f)(2)(ii) (based on "materially different" information) and how that requirement relates to the Section 2.309(f)(2) requirement that data or conclusions in the Staff's environmental review document "differ significantly" from data or conclusions in the applicant's ER. As noted above, under the old Part 2 rules, the "differ significantly" requirement appeared at 10 C.F.R. § 2.714(b)(2)(iii). Section 2.714(b)(2)(iii) also contained additional substantive requirements, including that the intervenor provide "[s]ufficient information . . . to show that a genuine dispute exists with the applicant on a material issue of law or fact," which is incorporated under the new rules in Section 2.309(f)(1)(vi).[97] In addition, our new rules contain a second "materiality" requirement in Section 2.309(f)(1)(iv), stating that, for a contention to be admissible, it must be "material to the findings the NRC must make to support the action that is involved in the proceeding." This latter requirement also appears to have its roots in the former Section 2.714(b)(2)(iii). In the Board's judgment, therefore, these correlations clearly advise that the requirement of Section 2.309(f)(2) that data or conclusions "differ significantly" is inextricably intertwined with the requirements that the newly supplied information be material to the outcome of the proceeding.[98] In other words, data or conclusions cannot be significantly different if they are not

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[96] In fact, in the Commission's only substantive ruling related to Sections 2.309(f)(2)(i)-(iii), in citing those subsections, the Commission also provided a citation to the "good cause" prong of the late-filing standards found at Section 2.309(c)(1). See Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-04-36, 60 NRC 631, 636 n.5 (2004).

[97] Compare 10 C.F.R. § 2.714(b)(2)(iii) (repealed 2004) with 10 C.F.R. § 2.309(f)(1)(vi).

[98] See id. §§ 2.309(f)(1)(iv), (vi).

material to the determination the Staff must make under NEPA. And new information, found here in the RAI response, cannot be "materially different" than that found in the original ER if it does not raise a genuine dispute on a material issue of law or fact. Thus, there is a clear analogy between the requirement that data or conclusions "differ significantly," as required by Section 2.309(f)(2), and the requirement that information be "materially different," as required by Section 2.309(f)(2)(ii).

Because of these analogies between the first and second parts of Section 2.309(f)(2), the Board analyzes Intervenors' challenges with regard to the DEIS and to the RAI response in the same manner. First, because Intervenors filed the motion to amend within that forty-five day "safe harbor" established by the Board in our April 6 Order, we need not address any issues of timeliness (or untimeliness), either in the context of "good cause" or Section 2.309(f)(2)(iii). Second, because we have held that the baseline for judgment of the newness of information is the original ER, and the proffered amended contention is based on information supplied since then, we find that these contentions are based upon "new information" that was "not previously available."[99]

This leaves for the Board the question of materiality: whether the Intervenors' challenges, presented in the form of an amended contention, pose matters material to the outcome of this proceeding. And, of course, in addition to such a determination is the requirement that each portion of the amended contention must meet the other general Section 2.309(f)(1) requirements for contention admissibility. Accordingly, an assessment of the Intervenors' challenges to allegedly erroneous and/or outdated data relative to the issue of

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[99] The information challenged was not available at the time Intervenors filed their original intervention petition and contentions; indeed, the fact that the information later provided by the Applicant in the RAI response was lacking in the original application forms the basis for Contention 3.1 as admitted, and, given that the DEIS was issued approximately nine months following the Intervenors' petition, this information is also "new" as compared to the ER.

materiality and those other requirements set forth at Section 2.309(f)(1) follows.

2. Board Ruling

Issues raised by challenges to the data can only be understood in the context of the underlying analyses presented by the Applicant in its ER and responses to RAIs and by the Staff in the DEIS. We examine those analyses below.

In its ER, the Applicant analyzed the environmental impacts of the proposed 2180 megawatt ("MW") nuclear facility, whose specific design has not yet been selected, but whose overall characteristics are within certain parameters defined in the ER. The Applicant then examined a set of alternative ways to generate the desired 2180 MW, including: wind power coupled with energy storage mechanisms (the Applicant concluded that energy storage mechanisms are too expensive to make the combination a practical baseload generation alternative);[100] solar power also coupled with energy storage mechanisms (also determined by the Applicant to be too expensive to be a practicable alternative);[101] fuel cells (technology insufficiently matured);[102] geothermal power (unavailable in Illinois);[103] hydropower (no suitable sites in Illinois);[104] burning wood waste or other biomass (insufficient "fuel" supplies in Illinois);[105] burning municipal solid waste (high capital costs and lack of environmental advantages when compared to coal fired plants);[106] burning "energy crops" (high capital costs and lack of

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[100] ER at 9.2-7.

[101] Id. at 9.2-8.

[102] Id. at 9.2-10 to 9.2-11.

[103] Id. at 9.2-8.

[104] Id.

[105] Id. at 9.2-9.

[106] Id. at 9.2-9 to 9.2-10.

environmental advantages);[107] oil-fired (high fuel costs and lack of environmental advantages as compared to coal);[108] coal-fired (deemed a competitive alternative);[109] and natural gas-fired (deemed a competitive alternative).[110]

In response to the admission of Contention 3.1 and RAIs from the Staff, the Applicant revised its analysis of wind and solar energy, including the impacts comparison, and its analysis of alternatives, to which it added an analysis of combinations of either a clean coal or natural gas-fired plant to a wind and solar combination.[111] It is of particular import to note that, in analyzing this last alternative, the Applicant had, as a premise, that the combined plant must be able to generate 2180 MW at all times.[112] This led to the inevitable conclusion that the fossil-fired portion of the combination must have the full 2180 MW capacity, because there are undoubtedly times at night (no solar power production) when the wind will not be blowing.[113] In assessing the environmental impacts of this combination, the Applicant noted that it had already determined that the environmental impacts from a natural gas-fired plant are less than those of

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[107] Id. at 9.2-10.

[108] Id.

[109] Id. at 9.2-11.

[110] Id. at 9.2-11 to 9.2-12.

[111] See RAI Response.

[112] See id. at 14.

[113] See id. at 15. Wind resources are generally characterized by wind power density classes, meaning that at a height of fifty meters (approximately 164 feet) each class produces a particular average windspeed ranging from Class 1 (less than 12.5 miles per hour (mph)) to Class 7 (greater than 19.7 mph). See Summary Disposition Motion at 18. Class 4 wind sites (15.7-16.8 mph), the highest class found in Illinois, are regarded as potentially economical as a source of energy production, and Class 3+ sites may, with advances in technology and financial support, also be economical. See id.

a clean coal-fired plant.[114] It then noted that a natural gas-fired plant would be better able to provide the varying power needs to fill shortfalls in power from wind and solar, and therefore concluded that the better combination would be natural gas with wind and solar.[115] Therefore, for the purpose of computing environmental impact, it considered the natural gas-fired combination. However, because coal has been estimated to produce lower-cost power than natural gas, for its economic comparison, EGC considered a combination with a coal-fired plant.[116] This split evaluation, while clearly an inaccurate representation of any particular combination, puts an alternative combined facility in the best possible light by minimizing both environmental impacts and costs of power production. Even with this "spin," the Applicant concluded that the combined plant would have environmental impacts that are equal to or greater than the proposed nuclear facility,[117] and that the cost of power produced by the combined plant would not be competitive with the proposed nuclear facility.[118]

In Section 8.2.2 of the DEIS, the Staff presented analyses of coal-fired and natural gas-fired generation. Stating that it reviewed the Applicant's analyses and conducted its own evaluation, the Staff also presented brief discussions and conclusions regarding wind, geothermal, hydro, solar, wood waste, municipal solid waste, other biomass-derived fuels, fuel cells, and oil-fired generation.[119] In addition, the Staff examined, as one of many possible combinations of alternatives, a combination of three 550 megawatts electric ("MW(e)") natural

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[114] RAI Response at 15.

[115] Id.

[116] Id.

[117] Id. at 17.

[118] Id. at 17-18.

[119] See DEIS at 8-15 to 8-21.

gas-fired turbines with 60 MW(e) of wind, hydropower, or pumped storage, 90 MW(e) from biomass, and 400 MW(e) of purchased power, conservation, and DSM.[120] The Staff concluded that the environmental impacts of the proposed new nuclear facility were either equivalent to, or preferable to, the reasonable alternatives, which it found to be natural gas-fired, coal-fired, or the combination mentioned above.[121]

It is against this background that we consider the admission (or rejection) of the portions of Contention 3.1 and of Intervenors' proposed amendments thereto that focus on specific alleged errors in data or assumptions. These portions of the challenges raised by Intervenors are, in essence, a number of specifically alleged errors in assumptions and/or data used in the Applicant's and/or the Staff's analyses of the environmental impacts of the proposed nuclear facility or in alternatives thereto, or in analysis of the relative cost of power produced thereby.

As we discussed above, for an amendment to a contention based upon such challenges to be admissible, those alleged errors must be in data or assumptions that are significantly different from those challenged in the original ER, meaning that the alleged differences would lead to definitively and materially different results, either in the assessment of the environmental impact of a particular generation option or of the "benefits" which such an option creates. And, as we earlier noted,[122] with respect to certain challenges to cost-related analyses used in the "benefits" side of the balance, the NRC's regulations expressly provide that, in an ESP case, both the ER and the DEIS "need not include an assessment of the benefits . . . of the proposed action";[123] *i.e.*, Agency regulations expressly permit exclusion of

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[120] See id. at 8-21 to 8-22.

[121] See id. at 8-22; tbl. 8-4.

[122] See supra pp. 16-17.

[123] See 10 C.F.R. §§ 52.17(a)(2) and 52.18.

analysis of benefits.[124] Therefore, there may be no legal foundation for a challenge to an alleged error in that cost-related analysis.

With the foregoing as background for our analysis, we begin by noting that Intervenors' specific challenges fall into two general classes which, because of the portion of the balancing analysis they address, are examined differently: (1) those that challenge an assumption or data which was employed by the Applicant or the Staff in making the environmental impact analysis; and (2) those that challenge a financial aspect of the cost analyses, which is clearly not part of the environmental impact portion of the analysis, but, because one methodology could be found preferable over another because of its lower cost, falls on the "benefits" side of the balance.

In examining these specific challenges, we are cognizant of the fact that a NEPA analysis often must rely upon imprecise and uncertain data, particularly when attempting to forecast future markets and technologies, and Boards (and parties) must appreciate the fact that such forecasts "provide no absolute answers," and must be "judged on their reasonableness."[125] NEPA analyses are subject to a "rule of reason" which teaches that an environmental impact statement need only discuss "the significant aspects of the probable environmental impact of the proposed agency action."[126] In weighing the potential

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[124] This point is made clear by the provisions of Section 52.18 that expressly require an analysis of the environmental effects of a nuclear facility whose characteristics are within the postulated site parameters, but expressly exclude the benefits analysis. We note, however, that this is an exclusion that is unique to applications for ESPs, and, further, should the ESP be issued for this site, a consideration of the benefits "will be considered in the EIS for any construction permit (CP) or combined license (COL) application that references such an ESP." DEIS at 8-1. Therefore, the fact that challenges relative to an analysis of benefits are, at this stage, inadmissible would not preclude challenges to the benefits analysis in the context of any future application for a construction permit or combined license at the Clinton ESP site.

[125] See Louisiana Energy Services (Claiborne Enrichment Center), LBP-96-25, 44 NRC 331, 355 (1996), rev'd on other grounds, CLI-97-14, 46 NRC 294 (1997).

[126] Long Island Lighting Co. (Shoreham Nuclear Power Station), ALAB-156, 6 AEC 831, 836 (1973).

environmental harm of a proposed project against the "benefits," we find compelling the test enunciated by the United States Court of Appeals for the Fifth Circuit in considering challenges to the accuracy of economic assumptions underlying the analysis of a Federally-owned project, which is "whether the economic considerations . . . were so distorted as to impair fair consideration of those environmental consequences."[127] In the instant case of a privately-sponsored project[128] in which the agency's role is that of the grantor (or denier) of a Federally-issued license, alleged errors or discrepancies in underlying data should not be subjected to a more strict test than the "not so distorted as to impair fair consideration" test enunciated above for a Federally-owned project. We thus would adopt this benchmark for both the examination of economic effects and for application to uncertainties in the environmental impact analyses in our analysis of admissibility of an intervenor's proposed contentions.

Additionally, we note that challenges in this instance by Intervenors to the financial elements of the Applicant and Staff analyses relate to the "benefit" side of the balancing of the project's environmental impacts against its benefits, an aspect of the analysis that, because NEPA is an environmental protection measure, is not of the same significance as the NEPA-mandated balancing of environmental impacts of the proposed new nuclear power plant against

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[127] South Louisiana Envt'l Council, Inc. v. Sand, 629 F.2d 1005, 1011 (5th Cir. 1980) (emphasis added). We note that, in South Louisiana Envt'l Council, the agency had attempted to actually compute a dollar value of the "economic benefits" and weigh them against a computed dollar value of the environmental cost through the use of a numerical cost/benefit ratio, id. – a practice we eschew because it would create the impression of accuracy despite a process for deriving the numbers potentially so fraught with uncertainty and error that the actual numerical results could be meaningless. In its analysis of a similar situation, the South Louisiana Envt'l Council Court observed that NEPA "permits, at most, a narrowly focused, indirect review [of the agency analysis] of the economic assumptions underlying a federal project described in an impact statement." Id.

[128] As opposed to the Federally-owned project at issue in South Louisiana Environmental Council, supra note 127.

those of the reasonable alternatives.[129] Thus, even if Agency regulations required a benefits analysis to be included in the ER or an EIS (which they expressly do not), in this context, in which the challenge is to financial estimates underlying the estimated cost of power expected to be produced by the proposed new nuclear facility or by one or more of the alternatives to that facility, the weight assigned in the balancing analyses should be further reduced. Thus, disputes about the financial cost of certain components of generation by wind or solar or nuclear, or about other aspects of the analysis that require speculation (such as what efficiency will be achieved in future wind or solar technologies), cannot, where there is, as here,[130] great uncertainty, have a material role in the examination, and, if they are to be treated at all, are more properly treated qualitatively rather than quantitatively.[131]

We apply these principles as we address below each specific alleged shortcoming.

a. Alleged Errors Associated with Estimating the Environmental Effects of Combinations of Wind and Solar Power With Natural Gas

First, we address the challenge to the fact that the Applicant and the Staff have examined a combination of wind generation and solar generation with a natural gas-fired power

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[129] Although the Intervenors challenge financial estimates related to the "cost" of power, these costs are not the same costs that are required to be analyzed under NEPA at this juncture. "NEPA is generally regarded as calling for some sort of a weighing of the environmental costs against the economic, technical, or other public benefits of a proposal." Claiborne, CLI-98-3, 47 NRC at 88 (emphasis added). The relative cost of nuclear power, which is unrelated to the environmental costs of the proposal, will only become ripe for challenge when the economic benefits of the project are later addressed at the construction permit or combined license stage.

[130] The Parties have acknowledged that the estimated cost at which new nuclear power can be produced is highly uncertain, see, e.g., Summary Disposition Motion, Joint Affidavit of William D. Maher and Curtis L. Bagnall (Mar. 17, 2005) at pt. IV [hereinafter Maher/Bagnall Aff.]; Intervenors' Response to Summary Disposition Motion, Affidavit of Bruce Biewald (Apr. 6, 2005) at pt. IV.B. [hereinafter Biewald Aff.], and have similarly indicated the large potential uncertainties regarding the cost of production of power from either solar or wind generation, see, e.g., Maher/Bagnall Aff. at pt. V.A.2., pts. V.B.1. and 2.; Biewald Aff. at pt. IV.B.

[131] See supra note 62 and accompanying text.

plant whose capacity is equal to the full capacity of the proposed new nuclear plant instead of a smaller capacity designed to give an aggregate capacity (when added to an "averaged" capacity assigned to the wind and solar generation) equal to the proposed nuclear facility's 2180 MW. The Intervenors insist that there is a fundamental flaw in the overall analysis rooted in the assumption that the combined facility must contain a full 2180 MW gas-fired plant. They specifically challenge the "benefits" side of the balance, arguing, in essence, that the Applicant and the Staff have failed to examine the potential additional income the Applicant would receive because the natural gas plant would not only run to bring the overall generation up to 2180 MW at any particular time (as assumed by the Applicant and Staff in their analyses), but would also run when it can profitably do so, even if the solar and/or wind generation were simultaneously running.[132]

We note first that Intervenors have not challenged the "environmental impact" side of the Applicant's or the Staff's analysis, which assumed, for the purposes of assessing the environmental impacts of such a combination, that the 2180 MW natural gas-fired plant would not be running at full capacity when the solar and/or wind power portions are generating, and therefore not contributing to the environmental impact at those times. This assumption used by the Applicant and Staff clearly reduces the computed environmental impact of the natural gas-fired portion of the combination, and therefore minimizes the computed overall environmental impact of the combination for the purposes of the comparison to the environmental impact of the proposed new nuclear plant. This minimization is particularly clear for the DEIS analyses where it was assumed that the solar and wind portions of the combined facility had no

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[132] See Motion to Amend at 20. But, in estimating the cost of power from the combination, Intervenors have assumed that the capacity of the gas-fired portion will be only 1691 MW instead of the 2180 MW to which the combination is to be compared. See Biewald Aff. at tbl. 6. This selective inconsistent approach to its presentation distorts and misrepresents the situation and is not constructive to enabling the Board to weigh the arguments and the facts.

environmental impacts – all of the environmental impacts of the combination were assumed to be associated with the natural gas generation.[133]

We agree with the Staff, therefore, that, as it relates to evaluation of the combination, the DEIS did not overstate the impacts of wind power in favor of nuclear power;[134] in fact, if anything, it did just the opposite because the DEIS found the nuclear option to be environmentally preferable even though it both assumed no adverse environmental impact from the solar and wind generation and minimized the contribution from the natural gas component by assuming that it would run only when necessary to bring the total generation at any time up to the 2180 MW (*i.e.*, the gas-fired generation would generate the difference between the desired 2180 MW and the power being generated by solar and wind at that time). If the natural gas-fired plant were to run during additional periods as proposed by the Intervenors, the environmental impact of the combination would be correspondingly increased, and, while there would be some clear economic benefit to the Applicant, we see no reason to require a comparison of such a scenario when it is apparent that the environmental impacts would indeed be greater than those already estimated for the combination and found less preferable than the proposed nuclear power plant. In addition, as we have noted earlier, 10 C.F.R. §§ 52.17(a)(2) and 52.18 expressly exclude a requirement to assess benefits at all in this case, and therefore this challenge fails for the reasons mentioned above in this regard. Thus this portion of the

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[133] See Staff Response to Summary Disposition Motion at 12 (citing DEIS at 8-22, 8-23). The Staff points out that all of the environmental impact was therefore attributable to the portion associated with natural gas generation, and refers to the DEIS at 8-22 wherein it is stated: "The impacts associated with the combined-cycle natural-gas-fired units would be the same as shown in Table 8-2 ["Summary of Environmental Impacts of Natural Gas-Fired Power Generation - 2200 MW(e)"] with magnitudes scaled for reduction in capacity from 2200 MW(e) to 1650 MW(e)."

[134] See Staff Response to Summary Disposition Motion at 10-11, where the Staff responded to alleged deficiencies raised by the Intervenors in their motion to amend, see Motion to Amend at 12-14.

contention contained in the Intervenors' proposed amendment is inadmissible in that it constitutes an impermissible challenge to Commission regulations and fails to raise a material legal or factual issue.[135]

b. Alleged Errors in Underlying Facts

Intervenors claim the Applicant used flawed and outdated information in its original ER and continues, despite the new information, to use flawed and outdated information in its ER and that the Staff similarly uses flawed and outdated information in the DEIS. EGC's updated information (supplied in its responses to RAIs) referenced 24 reports issued between 2001 and 2004, including a number of reports on wind and solar power issued by the U.S. Department of Energy ("DOE") in 2004, together with references to a number of the Intervenors' exhibits.[136] Similarly, Chapter 8 of the DEIS provides recent references. Both the Applicant and the Staff argue that these updates "cure" the omissions alleged by Intervenors as to admitted Contention 3.1[137] and, as is relevant here, that the Intervenors have raised no material issue with regard to the new information provided in the RAI response and/or DEIS.

The remaining sections of this Part of our analysis consider, point-by-point, each specific shortcoming alleged by the Intervenors in amended Contention 3.1 relative to the Applicant's documents as amended through April 22, 2005 and/or the DEIS. The analyses set out in earlier portions of this ruling contribute materially to our evaluation below of the specific alleged instances of use by the Applicant and the Staff of outdated and erroneous data in the assessment of the potential environmental effects of various alternatives and in the assessment of the estimated cost of power generated by the proposed nuclear facility or one of the

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[135] See 10 C.F.R. § 2.309(f)(1)(vi); see also LBP-04-17, 60 NRC at 241, 242-43.

[136] See Summary Disposition Motion at 14.

[137] See infra Part IV.

alternative generation possibilities.

i. Intervenors' General Arguments in the Proposed Amendment Regarding Errors

First, Intervenors make a generalized contention that: (a) the use by the Staff of the categorizations of SMALL, MODERATE, and LARGE based on Appendix B to 10 C.F.R. Part 51 is not mandatory and, therefore, the Board may ignore those classifications, and (b) the assignment of particular categories to natural gas generation when examining combinations and the concurrent assignment of no category to wind or solar was the cause for the Staff's finding that the combination was not preferable from an environmental impact perspective to nuclear.[138] The Staff, however, points out that it assigned no negative environmental impacts to wind or solar in assessing the environmental impacts of the combination, and therefore (a) of course no such category was assigned, and (b) as discussed above,[139] it is evident that the analysis performed and reflected in the DEIS is based upon assumptions that minimize the estimated environmental impact from the combination. Furthermore, Intervenors offer no specific evidence to support any different finding. Additionally, even if the Staff had used such categorizations, that use is permissible under the NRC's regulations.[140] Therefore, we find inadmissible – as lacking the requisite degree of specificity under 10 C.F.R. § 2.309(f)(1)(vi) and lacking adequate expert support under 10 C.F.R. § 2.309(f)(1)(v)[141] – this portion of Intervenors' proposed amendment. In addition, we find that, insofar as this is a component of Intervenors' motion to amend Contention 3.1, it is inadmissible as it is not based upon data or conclusions which differ significantly from those in the Applicant's documents (prior to

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[138] See Motion to Amend at 10-11, 11 n.3.

[139] See supra notes 127 and 128 and accompanying text.

[140] See 10 C.F.R. Part 51, App. B.

[141] See also LBP-04-17, 60 NRC at 241-43.

responding to the RAIs).[142]

Second, Intervenors contend, generally, that the estimated environmental impacts in the DEIS and in the Applicant's documents overestimate impacts of clean energy and underestimate impacts of nuclear power.[143] This generalized portion of the proposed amended contention is inadmissible because it is a bare assertion lacking any support and the requisite specificity.[144]

Third, Intervenors contend that "the most fundamental flaw" in the DEIS and the Applicant's environmental analysis is that EGC has identified numerically more areas that would be impacted by nuclear power than by wind or solar, and that fact alone should make wind and/or solar preferable.[145] This portion of the contention also is a bare assertion; Intervenors have presented no impact analyses whatsoever to support their proposition that because one or another alternative has numerically more areas impacted, the overall environmental impact is greater. One could easily construct hypothetical examples where only one area was adversely impacted but the impact was so severe that the overall environmental impact was considerably worse than an alternative proposal which had dozens of areas impacted minimally. This contention is, therefore, inadmissible.[146]

Fourth, Intervenors contend that the Applicant and the Staff analyses use too small a portion of wind and solar in the combination that was analyzed, speculating that the environmental impact of the fossil-fired portion would be reduced if the wind and solar

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[142] See 10 C.F.R. § 2.309(f)(2); see also supra Part III.B.1.

[143] See Motion to Amend at 11.

[144] See 10 C.F.R. §§ 2.309(f)(1)(v)-(vi); see also LBP-04-17, 60 NRC at 241-42.

[145] See Motion to Amend at 11.

[146] See 10 C.F.R. § 2.309(f)(1)(v); see also LBP-04-17, 60 NRC at 241-42.

components were increased,[147] thereby decreasing overall environmental impacts of the combination and making the combination more attractive vis-a-vis nuclear. While this assertion appears on its face to have merit and has support in the Applicant's responses to RAIs, it is clear that the sun will not shine at night and certainly the wind will not be blowing at all times at night,[148] so the fossil-fired component will certainly have some minimum amount of run time. In addition, the "cost analysis" portion of the balance would clearly be impacted because the capital cost of additional wind and solar capacity would increase while the capital required to be invested in the fossil-fired component could not decrease because of the need to generate the minimum baseload power generated by the proposed nuclear plant. Nothing is presented by the Intervenors to indicate that any of these effects have been even superficially analyzed by them to support this assertion. Absent a specific analysis of the actual wind potential and the actual solar potential and the respective costs of increased capacity for both, this portion of the contention also amounts to speculation without support; *i.e.*, it is a bare assertion and is therefore inadmissible.[149]

In addition to the foregoing general portions of the proposed amendment to the contention, the Intervenors proposed amendment presents a number of specific challenges.

ii. Specific Challenges Set Out in the Proposed Amended Contention 3.1

The specific challenges (which, if properly supported, could be viewed as "bases" in the parlance of our regulations) fall into two general categories: (1) those that challenge assumptions or data used in the environmental impact assessments, and (2) those that

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[147] See Motion to Amend at 20. The Intervenors cite to the Biewald Affidavit to support this claim; however, the cited part III.B. offers no support for that proposition other than to cite to, and characterize as having "no real meaning," a statement in the Applicant's RAI response to this general effect. See Biewald Aff. at 3-4.

[148] See supra note 113 and accompanying text.

[149] See 10 C.F.R. § 2.309(f)(1)(v); see also LBP-04-17, 60 NRC at 241-42.

challenge economic assumptions and data underlying the "benefit" side of the balancing. We address these in that order.

(1) Specific Facts Affecting Environmental Impact Assessment

In the proposed amendment to Contention 3.1, Intervenors raise six specific matters regarding environmental impacts. *First* is an argument that the ER has assumed an erroneously low capacity factor for wind energy (using between 17% and 29% instead of 35%), leading to an overestimate of the land necessary for a comparable wind farm and, at the same time, in considering the nuclear option has ignored the land to be used in mining uranium and storing waste, and has also ignored the fact that land used for waste storage is used for a longer period of time.[150] These challenges regarding land use for the mining and waste storage associated with nuclear power are, however, an impermissible challenge to the Commission's regulations;[151] EGC is permitted by 10 C.F.R. §§ 51.51 and 51.23, respectively, to rely upon Table S-3 to evaluate the effects of the uranium fuel cycle, and the Waste Confidence Rule ("WCR") for its findings regarding waste disposal.[152] Therefore, these portions of this challenge are inadmissible.

As to the land use by wind power, in addressing the alleged errors in capacity factor, the Applicant points out that any projected change in capacity factor depends upon future developments of technology. Assessment of such errors is therefore, in our view, clearly

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[150] See Motion to Amend at 12-13. We note that, while Intervenors focus upon the environmental effects of processes ancillary to the nuclear power plant construction and operation, no party has even mentioned the ancillary environmental impacts associated with manufacturing solar cells or wind turbines.

[151] See LBP-04-17, 60 NRC at 241.

[152] A previous decision in this proceeding held, in response to Intervenors' original contention EC 3.2 asserting that the Waste Confidence Rule does not apply to this proceeding, that the contention impermissibly challenged Commission's regulatory requirements and was therefore inadmissible. See id. at 246-47. For this same reason, newly raised arguments in the amended contention which challenge long term disposal of waste are rejected.

speculative.[153] Furthermore, the change that this difference could make is only upon the land used by the wind power facility, a small portion of the environmental impact which plays a correspondingly smaller role in the environmental impact assessment.[154] Thus we find that, even if correct, the minor change this could make in the (already small) projected environmental impact of the wind portion of a combination facility or of a wind/energy-storage facility, is such that this portion of the contention neither raises a genuine dispute on a material issue nor is based upon data or conclusions that differ significantly from those in the Applicant's documents (prior to responding to the RAIs). Therefore, this portion of the proposed amendment is inadmissible under 10 C.F.R. §§ 2.309(f)(1)(vi) and (f)(2).

The *second* specific environmental impact portion of the proposed amendment is an assertion that the environmental impact on bird deaths is erroneously computed; Intervenors argue that wind turbines have historically only killed 2 birds per year while there is data from the Susquehanna nuclear power plant to the effect that 1500 birds were killed over an 8 year period (*i.e.*, somewhat less than 200 bird deaths per year).[155] Intervenors' statement, however, misrepresents the number of bird deaths per year to be expected from a wind farm; both the Intervenors' expert and the Applicant (who cited the same study) state that the number of avian deaths from a wind farm is 2 birds per year per turbine.[156] Thus, when one considers that a current state-of-the-art large wind turbine generates approximately 2 MW, a 2000 MW wind farm would have 1000 wind turbines and would therefore cause 2000 bird deaths per year. This portion of the proposed amendment to Contention 3.1 is inadmissible because it fails to

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[153] See Applicant Response to Motion to Amend at 25-26.

[154] The DEIS, in fact, assigned zero environmental impact to the wind portion of a combined facility. See supra note 133 and accompanying text.

[155] See Motion to Amend at 13.

[156] Biewald Aff. at 4; Applicant Response to Motion to Amend at 23.

raise a genuine dispute and is not based upon data or conclusions that differ significantly from those in the Applicant's documents (prior to responding to the RAIs).[157]

The *third* specific environmental impact portion of the proposed amendment is a contention that the noise from a wind farm (alleged to be in the range of 35-45 decibels acoustic ("dB(A)")) is incorrectly weighed against that of a nuclear plant (alleged to be approximately 55 dB(A)).[158] These numbers, cited by the Intervenors, are precisely those used by the Applicant; *i.e.*, this portion of the proposed amendment is not based upon any data or conclusions that differ at all (let alone "significantly") from those in the Applicant's documents (prior to responding to the RAIs). In addition, the Applicant pointed out in its response that the ER states that, because noise level varies with distance from the source, the noise from a wind farm would be SMALL. Moreover, as mentioned above, the Staff assigned zero environmental effects to the wind power portion of the combined facility. Therefore, the ER and the DEIS have already weighed these relative effects favorably to the Intervenors' position, and there is no genuine dispute over any material fact. Thus, this portion of the proposed amended contention is inadmissible under 10 C.F.R. §§ 2.309(f)(1)(vi) and (f)(2).

The *fourth* specific environmental impact portion of the proposed amendment is a contention that the air quality impacts computed for nuclear are erroneous because they ignore the effects of the uranium fuel cycle,[159] while the *fifth* specific portion of the proposed amendment is a contention that the Applicant's filings and the DEIS improperly evaluate the impacts of exposure to radioactive wastes from mining and disposal.[160] As we noted earlier,

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[157] See 10 C.F.R. §§ 2.309(f)(1)(vi) and (f)(2).

[158] See Motion to Amend at 13.

[159] See id.

[160] See id. at 14.

these portions of the proposed amendment are inadmissible because they are impermissible challenges to the Commission's regulations;[161] EGC is permitted by 10 C.F.R. § 51.51 to rely upon Table S-3 of that Section to evaluate the effects of the uranium fuel cycle.[162]

The *sixth* specific environmental impact portion of the proposed amendment is a contention that the DEIS understates the risks presented by serious accidents at the proposed nuclear plant, particularly the risk posed by terrorist attacks.[163] This portion of the proposed amendment is inadmissible in that the Intervenors fail to provide adequate factual support or expert opinion regarding accidents,[164] and because the specific issue of risks from terrorist attacks is outside the scope of the proceeding.[165]

(2) Specific Facts Affecting Economic Assessment

The remainder of the specific portions of the proposed amendment all relate, in one way or another, to the economic portions of the comparison. Admissibility of these portions of the contention, which rest on a challenge to assumptions that are used in the "benefits" analyses, is

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[161] See LBP-04-17, 60 NRC at 241.

[162] Section 51.51(a) states that Table S-3, "Table of Uranium Fuel Cycle Environmental Data," shall be taken

> as the basis for evaluating the contribution of the environmental effects of uranium mining and milling, the production of uranium hexafluoride, isotopic enrichment, fuel fabrication, reprocessing of irradiated fuel, transportation of radioactive materials and management of low level wastes and high level wastes related to uranium fuel cycle activities to the environmental costs of licensing the nuclear power reactor . . . and may be supplemented by a discussion of the environmental significance of the data set forth in the table as weighed in the analysis for the proposed facility.

10 C.F.R. § 51.51(a) (emphasis added).

[163] See Motion to Amend at 14.

[164] See 10 C.F.R. § 2.309(f)(1)(v); see also LBP-04-17, 60 NRC at 241-42.

[165] See 10 C.F.R. § 2.309(f)(1)(iii); see also LBP-04-17, 60 NRC at 241.

affected by the plain language of Sections 52.17(a)(2) and 52.18, which expressly eliminate any requirement that Applicant consider benefits in its ER or that the Staff consider benefits in its DEIS and FEIS. In fact, the Staff asserted that it does not (and need not) consider economic costs at all in assessing alternatives (or combinations of alternatives) to new nuclear power plants for early site permits.[166] While we do not consider the cited reference suitable authority for the proposition the Staff asserts, there is sound authority for that position in the plain language of Section 52.18. Thus Intervenors' challenges in these matters are singularly directed at the content of the Applicant's documents. Analysis of this portion of the proposed amendment to Contention 3.1 must weigh the fact that NEPA places obligations on the NRC, not upon the Applicant, and the purpose of the NRC's requirement that the Applicant submit an ER, the required content of which is spelled out generally in 10 C.F.R. § 52.17(a)(2), is to provide essential information to the Commission so that it can be adequately informed in preparation of its environmental assessment. But any discussion of benefits included in the Applicant's documents is purely voluntary,[167] and was, in the end, used by the Applicant to assist in its business decision regarding which method of power generation might be least costly, and it is clear that the NRC does not involve itself with the business decisions of an

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[166] See Staff Response to Motion to Amend at 11 (citing NRR Review Standard RS-002, Attachment 3 "Early Site Permit Scope and Associated Review Criteria for Environmental Report" (May 3, 2004) at 13, ADAMS Accession No. ML040700772). Intervenors also observe, in their motion to amend, that the DEIS does not discuss costs in its analysis of various clean energy alternatives. See Motion to Amend at 15.

[167] Although 10 C.F.R. § 52.17(a)(2) states at the outset that the Applicant must submit an ER as required by 10 C.F.R. § 51.45, it goes on to expressly eliminate the requirement for a benefits assessment. This express provision supercedes the general requirement of Section 51.45 that would otherwise require such an analysis. Thus the implication by Intervenors that there is such a requirement is based upon a faulty premise: the lesson here is, to paraphrase Ayn Rand's John Galt, the law abhors a contradiction - if you believe there is a contradiction, check your premises.

Applicant.[168] Although the Staff is to review the ER, the content and accuracy of the DEIS and FEIS are the sole responsibility of the Agency.[169] Examination of costs of the various alternatives would clearly be, if it were required to be included, a *de minimis* portion of the alternatives investigation. The cost to build or own, or generate power from, any of the particular technologies plays no role whatsoever in the NEPA balance required by our regulations for an application for an ESP; the balance focuses singularly upon the environmental impacts. In these circumstances, the allegation that the Applicant's cost calculations are erroneous neither rises to the level of significance required by Section 2.309(f)(2) for admissibility of a contention amendment, nor does it raise a genuine dispute on a material legal or factual issue.[170]

With these principles in mind, we turn to the specific cost-related errors alleged by Intervenors.

The *seventh* portion of the proposed amendment contends that the cost of wind power is overestimated, stating that EGC has estimated the cost of wind power at 5.7 cents per kilowatt hour ("c/kWh") while Northern States Power ("NSP"), a Minnesota energy company, purchases wind power at 3.5 c/kWh.[171] This bare statement, however, fails to note that the principal underlying reason that NSP can purchase wind power at 3.5 c/kWh is that the IPP that sells power to NSP gets a Production Tax Credit ("PTC") of approximately 2 c/kWh that offsets most of the gap,[172] and fails to note that the PTC is currently available only for wind plants

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[168] See, e.g., HRI, CLI-01-04, 53 NRC at 48 ("The NRC, however, is not in the business of regulating the market strategies of licensees.").

[169] See supra note 64 and accompanying text.

[170] See 10 C.F.R. §§ 2.309(f)(1)(vi), (f)(2); see also LBP-04-17, 60 NRC at 243.

[171] See Motion to Amend at 15.

[172] See Applicant Response to Motion to Amend at 28-29; Biewald Aff. at 18.

placed in service prior to 2006.[173] In addition, Intervenors' own expert indicated that the cost of production for wind power will be in the range of 4.5 to 6.0 c/kWh,[174] which does not disagree at all with the Applicant's estimate. Intervenors have offered no evidence or expert testimony that the PTC will be available to an IPP placing a wind power facility into service after 2006. Furthermore, Intervenors apparently overlook the Applicant's statement in its RAI response that a wind generating facility can "produce power at a levelized rate of $.049/kWh,"[175] which is close to the low end of the range suggested by Intervenors' expert. Therefore the challenge to cost estimates for wind power is inadmissible because: (a) regarding the PTC and the estimated cost of wind power after inclusion of the Applicant's responses to the RAIs, there is no genuine dispute over any material fact and therefore it fails to satisfy the requirements of 10 C.F.R. §§ 2.309(f)(1)(iv) and (vi);[176] and (b) it is not based upon data or conclusions which differ significantly from those in the Applicant's documents prior to responding to the RAIs and therefore fails to satisfy the requirements of 10 C.F.R. § 2.309(f)(2). Therefore, we find that this portion of the proposed amended contention is inadmissible.

The *eighth* portion of the proposed amendment contends that the cost estimates for new nuclear generated power are erroneous because: (1) they generally ignore statements by the DOE, the Energy Information Administration ("EIA"), and other entities to the effect that new nuclear will not be economic;[177] (2) they use overly optimistic assumptions, such as that capital cost will be only $1200/kW, and the "learning rate" will be 10%, when the actual costs of

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[173] See Applicant Response to Motion to Amend at 29.

[174] Biewald Aff. at 22, tbl. 6.

[175] RAI Response at 6.

[176] See also LBP-04-17, 60 NRC at 242-43.

[177] See Motion to Amend at 16.

constructing the 75 existing plants was more than 200% above estimates;[178] and (3) a recent Massachusetts Institute of Technology study estimates that the cost of future nuclear power will be 6.7 c/kWh, whereas EGC is estimating 5.5 c/kWh.[179] The Applicant points out that the study referenced by the Intervenors as the source for the $2000 per kW(e) capital cost estimate itself stated that cost could be reduced by 25% (*i.e.*, to $1500 per kW(e)) "to match optimistic but plausible forecasts."[180] In point of fact, however, the relative capital cost estimates set out in the particular study cited by Intervenors vary from a low of $1080 per kW for a mature technology to a high of $1980 for a new design.[181] The foregoing clearly indicate that projecting costs is an uncertain endeavor, and should, as a result of the uncertainties, be given less weight by the agency.[182]

Given the uncertain nature of the results of this part of the analysis, the fact that it falls on the non-environmental side of the balance, and the fact that cost would only come into the analytical balancing if the environmental impact balancing indicates that a reasonable alternative is environmentally preferable to the proposed project,[183] we find that these portions

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[178] See id.

[179] Id. at 17.

[180] See Applicant Response to Motion to Amend at 30.

[181] See Biewald Aff. at 15, tbl. 3.

[182] Finally, we note that, in addition, this portion of the proposed amendment to Contention 3.1 posits that the cost for a combination of wind and natural gas generation would be able to produce power in a range of 4.6-5.0 c/kWh, but that estimate is based upon the premise that the gas-fired plant will have only 1691 MW generation capability (as opposed to the 2180 MW for the nuclear plant), thus underpredicting the capital cost and other costs related to the gas-fired portion of the combination for the situation being examined (which is that the gas-fired portion of the combination must have the full capacity of the nuclear plant). This inaccurate comparison cannot be deemed to create a genuine dispute and is therefore inadmissible. 10 C.F.R. § 2.309(f)(1)(vi); see also LBP-04-17, 60 NRC at 243.

[183] See Applicant Response to Motion to Amend at 27; see also, e.g., Virginia Electric and Power Company (North Anna Nuclear Power Station, Units 1 and 2), ALAB-584, 11 NRC

of the proposed amendment: (a) do not raise a genuine dispute over a material legal or factual issue; and (b) are not based upon data or conclusions which differ significantly from those in the Applicant's documents (prior to responding to the RAIs).[184] Furthermore, because the cost information provided by the Applicant was voluntarily included and expressly not required by the regulations governing the content of the ER, the DEIS, or the FEIS, these particular portions of Intervenors' proposed amendments are an improper challenge to NRC regulations and outside the scope of this proceeding, given there was no requirement for such an analysis by the Applicant or the Staff in the first instance.[185]

IV. ANALYSIS OF APPLICANT'S MOTION FOR SUMMARY DISPOSITION OF CONTENTION 3.1

A. Legal Standard for Summary Disposition

Pursuant to the NRC's 10 C.F.R. Part 2 regulations governing procedure, a Licensing Board may grant summary disposition as to all or any part of a proceeding if the Board finds that "the filings in the proceeding, depositions, answers to interrogatories, and admissions on file, together with the statements of the parties and the affidavits, if any, 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."[186] It is well established that summary disposition motions under the

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451, 458 (1980); Consumers Power Company, ALAB-458, 7 NRC 155, 162-63 (1978); Public Service Company of Oklahoma (Black Fox Station, Units 1 and 2), LBP-78-26, 8 NRC 102, 161-62 (1978).

[184] See 10 C.F.R. §§ 2.309(f)(1)(vi), (f)(2); see also LBP-04-17, 60 NRC at 243.

[185] See LBP-04-17, 60 NRC at 241.

[186] See 10 C.F.R. § 2.710(d)(2). As we have noted on prior occasions, this proceeding is a Subpart L proceeding (*i.e.*, is governed by the procedural rules found at 10 C.F.R. Part 2, Subpart L); 10 C.F.R. § 2.1205 is therefore the applicable section on summary disposition, which itself directs this Board to apply the standards set forth in Subpart G of this Part, or

Commission's Part 2 rules are held to the same standards by which the Federal courts evaluate Federal Rule of Civil Procedure 56 summary judgment motions.[187]

The party seeking summary disposition bears the burden of showing that there is no genuine issue as to any material fact,[188] and 10 C.F.R. § 2.710 requires that this be shown through a statement of material facts not at issue and any supporting materials, such as affidavits, discovery responses, and documents, accompanying the motion.[189] Nevertheless, a party opposing the motion must put forth specific facts showing that there is a genuine issue of material fact to be litigated,[190] and any material facts set forth in the movant's statement not controverted by a like statement of an opposing party are deemed admitted.[191]

The Board's function in considering summary disposition is only to decide whether genuine issues of material fact remain between the parties, not to substantively seek to resolve material factual issues that do exist.[192] To support a finding that there is a genuine issue of material fact, the factual record, when considered in its entirety, must be in doubt to such a

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Section 2.710.

[187] See, e.g., Advanced Med. Sys., Inc. (One Factory Row, Geneva, Ohio 44041), CLI-93-22, 38 NRC 98, 102 (1993).

[188] See id.

[189] See, e.g., Statement of Material Facts on Which No Genuine Issue Exists in Support of Exelon's Motion for Summary Disposition of Contention 3.1 (Mar. 17, 2005); Statement of Disputed Facts in Support of Intervenors' Response to Exelon's Motion for Summary Disposition of Contention 3.1 (Apr. 6, 2005).

[190] 10 C.F.R. § 2.710(b).

[191] 10 C.F.R. § 2.710(a).

[192] See Sequoyah Fuels Corp. and General Atomics (Gore, Oklahoma Site Decontamination and Decommissioning Funding), LBP-94-17, 39 NRC 359, 361 (1994) (citing Weiss v. Kay Jewelry Stores, Inc., 470 F.2d 1259, 1261-62 (D.C. Cir. 1972).

degree that it is necessary to hold a hearing to aid in resolving the factual dispute.[193] It is, nevertheless, appropriate to look into the substance of the contention to the degree necessary to make the determination whether a genuine dispute about a factual issue exists, and whether, if one does, that dispute is indeed over a "material" fact.[194] In other words, summary disposition should not be used to decide genuine issues of material fact that warrant an evidentiary hearing,[195] but is appropriate if the moving party makes a properly supported showing as to the absence of any genuine issue of material fact and the opposing party fails to show that such an issue does exist.

B. Board Ruling

We preface our analysis by further clarifying the scope and subject matter of Contention 3.1 as admitted. While formulated as a general contention that the ER fails to rigorously explore and objectively evaluate all reasonable alternatives (and the Intervenors have moved to include the DEIS in this challenge), the substance is most properly addressed by focusing upon the details of the challenge and upon the Standing/Contentions Board's prior ruling in admitting it, wherein the contention, as rewritten, was admitted only:

> to the degree it allege[d] (a) a failure by EGC in its evaluation of the alternatives that could be used by an independent power provider in its power generation mix adequately to address a combination of wind power, solar power, natural gas-fired generation, and "clean coal" technology []; and (b) the Applicant's use of potentially flawed and outdated information regarding wind and solar power generation methods [].[196]

The admitted contention must therefore be read and construed in light of these statements. In

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[193] See, e.g., Cleveland Electric Illuminating Company (Perry Nuclear Power Plant, Units 1 and 2), LBP-83-46, 18 NRC 218, 223 (1983).

[194] Cf. Anderson v. Liberty Lobby, 477 U.S. 242, 248 (1986).

[195] See Private Fuel Storage, L.L.C. (Independent Spent Fuel Storage Installation), LBP-01-39, 54 NRC 497, 509 (2001).

[196] LBP-04-17, 60 NRC at 246.

addition, while the text of the contention is quite general, it is interpreted and has meaning only to the extent of the "bases," or specific flaws identified in the Intervenors' submittals, which define its scope.[197]

As discussed above, Intervenors claim the Applicant used flawed and outdated information in its original ER and continue, despite new information, to use flawed and outdated information in its RAI response,[198] which was produced in the form of revisions to relevant sections of the ER. The Applicant argues, however, and the Staff agrees, that these updates to the information provided in the original ER "cure" the alleged omissions and that Contention 3.1, as a contention of omission, is now moot.[199] The Intervenors, on the other hand, continue to assert that Contention 3.1, as admitted, is not a contention of omission, but is instead a challenge to the substance of the Applicant's discussion of alternatives in the ER. In fact, the original contention contains two separate challenges by the Intervenors. First, it presented an alleged omission from the ER of analyses of certain combinations of generation technologies. Second, the Intervenors proffer an allegation that the ER used potentially flawed and outdated information relative to wind and solar power, which we take, in light of the Intervenors' detailed

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[197] See, e.g., 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) (appropriate to refer to the bases provided in support of a contention to define the scope of that contention); Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), ALAB-899, 28 NRC 93, 97 (1988) ("The reach of a contention necessarily hinges upon its terms coupled with its stated bases."), aff'd sub nom. Massachusetts v. NRC, 924 F.2d 311 (D.C. Cir. 1991), cert. denied, 502 U.S. 899 (1991).

[198] See Intervenors' Response to Summary Disposition Motion at 5.

[199] See Summary Disposition Motion at 13-15; Staff Response to Summary Disposition Motion at 4-5. In this regard, we must bear in mind that at issue here (with regard to the mootness of Contention 3.1) is only information regarding wind and solar - not information regarding nuclear, as none of the bases upon which Contention 3.1 was admitted alleged any error in data underlying the analysis of the nuclear power option. Thus, to the extent that the Intervenors now seek to challenge information regarding nuclear power, it must be based upon new information or there must have been a request to admit a late filed contention as to those matters.

pleadings, to mean an allegation that newer data was not examined (*i.e.*, failure to consider newer data) and that certain data was erroneous (*i.e.*, "flawed").

We do not need, however, to resolve the issue of whether admitted Contention 3.1 should be viewed simply as one of "omission," as we find, as discussed below, that the Applicant in its responses to the RAIs has (a) supplied the allegedly omitted analysis of combinations of generation technologies, and (b) addressed the allegedly outdated and erroneous information by considering (i) the information identified by the Intervenors in support of Contention 3.1, and (ii) other information not previously identified by the Intervenors.

As noted above, the Applicant seeks summary disposition of the original contention, while the Intervenors have sought to amend that contention in light of additional information provided by the Applicant in its responses to the RAIs, as well as information contained in the DEIS. We considered in Part III, supra, point-by-point, the Intervenors' proposed amendments to that contention, including each specific alleged shortcoming in the ER and, as specified in the Intervenors' response to the summary disposition motion (and as further elaborated on in its motion to amend), each specific alleged shortcoming in the Applicant's documents included in the RAI response as well as shortcomings in the DEIS. Based on that analysis, we found no portion of the proposed amendment admissible. Thus, we have remaining before us the original Contention 3.1, which the Applicant asserts is amenable to summary disposition in its favor.

As to the original contention's alleged omissions from the ER of analyses of certain combinations of generation technologies, we find summary disposition appropriate because those omissions have been cured by the Applicant's consideration, in its RAI responses, of the allegedly-omitted combinations, making this Intervenor claim moot so as to be resolved in the Applicant's favor. As to the allegation that certain data in the ER relative to wind and solar

power are outdated or flawed, we find summary disposition appropriate because the Applicant has considered (1) the information provided or cited by the Intervenors in support of that portion of Contention 3.1, which the Intervenors themselves impliedly assert provides an adequate foundation for an analysis of wind and solar alternatives; and (2) other new information not considered in the original ER, to which Intervenors have not posited an admissible challenge. Intervenors having failed to demonstrate that a disputed genuine issue of material fact exists relative to the adequacy of the Applicant's supporting data, the Applicant is entitled to judgment as a matter of law on that portion of the contention as well.

Based on the preceding, we find that: (1) there being no genuine issue as to any material fact relative to the Applicant's demonstration that it has adequately addressed the NEPA analysis deficiencies claimed in Contention 3.1 as originally admitted such that the Applicant is entitled to judgment as a matter of law, summary disposition of this contention is granted in favor of the Applicant; and (2) there being no remaining matter at issue in the contested portion of this proceeding, the contested portion of this proceeding is terminated.[200]

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[200] As was noted in the Standing/Contentions Board's initial ruling, see LBP-04-17, 60 NRC at 250 n.10, the Board also must conduct a "mandatory hearing" in this proceeding regarding matters that were not the subject of admitted contentions.

V. CONCLUSION

For the reasons set forth above, we find that the Intervenors have failed to proffer any admissible amendment in their proposed amendment to Contention 3.1. We further find that, there being no genuine issue of material law or fact in dispute with regard to Contention 3.1 as originally admitted, summary disposition in favor of the Applicant is granted. Finally, there being no admitted contention remaining to be litigated in this proceeding, the contested portion of this proceeding is terminated.

For the foregoing reasons, it is this twenty-eighth day of July 2005, ORDERED, that:

1. The Intervenors' April 22, 2005 motion to amend is denied.

2. The Applicant's March 17, 2005 motion for summary disposition of Contention 3.1 is granted.

3. As there remain no admitted issues to be litigated in this proceeding, the contested portion of this proceeding is terminated.

4. Any party wishing to file a petition for review on the grounds specified in 10 C.F.R. § 2.341(b)(4) must do so within fifteen (15) days after service of this memorandum and order. The filing of a petition for review is mandatory in order for a party to have exhausted its administrative remedies before seeking judicial review. Within ten (10) days after service of a petition for review, parties to the proceeding may file an answer supporting or opposing

Commission review. Any petition for review and any answer shall conform to the requirements of 10 C.F.R. § 2.341(b)(2)-(3).

THE ATOMIC SAFETY
AND LICENSING BOARD[201]

/RA/
Paul B. Abramson
ADMINISTRATIVE JUDGE

/RA/
Anthony J. Baratta
ADMINISTRATIVE JUDGE

***/RA by* G. P. Bollwerk, III for:/**
David L. Hetrick
ADMINISTRATIVE JUDGE

Rockville, Maryland
July 28, 2005

[201] Copies of this memorandum and order were sent this date by Internet e-mail transmission to counsel for (1) applicant EGC; (2) the Intervenors; and (3) the NRC Staff.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
EXELON GENERATION COMPANY, LLC	)	Docket No. 52-007-ESP
	)	
	)	
(Early Site Permit for Clinton ESP Site)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing LB MEMORANDUM AND ORDER (RULING ON MOTION FOR SUMMARY DISPOSITION REGARDING CONTENTION 3.1 AND PETITION FOR ADMISSION OF AMENDED CONTENTION) (LBP-05-19) have been served upon the following persons by deposit in the U.S. mail, first class, or through NRC internal distribution.

Office of Commission Appellate Adjudication
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Administrative Judge
Dr. Paul B. Abramson, Chair
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Administrative Judge
Dr. David L. Hetrick
8740 E. Dexter Dr.
Tucson, AZ 85715

Administrative Judge
Dr. Anthony J. Baratta
Atomic Safety and Licensing Board Panel
Mail Stop - T-3 F23
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Ann P. Hodgdon, Esq.
Mauri T. Lemoncelli, Esq.
Darani M. Reddick, Esq.
Office of the General Counsel
Mail Stop - O-15 D21
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dave Kraft, Executive Director
Nuclear Energy Information Service
P.O. Box 1637
Evanston, IL 60204-1637

Paul Gunter, Director
Reactor Watchdog Project
Nuclear Information and Resource Service
1424 16th St., NW, Suite 404
Washington, DC 20036

Michele Boyd
Public Citizen
215 Pennsylvania Ave., SE
Washington, DC 20003

Docket No. 52-007-ESP
LB MEMORANDUM AND ORDER (RULING ON
MOTION FOR SUMMARY DISPOSITION REGARDING
CONTENTION 3.1 AND PETITION FOR ADMISSION
OF AMENDED CONTENTION) (LBP-05-19)

Howard A. Learner, Esq.
Ann Alexander, Esq.
Shannon Fisk, Esq.
Environmental Law and Policy Center
35 E. Wacker Dr., Suite 1300
Chicago, IL 60601

Thomas S. O'Neill, Esq.
Associate General Counsel
Exelon Nuclear
4300 Winfield Rd.
Warrenville, IL 60555

Steven P. Frantz, Esq.
Paul M. Bessette, Esq.
Alex S. Polonsky, Esq.
Annette M. Simon, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Ave., NW
Washington, DC 20004

Diane Curran, Esq.
Harmon, Curran, Spielberg
& Eisenberg, L.L.P.
1726 M Street, NW, Suite 600
Washington, DC 20036

[Original signed by Evangeline S. Ngbea]

Office of the Secretary of the Commission

Dated at Rockville, Maryland,
this 28th day of July 2005