

In the  
**United States Court of Appeals**  
**For the Seventh Circuit**

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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,*

and

EXELON GENERATION COMPANY, LLC,

*Intervening Respondent.*

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Appeal from the United States Nuclear Regulatory Commission.  
No. CLI-05-29

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ARGUED SEPTEMBER 29, 2006—DECIDED DECEMBER 5, 2006

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Before FLAUM, EVANS, and WILLIAMS, *Circuit Judges.*

FLAUM, *Circuit Judge.* In January 2004, the Environmental Law and Policy Center, Blue Ridge Environmental Defense League, Nuclear Energy Information Service, Nuclear Information and Resource Service, and Public

Citizen (collectively “the Environmental Groups”) intervened in Nuclear Regulatory Commission (“NRC”) proceedings regarding an Early Site Permit (“ESP”) for new nuclear power facilities in Clinton, Illinois. The Environmental Groups contended, among other things, that the ESP applicant and the NRC failed to consider various alternative energy sources. After permitting one contention to proceed for further adjudication, the NRC’s Atomic Safety Licensing Board (“Board”) determined that the applicant’s consideration of alternative energy sources satisfied the requirements of the National Environmental Policy Act (“NEPA”) and granted summary disposition in favor of the applicant. The NRC affirmed the Board’s ruling and issued a dismissal order against the Environmental Groups. For the reasons set forth below, we affirm the decision of the NRC.

## I. BACKGROUND

Federal Guidelines require any entity commencing construction of a nuclear power plant to obtain a construction permit and an operating license. Permit applicants must submit information related to the plant’s design, a safety assessment of the site, and a report that assesses the environmental impact of the plant’s construction and operation. After reviewing a permit application, the NRC prepares an Environmental Impact Statement (“EIS”) for the construction permit. If an entity is not yet ready to construct a nuclear power plant but desires to seek early approval for a potential construction site, NRC regulations permit the person to apply for an ESP. The ESP application process resolves key site-related safety, environmental, and emergency preparedness issues before the NRC authorizes (or declines to authorize) construction on that site. If granted, the ESP allows an applicant to maintain a site for possible future construction of new nuclear

power facilities for up to twenty years. Moreover, an applicant may renew the ESP for an additional twenty year term. However, an ESP does not authorize the holder to construct a nuclear plant. NRC regulations require applicants to obtain additional permits before commencing such construction. Under 10 C.F.R. § 52.17 and § 52.18, an ESP applicant must submit a complete environmental report and the NRC must issue an EIS that addresses all issues NEPA identifies regarding the construction and operation of a nuclear power plant on the proposed site, but a project's benefits need not be discussed at the ESP stage. If the benefits are not discussed, they must be evaluated at later permit or licensing stages before construction may begin.

Persons whose interests may be affected by an NRC licensing proceeding may file a request for a hearing and a petition to intervene. The petition must demonstrate the petitioner's standing and contain at least one admissible "contention." An admissible contention is one that provides sufficient information to show that a genuine dispute exists on a material issue of fact or law. 10 C.F.R. § 2.309(f)(1)(vi). Once the Board chooses to admit a contention, however, 10 C.F.R. § 2.1205 and § 2.710 provide that any party may file a motion for summary disposition of a contention, and a contention may be dismissed if the Board finds that no genuine dispute of material fact remains.

In this case, Exelon Generation Company ("Exelon") applied for an ESP, seeking approval for the construction of one or two new nuclear reactors on an existing Clinton nuclear power station site. Exelon is a merchant generator, which means that it sells power on the open wholesale market. Unlike a traditional regulated utility, Exelon is not required to supply the energy needs of any particular area. In its ESP application, Exelon stated that it sought to reserve the proposed site for future large-scale,

baseload nuclear energy generation; that is, the creation of new energy intended to continuously produce electricity at or near full capacity, with high availability. Exelon intended to sell any new energy it generated on the open wholesale market.

As part of its ESP application, Exelon submitted an environmental report. Although the report did not address the general need for power, it examined a number of alternative energy sources that could generate baseload power. Exelon evaluated alternative sources in terms of their ability to produce a baseload power equivalent to the amount of electricity that the proposed nuclear facility would produce. In its initial report, Exelon evaluated wind power coupled with energy storage mechanisms, solar power coupled with energy storage mechanisms, fuel cells, geothermal power, hydropower, burning wood water or other biomass, burning municipal solid waste, burning energy crops, oil-fired plants, coal-fired plants, and natural gas-fired plants. The report concluded that several of the alternatives were not viable baseload energy alternatives because, for example, they involved insufficiently matured technology (fuel cells) or the state lacked sufficient available fuel supplies (geothermal power, hydropower, woodwaste, and biomass). The report stated that wind and solar power, by themselves, were not reasonable baseload alternatives because they are intermittent energy sources and therefore cannot maintain continuous full rated capacity (the sun is not always shining, and the wind is not always blowing). In addition, the report concluded that power generated from natural gas and coal had greater environmental impacts on air quality than a nuclear plant.

After Exelon submitted its environmental report, the Environmental Groups filed a contention alleging several shortcomings in Exelon's evaluation of energy alternatives. In particular, the Environmental Groups alleged that

Exelon had failed to adequately consider energy efficiency<sup>1</sup> or combinations of wind or solar power with fossil fueled plants. The Environmental Groups also claimed that Exelon used flawed information in its evaluation of wind and solar power. The Board rejected the energy efficiency claim, reasoning that energy efficiency is not an alternative generation method that independent power generators like Exelon typically employ. In addition, the Board reasoned, an energy efficiency analysis would essentially consider the need for power, an analysis that may be postponed until Exelon requests an actual construction permit. The Board acknowledged the Environmental Groups' contention that Exelon had failed to consider combining wind or solar power with fossil fueled facilities and had used potentially flawed and outdated information regarding wind and solar power generation methods ("Contention 3.1").

After the Board recognized Contention 3.1, Exelon provided a report evaluating facilities that combined wind or solar power with fossil fuel. Exelon's revised evaluation concluded that coal-fired facilities, gas-fired facilities, or facilities using a combination of these alternatives were not environmentally preferable to the proposed nuclear facility, because the combination would produce environmental impacts greater than or equal to a new nuclear facility.

After reviewing the submitted information, the NRC issued a draft EIS, which evaluated a wide range of reasonable alternatives to nuclear baseload energy. The draft EIS reached conclusions similar to those reached

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<sup>1</sup> Energy efficiency was characterized by the Board as "demand side management," i.e., measures aimed at reducing energy consumption. Exelon Generation Co., LLC, No. 52-007-ESP at 21 (Atomic Safety and Licensing Bd. Jul. 28, 2005).

by Exelon. Specifically, the draft EIS found that individual wind and solar facilities were not sufficient on their own to generate baseload power. The draft EIS also concluded that, from an environmental standpoint, the nuclear facility would be preferable or equivalent to a combination facility using wind or solar power and fossil fuel. The draft also concluded that a new nuclear unit was preferable in terms of air resources, ecological resources, water resources, and aesthetics.

After the NRC issued the draft EIS, Exelon submitted a motion for summary disposition of Contention 3.1. In its motion, Exelon asked the Board to find that Exelon's response to the request for additional information cured its alleged failure to consider all reasonable alternatives. After the Board permitted the Environmental Groups to petition to amend Contention 3.1, it concluded that no genuine disputes of material fact remained. As a result, the board granted summary disposition of Contention 3.1 in favor of Exelon and terminated the contested portion of the ESP proceeding. The Environmental Groups then appealed the Board's decision to the NRC. The NRC affirmed the Board's ruling, and the Environmental Groups appealed.

## II. DISCUSSION

We consider three issues on appeal: whether the dismissal of the Environmental Groups from NRC proceedings constitutes a final order under 28 U.S.C. § 2342; whether the Board properly dismissed the Environmental Groups' contention that Exelon failed to consider energy efficiency alternatives; and whether the Board properly granted summary disposition against the Environmental Groups on Contention 3.1.

### A. Jurisdiction

As a threshold matter, the NRC argues that this Court should not consider the Environmental Groups' claims because the NRC's decision to dismiss them from its proceedings is not a final order for purposes of 28 U.S.C. § 2342(4). Under the Hobbs Act, this Court's jurisdiction is limited to review of final orders entered by the NRC in a proceeding to grant any license or construction permit. *See id.*; 42 U.S.C. § 2239. According to the NRC, it has not yet issued the ESP to Exelon, and, as such, there is no final order to appeal. In fact, the Board must independently review the final EIS (which was published on July 28, 2006), and the NRC must then consider it when deciding whether to issue an ESP. The NRC further states that the Environmental Groups will have additional opportunities to raise NEPA-related contentions and obtain a hearing before the NRC's final decision on whether to issue the ESP. Therefore, the NRC asserts, this lawsuit is premature.

The Environmental Groups, on the other hand, maintain that the NRC's ruling was final as it applies to them, because it terminated their participation in the ESP proceedings. The Environmental Groups liken the NRC's order to a denial of a motion to intervene, which is immediately appealable. *See, e.g., Fla. Power & Light Co. v. Lorion*, 470 U.S. 729 (1985); *In re UAL Corp.*, 408 F.3d 847, 849 (7th Cir. 2005) (holding that denial of motion to intervene is appealable immediately because it finally concludes the putative intervenor's rights). The Environmental Groups argue that they are entitled to challenge the NRC and Board orders now rather than at some later time, because those orders deprived them of the right to further participate in the proceedings. Additionally, they argue that the agency's review of alternatives is essentially complete, because there is no reason to believe that the

NRC's analysis will change between now and the issuance of the ESP.

We agree with the Environmental Groups. Although the Board initially permitted the Environmental Groups to intervene, the order granting summary disposition in favor of Exelon concluded the intervention. This Court has noted that, in determining the finality of an order, the relevant considerations include “whether the process of administrative decisionmaking has reached a stage where judicial review will not disrupt the orderly process of adjudication and whether rights or obligations have been determined or legal consequences will flow from the agency action.” See *Rosenthal & Co. v. Commodity Futures Trading Comm’n*, 614 F.2d 1121, 1127 (7th Cir. 1980) (citing *Port of Boston Marine Terminal Ass’n v. Rederiaktiebolaget Transatlantic*, 400 U.S. 62, 71 (1970)). Although as of the date of oral arguments, the NRC had not yet granted the ESP, the Board’s order terminated the Environmental Groups’ involvement in the agency proceeding. Therefore, it is clear that the Board’s order determined the Environmental Groups’ rights and legal consequences flowed from that determination. Moreover, since the final EIS already has been published, our review will not disrupt the process of adjudication. Consequently, the order is final and appealable under 28 U.S.C. § 2342.

### **B. Failure to Consider Energy Efficiency**

Section 101 of NEPA declares a broad national commitment to protecting and promoting environmental quality. 42 U.S.C. § 4331; *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 348 (1989). Section 102 of the act seeks to further those goals by prescribing procedures that federal agencies must follow when recommending or reporting on major federal actions “significantly affecting



the quality of the human environment.” See 42 U.S.C. § 4332; *Robertson*, 490 U.S. at 348. The required report or recommendation, commonly called an Environmental Impact Statement (“EIP”), must address the following in detail:

- (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; *Robertson*, 490 U.S. at 348. Although NEPA requires detailed consideration of the environmental consequences of federal projects, it does not mandate particular results. *Highway J Citizens Group v. Mineta*, 349 F.3d 938, 953 (7th Cir. 2003). It simply prescribes the necessary process. *Id.*

This Court’s review of agency action under NEPA is governed by the Administrative Procedure Act (“APA”). *Mineta*, 349 F.3d at 952. The APA instructs courts to set aside agency action only if it is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.” 5 U.S.C. § 706(2)(A). Under this standard, although a reviewing court’s inquiry is “searching and careful . . . the ultimate standard of review is a narrow one.” *Mineta*, 349 F.3d at 952 (citations and quotations omitted). A reviewing court must make two inquiries: 1) whether the agency’s decision was based on a consideration of the relevant factors; and 2) whether the agency has made a

clear error in judgment. *Id.* at 952-53. If an agency has considered the proper factors and makes a factual determination regarding the significance of environmental impacts, that determination implicates substantial agency expertise and is entitled to deference. *Id.* at 953. This Court cannot substitute its own judgment for that of the agency as to the environmental consequences of its actions. *Id.* In fact, in applying the arbitrary and capricious standard, this Court's only role is to ensure that the agency has taken a hard look at environmental consequences. *Id.*

The Environmental Groups challenge two aspects of the Board's decision to decline consideration of energy efficiency alternatives. First, they contend that the Board unnecessarily excluded reasonable alternatives like energy efficiency measures by adopting Exelon's goal of generating baseload energy. In any case, the Environmental Groups argue that the Board should have considered energy efficiency alternatives in a "need for power" analysis—an analysis that the Board refused to conduct altogether.

The Environmental Groups claim that the Board's rejection of reasonable energy efficiency alternatives is contrary to the "searching inquiry into alternatives" required by NEPA. *See Simmons v. U.S. Army Corps of Eng'rs*, 120 F.3d 664, 666 (7th Cir. 1997). We have held that blindly adopting the applicant's goals is "a losing proposition" because it does not allow for the full consideration of alternatives required by NEPA. *Id.* at 669. NEPA requires an agency to "exercise a degree of skepticism in dealing with self-serving statements from a prime beneficiary of the project" and to look at the general goal of the project rather than only those alternatives by which a particular applicant can reach its own specific goals. *Id.*

In *Simmons*, the City of Marion, Illinois sought to build a new water reservoir to address its need for water. 120

F.3d at 666. Marion and the Army Corps of Engineers defined the project's purpose as "supplying two users . . . from a single source—namely a new lake." *Id.* at 667. Accordingly, when the Corps prepared an EIS, it confined its analysis of reasonable alternatives under NEPA to single-source alternatives. *Id.* at 667-68. The Court determined that the Corps and Marion had defined the project's purpose too narrowly. *Id.* The common problem faced by Marion and a neighboring district was "a thirst for water." *Id.* at 667. As such, the goal of the project was to quench that thirst, and it was error for the Corps to look into only single-source alternatives. *Id.* Therefore, we held, the procedures undertaken by the Corps did not satisfy NEPA because the EIS did not examine the full range of reasonable alternatives, i.e., multiple-source alternatives. *Id.* The Environmental Groups argue that the instant case is analogous to *Simmons* because the Board "stacked the deck" against reasonable alternatives by adopting Exelon's limited business purpose of generating baseload power. According to the Environmental Groups, this purpose favors Exelon's proposed new nuclear plant by rendering energy efficiency alternatives inconsistent with the project's goal.

Exelon and the NRC attempt to distinguish *Simmons*. They claim *Simmons* stands for the simple proposition that the purpose of a project cannot be so narrow as to define reasonable alternatives out of existence. In any case, they contend, *Simmons* does not require an agency to disregard a private applicant's purpose for a project if that purpose is sufficiently broad to allow consideration of reasonable alternatives. In affirming the Board's decision, the NRC held that it had not violated *Simmons* because Exelon considered numerous alternatives to meet the project's general goals:

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.

*Exelon Generation Co., LLC*, Nuclear Reg. Rep. 31,493, 2005 WL 4131570 at \*4 (Dec. 12, 2005). In other words, according to the NRC, just as *Simmons* did not require the Army Corps to reconsider the town's "need for water," it did not require the Board to consider alternatives to generating new energy. The NRC found such an inquiry particularly useless given that Exelon dealt only in the sale of wholesale power and had neither the authority nor the incentive to implement energy efficiency measures.

The Board's decision relied on case law supporting the proposition that a reviewing agency can take an applicant's goals for a project into account. For example, in *Citizens Against Burlington, Inc. v. Busey*, the court noted that an agency's evaluation of reasonable alternatives is "shaped by the application at issue." 938 F.2d 190, 199 (D.C. Cir. 1991). The Board also noted that where a federal agency is not the sponsor of a project, the "consideration of alternatives may accord substantial weight to the preferences of the applicant and/or sponsor in the siting and design of the project." *City of Grapevine v. Dep't of Transp.*, 17 F.3d 1502, 1506 (D.C. Cir. 1994).

We are persuaded by the Board's analysis. Because Exelon was a private company engaged in generating energy for the wholesale market, the Board's adoption of baseload energy generation as the purpose behind the ESP was not arbitrary, capricious, an abuse of discretion or otherwise not in accordance with law. See APA § 706(2)(A). The adopted purpose was broad enough to permit consideration of a host of energy generating alternatives. Moreover, it was reasonable for the Board

to conclude that NEPA did not require consideration of energy efficiency alternatives when Exelon was in no position to implement such measures. The Environmental Groups further contend that the Board should have independently analyzed energy efficiency alternatives, regardless of the project's stated purpose because NEPA requires consideration of the need for power as part of any alternatives analysis. The NRC responds that the Board equated analysis of energy efficiency alternatives to a "need for power" analysis and that under NRC regulations 10 C.F.R. §§ 52.17(a)(2) and 52.18, Exelon and the NRC did not need to conduct a "need for power" analysis at the ESP stage. Instead, the Board reasoned, it could defer that analysis until a later combined licensing proceeding.

Under NRC regulations, an applicant may defer an analysis of the need for power until a combined license application, when construction will be authorized. *See* 10 C.F.R. § 52.21. Because an ESP does not authorize construction, the evaluations conducted at the ESP stage are intended to provide early resolution to some—but not all—of the environmental issues. 10 C.F.R. §§ 52.79(a)(1) and 52.89 (stating that "any significant environmental issue not considered" at the ESP stage must be addressed when the holder of an ESP applies to commence construction). Although the Environmental Groups contend that the NRC regulations violate NEPA, the agency regulations at issue are not inconsistent with the environmental law, because all relevant issues will eventually be considered. Courts have permitted agencies to defer certain issues in an EIS for a multistage project when detailed useful information on a given topic is not "meaningfully possible" to obtain, and the unavailable information is not essential to determination at the earlier stage. *See, e.g., County of Suffolk v. Sec'y of the Interior*, 562 F.2d 1368, 1378 (2d Cir. 1977). In this case, it is especially

reasonable to defer the “need for power” analysis to a later stage considering that construction on the nuclear reactor could begin as late as forty years from now. The need for power could vary considerably over that time period, so any analysis at this stage is speculative at best. The NRC, in its broad discretion to implement procedural rules under the APA, *see, e.g., Vermont Yankee Nuclear Power Corps. v. Natural Res. Def. Council, Inc.*, 435 U.S. 519, 543-44 (1978), deferred analysis that would be merely speculative at such an early stage. That decision was not arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law. We therefore affirm the NRC’s dismissal of the Environmental Groups’ energy efficiency contention.

### **C. Summary Disposition of Contention 3.1**

The final claim that the Environmental Groups advance is that the Board should not have granted summary disposition in favor of Exelon regarding Contention 3.1. The Environmental Groups argue that the NRC should have held a full evidentiary hearing in order to conduct a rigorous exploration and objective evaluation of clean energy alternatives and should have considered the comparative costs of the nuclear plant and the clean energy alternatives. They also claim that the NRC violated NEPA by distorting the combinations of clean energy alternatives.

It is true that NEPA requires an agency to “rigorously explore and objectively evaluate all reasonable alternatives,” 40 C.F.R. § 1502.14(a), and to take a “hard look” at the environmental impacts of the proposed action and its alternatives. *Robertson*, 490 U.S. at 350. However, as this Court noted in *Van Abbema v. Fornell*, “it is not our role to second-guess. We merely consider whether the [agency] followed required procedures, evaluated relevant

factors and reached a reasoned decision.” 807 F.2d 633, 636 (7th Cir. 1986). The Environmental Groups’ claims regarding Contention 3.1 go to the substantive judgments made by the Board and the NRC—judgments this Court will defer to as long as they satisfy NEPA procedures and are not clearly wrong.

The Board’s 57-page memorandum and order granting summary disposition in favor of Exelon demonstrates that the board rigorously explored all reasonable alternatives and took a hard look at the environmental impacts of the proposed action. *See Exelon Generation Co., LLC*, No. 52-007-ESP (Atomic Safety and Licensing Bd. Jul. 28, 2005). The Board addressed the Environmental Groups’ concerns point by point, carefully considering each issue and providing reasons for each decision it made. It is unnecessary to repeat the Board’s analysis here. Whether or not this court would have made the same substantive judgment is irrelevant so long as the decision is not arbitrary. It is clear that the Board satisfied NEPA’s procedural requirements and rendered a decision that thoughtfully considered all reasonable alternatives. We therefore affirm the decisions of the Board and the NRC.

### III. CONCLUSION

For the foregoing reasons, we AFFIRM the NRC and its Board on all matters.

A true Copy:

Teste:

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*Clerk of the United States Court of  
Appeals for the Seventh Circuit*