No. 06-1442

UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT

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

vs.

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

and

Exelon Generation Company, LLC
Intervenor-Respondent

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

BRIEF OF INTERVENOR-RESPONDENT

Steven P. Frantz
Paul M. Bessette
MORGAN, LEWIS & BOCKIUS, LLP
1111 Pennsylvania Avenue, N.W.
Washington, DC 20004
(202)739-5460

Thomas S. O'Neill
Vice President for Regulatory and Legal Affairs
Exelon Nuclear
4300 Winfield Road, 5th Floor
Warrenville, Illinois 60555
(630)657-3770

Counsel for Intervenor-Respondent

RULE 26.1 CORPORATE DISCLOSURE STATEMENT

Pursuant to Fed. R. App. P. 26.1 and 7th Cir. R. 26.1, Intervenor-Respondent Exelon Generation Company, LLC (Exelon) hereby files this Disclosure Statement:

(1) The full name of every party that the attorney represents in this case:

Exelon Generation Company, LLC

(2) The names of all law firms whose partners or associates have appeared for the party in the case (including proceedings in the district court or before an administrative agency) or are expected to appear for the party in this court:

Morgan, Lewis & Bockius, LLP

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N/A

Attorney's Signature:  Date: June 7, 2007

Attorney's Printed Name: Steven P. Frantz

Please indicate if you are Counsel of Record for the above parties pursuant to Circuit Rule 3(d). Yes __X__ No ____

Address: 1111 Pennsylvania Avenue, N.W., Washington, D.C. 20004

Phone Number: (202) 739-5460 Fax Number: (202) 739-3001
E-Mail Address: sfrantz@morganlewis.com

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I. JURISDICTIONAL STATEMENT

The jurisdictional statement of Environmental Law and Policy Center, Blue Ridge Environmental Defense League, Nuclear Energy Information Service, Nuclear Information and Resource Service, and Public Citizen (collectively "Petitioners") is complete and correct.

II. STATEMENT OF THE ISSUES

1. Whether, under the National Environmental Policy Act ("NEPA"), the Nuclear Regulatory Commission ("NRC" or "Commission") acted arbitrarily, capriciously, or in violation of law when it determined that "energy efficiency" is not a reasonable alternative to baseload generation of electric power, taking into account that the applicant's goal for the project was future development of additional baseload generation capacity.

2. Whether the NRC acted arbitrarily, capriciously, or in violation of law when it determined that assessment of "energy efficiency" was a surrogate for assessment of the "need for power" from a possible new nuclear plant, and pursuant to its regulations allowed deferral of such an assessment from the early site permit stage until a subsequent licensing proceeding that would actually authorize construction of a new plant.

3. Whether the NRC acted arbitrarily, capriciously, or in violation of law when it found that there was no genuine issue of material fact that alternatives to a new nuclear power plant, including combinations of facilities powered by coal, natural gas, wind, and solar power, were not environmentally preferable to a new nuclear power plant.

4. Whether the NRC acted arbitrarily, capriciously, or in violation of law when it held that costs of alternatives to a possible new nuclear power plant need not be considered in connection with an early site permit because only costs of

environmentally preferable alternatives need be considered (and no such alternatives exist here).

III. STATEMENT OF THE CASE

This case involves Exelon's application for an early site permit in connection with a possible new nuclear power plant under 10 C.F.R. Part 52 of the NRC's regulations, for the Clinton site in Dewitt County, Illinois.

Petitioners sought to intervene and requested a hearing on Exelon's application for the early site permit. Petitioners' contention alleged, in part, that Exelon's environmental report failed to adequately consider alternatives to the proposed new plant, including energy efficiency (also referred to as energy conservation) and combinations of alternatives involving wind, solar, and fossil fuel facilities. Pursuant to its rules, the presiding Atomic Safety and Licensing Board ("Licensing Board") rejected the portion of the contention pertaining to energy efficiency. The Board held that such an inquiry essentially equated to a "need for power" analysis, and that such an analysis was beyond the scope of the goals of the current early site permit proceeding and, pursuant to NRC regulations, appropriately deferred until a subsequent licensing proceeding that would actually authorize construction of a new plant.

The Licensing Board admitted the portion of the contention pertaining to combinations of alternatives, but, in a comprehensive 57-page decision, granted Exelon's motion for summary disposition of that contention. The Licensing Board also rejected an amended contention filed by Petitioners related to combinations of alternatives, on the ground that the Petitioners did not carry their burden to identify a genuine dispute of material fact. Petitioners sought review of the

Licensing Board's decision by the Commission, and the Commission upheld the decision. The Commission decision is a Final Order dismissing Petitioners' intervention in the early site permit administrative proceeding.

On February 8, 2006, Petitioners filed with this Court a Petition for Review of the Commission's order. The Petition argues that the Commission's decision violated the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4332, and the Administrative Procedure Act ("APA"), 5 U.S.C. § 706. The primary issue for review by this Court is whether the NRC's decision was arbitrary, capricious, an abuse of discretion, or contrary to law.

IV. STATEMENT OF THE FACTS

A. Background: NRC Regulations Applicable to Early Site Permits.

Under 10 C.F.R. § 50.10, a person may not commence construction of a nuclear power plant (also known as a "utilization facility") without a construction permit and may not operate the plant without an operating license. An applicant for a construction permit must submit certain information related to the design of the plant, a safety assessment of the site, and an environmental report which assesses the impacts of construction and operation of the plant. 10 C.F.R. § 50.34(a) and 10 C.F.R. § 51.50. Following its review of the application, the NRC prepares an environmental impact statement ("EIS") for the construction permit.

Under the NRC's regulations in Subpart C of 10 C.F.R. Part 52, a person may apply for a combined construction permit and operating license ("combined license"). Additionally, under Subpart A of Part 52, if a person is not yet ready to construct a nuclear plant but desires to seek early approval for a site for a possible nuclear plant, the person may apply for an early site permit. An early site permit resolves key site-related safety, environmental, and emergency preparedness issues before an NRC decision to authorize construction of a nuclear power facility on that site. Thus, if granted, the early site permit would allow a person to "bank" a site for possible future construction of one or more new nuclear power generation facilities. The early site permit is valid for up to twenty years and can be renewed for an additional twenty years.

Under 10 C.F.R. § 52.21, an early site permit is a partial construction permit that can be referenced in an application for a construction permit or an application for a combined license. However, an early site permit does not authorize the holder to construct a nuclear plant. Under 10 C.F.R. § 50.10, a person may not construct a nuclear power plant without a construction permit or combined license.[1] As noted above, construction could occur many years after issuance of the early site permit.

Under 10 C.F.R. § 52.17 and § 52.18, an early site permit applicant must submit a complete environmental report and the NRC must issue an EIS that addresses all issues under NEPA related to construction and operation of a nuclear power plant on the proposed site, except for benefits of the project, such as need for power. If the benefits are not discussed at the early site permit stage, they must be evaluated at the construction permit or combined license stage before construction begins. *See, e.g.*, 10 C.F.R. § 52.79(a)(1).

Persons who have an interest that may be affected by an NRC licensing proceeding (including an early site permit proceeding) may file a request for hearing and petition to intervene. Under 10 C.F.R. § 2.309, the petition to intervene must demonstrate the standing of the petitioner and must contain at least one admissible "contention." To be admissible, a contention must satisfy several criteria, including providing "sufficient information to show that a genuine dispute exists with the

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[1] Under 10 C.F.R. §§ 52.25 and 50.10(e)(1), the holder of an early site permit with a site redress plan may conduct certain limited activities to prepare the site for construction, such as "clearing, grading, [and] construction of temporary access roads," but may not construct any nuclear safety-related structures, systems or components.

applicant/licensee on a material issue of fact or law." 10 C.F.R. § 2.309(f)(1)(vi). Contentions that satisfy the standards in § 2.309 are then admitted for hearing. However, as provided by 10 C.F.R. § 2.1205 and § 2.710, any party may file a motion for summary disposition of a contention, and a contention may be dismissed if the Licensing Board finds 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."

B. Exelon's Early Site Permit Application.

Exelon filed an application for an early site permit, seeking approval of the existing Clinton nuclear power station site for the possible construction of one or more new nuclear reactors.[2] Exelon is not a regulated utility, but is a merchant generator.[3] As a merchant generator, Exelon sells power on the open wholesale market, without traditional considerations such as supplying a service area or satisfying a reserve margin objective.[4] In other words, Exelon does not need to supply the energy needs of any particular area.

Exelon's stated purpose of the project is to receive regulatory approval of the proposed site for future, large-scale, baseload nuclear energy generation.[5] Baseload generation is intended to produce electricity near full rated capacity continuously,

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2 Memorandum and Order, LBP-05-19, 62 N.R.C. 134 (2005) ("LBP-05-19") at A-16.

3 Illinois "deregulated" its retail electricity market with the Illinois Electric Service Customer Choice and Rate Relief Law of 1997, Public Act 90-0561 (1997).

4 *See* Environmental Report for the Exelon Generation Company's Early Site Permit (Sept. 25, 2003) ("ER") at A-130.

5 *See* LBP-05-19 at A-34 to A-35.

day and night, with high availability. The power produced by Exelon's proposed facility would be sold on the open wholesale market.[6]

As permitted by Part 52, Exelon's environmental report for the early site permit did not address need for power, but did examine a full set of alternatives to generate baseload power equivalent to the amount of electricity to be produced by the proposed nuclear facility.[7] Exelon evaluated wind power coupled with energy storage mechanisms; solar power coupled with energy storage mechanisms; fuel cells; geothermal power; hydropower; burning wood waste or other biomass; burning municipal solid waste; burning energy crops; oil-fired plants; coal-fired plants; and natural gas-fired plants.[8]

The environmental report demonstrated that several of the alternatives, including fuel cells, hydro power, geothermal power, and burning wood waste or other biomass, were not viable baseload energy alternatives because either the technology is not sufficiently matured (fuel cells) or because there are insufficient available fuel supplies in Illinois (e.g., geothermal power, hydropower, wood waste, and biomass).[9] The environmental report also demonstrated that wind and solar power, by themselves, were not reasonable baseload alternatives because they are

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6 ER at A-130.

7 *See* Memorandum and Order (Ruling on Standing and Contentions), LBP-04-17, 60 N.R.C. 229 (2004) ("LBP-04-17") at A-88 to A-89; ER at A-130 *et seq.* As noted previously, an applicant for an early site permit can defer the need for power analysis until the construction permit or combined license stage. *See* 10 C.F.R. §§ 52.17, 52.18.

8 *See* ER at A-135 to A-146.

9 *See id.*

intermittent energy sources and cannot generate baseload power.[10] Further, the environmental report demonstrated that natural gas and coal had greater environmental impacts on air quality than a nuclear plant.[11]

C. Petitioners' Proposed Contention 3.1.

Petitioners filed proposed Contention 3.1 that alleged several shortcomings in Exelon's evaluation of energy alternatives.[12] Specifically, they alleged that Exelon had failed to adequately consider energy efficiency and combinations of wind/solar power with fossil fueled plants.[13] Petitioners also alleged that Exelon used flawed information in its evaluation of wind and solar power.[14]

The Licensing Board rejected that portion of the proposed contention on energy efficiency. The Licensing Board ruled that it is not necessary to consider "alternative generation methods that are not typically employed by independent power generators" such as Exelon, because consideration of such methods would essentially equate to an analysis of need for power, an analysis that may be postponed until the combined license stage of NRC licensing proceedings.[15] The Licensing Board did, however, admit for litigation the contention that Exelon had failed to consider combinations of wind/solar and fossil fueled facilities and had

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10 *See id.* at A-136 to A-138.

11 *See id.* at A-146.

12 LBP-04-17 at A-88.

13 *See id.*

14 *Id.*

15 *Id.* Petitioners' Brief at 13, 17, argues that no party in the proceeding disputed that energy efficiency is a viable and cost-effective way to satisfy future energy needs. However, because the Licensing Board rejected the Petitioners' proposed contention on energy efficiency, the issue raised by the Petitioners was never litigated.

used potentially flawed and outdated information regarding wind and solar power generation methods.[16]

Following admission of Contention 3.1, the NRC staff submitted a request for additional information asking Exelon to address the contention and provide an evaluation of combinations of wind/solar facilities and fossil fueled facilities.[17] In response, Exelon provided a detailed analysis of wind and solar power, including combinations of these alternatives with coal and natural gas-fired facilities that together could generate baseload power in an amount equivalent to the proposed Exelon facility.[18] Exelon concluded that coal-fired, gas-fired, or a combination of alternatives, including wind and solar facilities, were not environmentally preferable to the proposed Exelon early site permit facility, because the combination "would have equivalent or greater environmental impacts relative to a new nuclear facility" at the Clinton site.[19]

D. The NRC's Draft Environmental Impact Statement.

The NRC staff issued a Draft EIS, which evaluated a wide range of technically reasonable and commercially viable alternative baseload energy sources, including oil, natural gas, coal, wind, geothermal, hydropower or pumped storage, solar thermal power and photovoltaic cells, wood waste, municipal solid waste, biomass

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16 LBP-04-17 at A-89.

17 *See* Letter, Exelon (M. Kray) to NRC (T.J. Kenyon) (Sept. 23, 2004) (Exelon Response to RAI Regarding the Environmental Portion of the Application for an Early Site Permit) ("RAI Response") at A-157 *et seq.*

18 *Id.* at A-161-195.

19 *Id.* at A-174.

fuels (such as ethanol), fuel cells, and a combination of alternatives.[20] The Draft EIS reached conclusions similar to those in Exelon's environmental report.[21] In particular, the Draft EIS concluded that individual wind and solar facilities would not be sufficient on their own to generate baseload power.[22] The Draft EIS also concluded that the Exelon facility would be environmentally preferable or environmentally equivalent to a reasonable combination of wind/solar facilities and fossil fueled facilities.[23] Specifically, the Draft EIS concluded that a new nuclear unit at the Clinton site is preferable to the combination of alternatives in the areas of air resources, ecological resources, water resources and aesthetics.[24]

E. Exelon's Motion for Summary Disposition of Contention 3.1.

Exelon submitted a motion for summary disposition of Contention 3.1, requesting the Licensing Board to find that Exelon's response to the request for additional information cured the alleged failure to consider combinations of wind/solar facilities and fossil fueled facilities. The motion also analyzed the information provided by Petitioners, point by point, and demonstrated that Exelon's response provided a bounding analysis of wind and solar power, and combinations thereof, that encompassed the information provided by Petitioners.[25] Further,

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20 Environmental Impact Statement for an Early Site Permit at the Exelon Early Site Permit Site, NUREG-1815 (Draft Report for Comment) (Feb. 2005) at A-202 to A-218.

21 *See id.* at A-211 to A-218.

22 *See id.* at A-213 to A-214.

23 *See id.* at A-217 to A-218.

24 *See id.* at A-218.

25 *See* LBP-05-19 at A-69 to A-70.

Exelon's motion showed that, in light of Exelon's amended analysis of alternatives and the Draft EIS, the information Petitioners had provided or cited in support of Contention 3.1 did not raise any genuine disputes of material fact.[26] The NRC staff supported Exelon's motion.[27]

The Licensing Board subsequently issued an order clarifying that Petitioners had the opportunity, based upon information first revealed in the recently issued Draft EIS and information supplied by Exelon since submitting the environmental report, to petition to amend Contention 3.1 or file new contentions.[28] Petitioners submitted a Motion to Amend Contention 3.1, alleging that the NRC staff and Exelon continued to improperly reject better, lower-cost, safer, and environmentally preferable clean energy alternatives to new nuclear power. Petitioners' motion essentially raised the same facts as their previous response to the motion for summary disposition.[29]

F. The Licensing Board's Order on the Motion for Summary Disposition.

The Licensing Board granted Exelon's Motion for Summary Disposition Regarding Contention 3.1 and rejected Petitioners' Motion to Amend Contention 3.1.[30] The Licensing Board held that Exelon had (a) supplied the analysis of combinations of generation technologies and (b) addressed the allegedly outdated and erroneous information by considering (i) the information identified by

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26 *See id.*

27 *Id.* at A-25.

28 *Id.* at A-40.

29 *Id.* at A-24 to A-25.

30 *Id.* at A-71.

Petitioners in support of Contention 3.1 and (ii) other information not previously identified by the Petitioners.[31] Accordingly, the Licensing Board held that no portion of amended Contention 3.1 was admissible because the amended contention failed to raise any genuine disputes of material fact. For similar reasons, the Licensing Board granted summary disposition of the original Contention 3.1, finding that there was no genuine dispute of material fact related to alternatives involving combinations of wind/solar and fossil fueled facilities.[32] Because there was no outstanding contention remaining to be litigated, the Licensing Board terminated the contested portion of the early site permit proceeding.[33] Petitioners appealed the Licensing Board decision to the Commission.

G. The Commission's Decision on Petitioners' Appeal.

The Commission issued an order affirming the Licensing Board's decision to grant summary disposition and its decision not to admit the amended contention.[34] The Commission upheld the Licensing Board's exclusion of energy efficiency because it is encompassed within the need for power analysis (which under 10 C.F.R. §§ 52.17 and 52.18 were postponed for evaluation until the combined license stage) and because it was not a reasonable alternative that would meet the project's stated goals.[35] The Commission also upheld the Licensing Board's decision that the

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31 *Id.* at A-69.

32 *Id.* at A-69 to A-70.

33 *Id.* at A-70.

34 Memorandum and Order, CLI-05-29, 62 N.R.C. 801 (2005) ("Commission Order") at A-1.

35 *Id.* at A-5.

amended contention failed to raise any genuine disputes of material fact.[36] Specifically, the Commission held that there was no genuine dispute that: 1) wind and solar power are not always available because the wind is not always blowing and the sun is not always shining; 2) the fossil-fueled plants will need to be operating when the wind/solar facilities are not in order to provide baseload capacity; 3) the Draft EIS analysis of combinations assumed that the wind/solar facilities did not have any environmental impacts, and 4) operation of a nuclear plant is environmentally preferable to operation of the fossil fueled facilities in the combination.[37]

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36 *Id.* at A-9.

37 *Id.* at A-12; LBP-05-19 at A-51 to A-53.

V. SUMMARY OF THE ARGUMENT

Under the NRC's regulations, an early site permit resolves certain site-specific safety and environmental issues. The early site permit process and regulations, however, properly and logically permit deferral of other issues, including an analysis of the need for power and cost/benefit analyses of the possible project, until the holder of the early site permit applies for a combined license to actually build and operate a new plant.

The NRC correctly found that the purpose of the proposed project is the possible generation of baseload electricity for sale on the wholesale market. This finding properly accounted for, and did not "blindly accept," the goals of Exelon, and allowed for the thorough and detailed consideration of numerous alternatives, including wind, solar, fossil fuels, combinations thereof, and a variety of other alternative baseload generation methods. Since the NRC identified a general and appropriate goal for the proposed project and properly considered numerous alternatives to the project, the NRC fully complied with NEPA and this Court's decision in *Simmons v. U.S. Army Corps of Engineers*, 120 F.3d 664, 666, 669 (7th Cir. 1997).

With regard to Petitioners' claims in connection with "energy efficiency," the NRC correctly determined that energy efficiency was not a reasonable alternative, given that the goal of the early site permit project involves possible generation of baseload power. Moreover, the NRC correctly held that assessment of "energy efficiency" is in any event a surrogate for assessment of "need for power," and the NRC properly applied its regulations allowing deferral of such assessments until a

subsequent licensing proceeding at which construction of an actual new power plant would be considered and authorized. These determinations by the NRC were consistent with NEPA, fully supported by the record, and not arbitrary, capricious, or an abuse of discretion.

The NRC granted summary disposition of Petitioners' contention regarding alternative generation sources because there were no genuinely disputed issues of material fact. The NRC concluded that none of the alternative generation methods at issue, including those proposed by Petitioners, was environmentally superior to a possible new nuclear power plant. After an exhaustive point by point review, the NRC concluded that Petitioners failed to offer any facts to contradict that conclusion. The NRC fully considered the issues raised by Petitioners and its decision to grant summary disposition was not arbitrary, capricious, or an abuse of discretion, or contrary to law.

In sum, at the end of the day, Petitioners are simply asking this Court to revisit the NRC's technical judgments regarding the environmental impacts of various alternatives, and to substitute its judgment for the NRC's. That, however, is not the appropriate role of a reviewing court under NEPA. The NRC's thorough and well-reasoned determinations were fully supported by the record. Accordingly, NRC's decisions were not arbitrary, capricious, an abuse of discretion, or in violation of law.

VI. STANDARD OF REVIEW

Under the APA, a court must uphold an agency's final action unless it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law." 5 U.S.C. § 706(2)(A); *see also Baltimore Gas & Electric Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 97-98 (1983) ("[Under NEPA, t]he role of the courts is simply to ensure that the [NRC] has adequately considered and disclosed the environmental impact of its actions and that its decision is not arbitrary or capricious."); *Highway J Citizens Group v. Mineta*, 349 F.3d 938, 952 (7th Cir. 2003) ("*Mineta*"); *Illinois v. NRC*, 591 F.2d 12, 16 (7th Cir. 1979). This is a narrow standard of review, and a court "is not empowered to substitute its judgment for that of the agency." *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 416 (1971); *see also Mineta*, 349 F.3d at 952 ("Under this standard, our inquiry is searching and careful, but the ultimate standard of review is a narrow one.") (internal quotations omitted).

Under NEPA, this means a court may not "substitute its judgment for that of the agency as to the environmental consequences of its actions." *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976). The court's "only role . . . is to insure that the agency has taken a 'hard look' at [the] environmental consequences." *Id.* Agency factual findings in the NEPA context are entitled to the same deferential review. A court:

> only must ask "whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment. If an agency considers the proper factors and makes a factual determination on whether the environmental impacts are significant or not, that decision implicates substantial agency expertise and is entitled to deference."

Mineta, 349 F.3d at 952-53 (citations omitted); *see also Van Abbema v. Fornell*, 807 F.2d 633, 636 (7th Cir. 1986) ("[I]t is not our role to second-guess. We merely consider whether the [agency] followed required procedures, evaluated relevant factors and reached a reasoned decision."). Thus, the courts do not review an agency's substantive judgments regarding alternatives under NEPA, but instead review the sufficiency of the agency's consideration of alternatives. *Mineta*, 349 F.3d at 960.

The same deference and standard of review applies to an appeal from an agency's grant of summary disposition. "Without evidence of an abuse of discretion, we defer to an agency's determination that a controversy raises no such issues [of material fact]." *Duke Power Co. v. FERC*, 864 F.2d 823, 829 (D.C. Cir. 1989) (upholding Federal Energy Regulatory Commission's grant of summary judgment); *see also National Engineering Contracting Co. v. OSHA*, 928 F.2d 762, 768 (6th Cir. 1991) (reviewing agency denial of summary judgment motion under abuse of discretion standard).

To the extent that Petitioners challenge the NRC's procedural regulations, courts have stated that the NRC has "wide discretion to structure its licensing hearings in the interests of speed and efficiency," including "pleading requirements in support of contentions, and procedures for summary disposition of claims not meeting the agency's criteria." *Massachusetts v. NRC*, 924 F.2d 311, 333 (D.C. Cir. 1991 (quoting *Union of Concerned Scientists v. NRC*, 735 F.2d 1437, 1448 (D.C. Cir. 1984)). This Court has also recognized this principle. *Illinois v. NRC*, 591 F.2d 12,

16 (7th Cir. 1979) ("The [NRC's] regulatory scheme is virtually unique in the degree to which broad responsibility is reposed in the administering agency, free of close prescription in its charter as to how it shall proceed in achieving the statutory objectives.") (internal quotations omitted).

VII. ARGUMENT

A. NRC Fully Complied with NEPA in Ruling that Energy Efficiency Is Not a Reasonable Alternative to Baseload Generation.

The Licensing Board initially rejected Petitioners' energy efficiency (or conservation) arguments, finding that those issues were outside the scope of the early site permit proceeding and constituted an impermissible challenge to the Commission's regulations.[38] Petitioners again raised these issues in their Motion to Amend Contention 3.1 and the Board again rejected Petitioners' energy efficiency arguments for the same reasons.[39]

The Board's decisions on energy efficiency are based on three principal propositions. First, while NEPA requires that federal agencies take a "hard look" at the environmental impacts of a proposed action, they need only consider alternatives that are reasonable and will bring about the ends of the project.[40] In doing so, the Licensing Board found that the agency *should* take into account the needs and goals of the applicant.[41] Second, reasonable alternatives in this case may be limited to those that can generate baseload power, and Exelon and the NRC have evaluated a multitude of alternatives that can generate baseload power.[42] Third, analysis of energy efficiency, no matter how it is characterized, is merely a surrogate for examination of the need for power, which is expressly deferred until

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[38] LBP-04-17 at A-88.

[39] LBP-05-19 at A-36 to A-38.

[40] *Id.* at A-33.

[41] *Id.* at A-33 to A-34 (emphasis added).

[42] *Id.* at A-35.

the combined licensing proceeding under 10 C.F.R. §§ 52.17(a)(2) and 52.18. Thus, any challenge by Petitioners alleging a failure to address such issues in the early site permit application is an impermissible challenge to Commission regulations.

The Commission affirmed the Board's ruling on this issue, holding that alternatives that could not achieve the general goal of providing baseload power were outside the scope of reasonable alternatives that must be considered under NEPA.[43]

Petitioners argue that, in reaching this decision, the NRC failed to require "the rigorous exploration and objective evaluation of all reasonable alternatives" to new nuclear power.[44] Specifically, they challenge the NRC's conclusions that (1) energy efficiency alternatives should be excluded because they are inconsistent with Exelon's purpose of creating baseload power; (2) the consideration of energy efficiency amounts to an improper analysis of the need for power; and (3) Exelon cannot implement energy efficiency alternatives.[45]

As discussed below, the NRC's decision on this issue is consistent with NEPA and applicable legal and regulatory precedent and therefore is not arbitrary and capricious, or contrary to law.

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[43] Commission Order at A-5 to A-6.

[44] Petitioners' Brief at 13.

[45] *Id.* at 18, 22, 24.

1. NRC's consideration of an applicant's purpose for the proposed project in evaluating the reasonableness of alternatives is fully consistent with NEPA and applicable legal precedent.

NEPA requires that federal "agencies 'study, develop, and describe appropriate alternatives' to major federal projects." *Mineta*, 349 F.3d at 960 (citing 42 U.S.C. § 4332 (2)(C)(iii) & (2)(E)). A "rule of reason" governs "both *which* alternatives the agency must discuss, and the *extent* to which it must discuss them. *Id.* (emphasis in original) (quoting *Citizens Against Burlington, Inc. v. Busey*, 938 F.3d 190, 195 (D.C. Cir. 1991)). To make that decision, the agency must ask three questions. First, what is the purpose or goal of the proposed project? Second, given that purpose, what are the reasonable alternatives to the project? And third, to what extent should the agency explore each particular reasonable alternative? *Mineta*, 349 F.3d at 960-61.

In this case, the NRC acknowledged that Exelon's purpose for the proposed project is to generate baseload power for sale on the wholesale market.[46] This is a general goal that permits evaluation of numerous alternatives. This goal is not unduly narrow; *e.g.*, it is not limited to only nuclear power plants.

Petitioners complain that the NRC "blindly adopted" Exelon's goal of creating baseload power in defining the scope of the project.[47] To the contrary: the NRC carefully considered the goals of the applicant, rejected as inapplicable those cases cited by Petitioners where goals had been defined too narrowly, and declined

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[46] Commission Order at A-6 to A-7. The Licensing Board also noted that "the purpose and need for the proposed action (issuance of the [early site permit]) 'is to provide stability in the licensing process by addressing safety and environmental issues before plants are built, rather than after construction is completed.'" LBP-05-19 at A-33 n.68 (quoting Draft EIS at 1-6).

[47] Petitioners' Brief, at 18.

Petitioners' invitation to conduct a NEPA inquiry "far afield" from the actual original proposal.

The NRC cited extensive case law supporting the proposition that a reviewing agency may *take into account* the applicant's goals for the project. Among other cases, the Board relied on *Citizens Against Burlington,* where the court held an agency "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." 938 F.2d at 199 (emphasis added). The NRC 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. Department of Transportation,* 17 F.3d 1502, 1506 (D.C. Cir. 1994), *cert. denied,* 513 U.S. 1043 (1994).[48]

This Court of Appeals has recently held that in considering whether an agency has met its obligation to consider alternatives under NEPA's "rule of reason," agency action should be upheld if it is based on consideration of a "sufficient number of reasonable alternatives." *Mineta*, 349 F.3d at 961. As required by NEPA, the NRC has defined the scope of Exelon's project in a sufficiently broad fashion so

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[48] It is also important to recognize that the NRC is not an economic regulator. Instead, the NRC has the statutory responsibility to regulate the safety of nuclear power. 42 U.S.C. § 2201(b) (NRC is required to "protect health" and "minimize danger to life or property"). Thus, the NRC's regulatory goal is to ensure the safety of the early site permit. The NRC plays no regulatory role in ensuring that the energy needs of a given region are met. *See, e.g., Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council,* 435 U.S. 519, 550 (1978) ("state public utility commissions and similar bodies are empowered to make the initial decision regarding the need for power. The [NRC's] prime area of concern in the licensing context, on the other hand, is national security, public health, and safety.") (internal citations omitted).

as to permit consideration of a wide range of reasonable alternatives. As discussed above, both the environmental report and Draft EIS identified and evaluated numerous non-nuclear alternatives to the proposed new nuclear plant, including natural gas, coal, and combinations involving wind, solar, and fossil fuel. Furthermore, the NRC considered these alternatives even though none of them was within the authority of the agency to implement. Therefore, NRC's stated goal for the project was sufficiently broad to permit the NRC to consider numerous alternatives that met the project's general goal, and NRC's stated goal is entitled to deference.

2. NRC's consideration of the applicant's purpose is consistent with this Court's decision in *Simmons*.

Petitioners rely heavily on this Court's decision in *Simmons*, 120 F.3d at 664 in arguing that the NRC's consideration of the applicant's purpose was improper in these circumstances. Petitioners have misread *Simmons* and its application to this case. *Simmons* simply stands for the proposition that the purpose of the project cannot be so narrow as to define reasonable alternatives out of existence. 120 F.3d at 666 ("We are confronted here with an example of this defining-away of alternatives"). This interpretation of *Simmons* is confirmed in *Mineta*. 349 F.3d at 961 ("We hold the defendants considered a sufficient number of alternatives and explored them to the extent necessary for this Project," *citing Simmons,* 120 F.3d at 668).

Simmons does state that the scope of reasonable alternatives should include alternatives to accomplish the "general goal of an action," and that an agency

cannot restrict its analysis to those "alternative means by which a particular applicant can reach *his* goals." *Simmons*, 120 F.3d at 669 (citing *Van Abbema*, 807 F.2d at 638 (emphasis in original). But *Simmons* does not hold that an agency must disregard a private applicant's purpose for the project if that purpose is sufficiently broad to allow consideration of a reasonable set of alternatives. *See* 120 F.3d at 666.[49]

Further, *Simmons* recognizes that a court must not substitute its judgment for reasonable agency determinations under NEPA. Specifically, *Simmons* states that it is not the role of the courts to "second-guess" the agency and that courts owe deference to decisions by an agency regarding the purpose of a proposed project. The courts must simply ensure that the agency followed required procedures, evaluated relevant factors, and reached a reasoned decision. *Id.* at 669 (citing *Van Abbema*, 807 F.2d at 636). The NRC did so in this case, as discussed above.

Petitioners also rely upon *Southern Utah Wilderness Alliance v. Norton*, 237 F. Supp. 2d 48 (D. D.C. 2002).[50] However, *Southern Utah* does not support the notion that the agency may not consider the applicant's goals, nor does that case help Petitioners here. The *Southern Utah* court stated that "an agency is obligated to

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49 Nor does the holding in *Van Abbema* foreclose consideration of a private applicant's goals. Instead, the *Van Abbema* opinion criticized the Army Corps of Engineers' decision that certain alternatives were not feasible because the applicant did not own the necessary land. *See* 807 F.2d at 638. In contrast, Exelon's environmental report and the NRC Staff's Draft EIS did not exclude any alternatives from consideration because Exelon did not own or could not purchase necessary land. In fact, Exelon considered wind power and solar power on sites it did not own. *See* ER at A-135 to A-138.

50 Petitioners' Brief at 18.

take the needs and goals of the project applicant in mind when considering alternatives [*Citizens Against Burlington*], but that obligation does not limit the scope of the agency's analysis to what the applicant states it needs." *Id.* at 53. The NRC in fact evaluated a number of non-nuclear alternatives to Exelon's proposed nuclear project, and the scope of the NRC's analysis was not impermissibly limited.

In this case, both the Licensing Board and the NRC carefully (and correctly) considered the *Simmons* decision. The Licensing Board, in ruling on Exelon's Motion for Summary Disposition, found that consideration of an applicant's purpose for the project when formulating NEPA alternatives is not incompatible with this Court's decision in *Simmons*. The Licensing Board based this conclusion on the facts that: (a) Exelon had examined several alternatives to generating baseload power; (b) the NRC had examined a multitude of alternatives, including some that cannot generate baseload power; and (c) Petitioners had failed to show that any of its proposed alternatives are even arguably competitive baseload alternatives.[51] The Board also held that the mere elimination of one alternative does not so narrow the scope of alternatives being examined as to run afoul of those cases standing for the proposition that the scope of alternatives cannot be so narrowed as to result in no alternative but the proposed action.[52]

The Commission similarly held that *Simmons*' holdings are not violated in this case because numerous alternatives to the general goals of the project were thoroughly considered. Specifically, the Commission stated that Exelon's proposed

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51 LBP-05-19 at A-35.

52 *Id.* at A-36.

project involves, "supplying additional power, [and] 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."[53] Thus,

> 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.[54]

In summary, under *Simmons*, an agency's finding regarding the goal of a project is entitled to deference by the courts, provided that the stated goal is not so narrow so as to exclude any reasonable alternative. In this case, the NRC's stated goal for the proposed project (providing baseload electricity) is not impermissibly narrow, and both Exelon and the NRC evaluated numerous non-nuclear alternatives for accomplishing that goal. Accordingly, the NRC's finding is consistent with NEPA and *Simmons* and is entitled to deference.

In contrast, Petitioners are asking that their views regarding the goals of the project be substituted for goals identified by the NRC. Such a request is directly contrary to *Simmons*. 120 F.3d at 669.

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53 Commission Order at A-7 (emphasis in original).

54 *Id.* at A-8 (internal citations omitted).

3. NRC's decision that energy efficiency is not a reasonable alternative is fully consistent with the Supreme Court's decision in *Vermont Yankee*.

Petitioners claim that consideration of purported energy efficiency alternatives is somehow mandated by the Supreme Court's decision in *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council*, 435 U.S. 519 (1978).[55] There is, however, nothing in *Vermont Yankee* that is inconsistent with the NRC's decision in this case.

Vermont Yankee does state that "the concept of 'alternatives' is an evolving one, requiring the agency to explore more or fewer alternatives as they become better known and understood." 435 U.S. at 552-553. In noting this, however, the Supreme Court upheld the NRC's decision *not* to consider energy conservation stating that, "[c]ommon sense also teaches us that the 'detailed statement of alternatives' cannot be found wanting simply because the agency failed to include every alternative device and thought conceivable by the mind of man." *Id.* at 551. Thus, contrary to Petitioners' argument, the NRC's decision not to consider conservation in this case does not turn the "holding in *Vermont Yankee* on its head."[56]

Further, the *Vermont Yankee* decision predates the era of electric utility deregulation. It does not discuss the scope of alternatives that must be considered in an application by a private merchant generator that simply sells power at wholesale. As described above, Exelon is not an electric utility.

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55 Petitioners' Brief at 21.

56 *Id.*

Instead, Exelon is a private company that sells power on the wholesale market. Therefore, *Vermont Yankee* is not relevant to the issue presented here.[57]

B. NRC Fully Complied with its own Rules and NEPA in Ruling that an Analysis of Need for Power can be Performed at the Combined License Stage before Construction of the Project.

The NRC concluded that the energy efficiency measures raised by the Petitioners pertained to the need for power. The NRC further concluded that, under 10 C.F.R. § 52.17 and § 52.18, Exelon and the NRC did not need to conduct a need for power analysis at the early site permit proceeding, but that such an analysis could be deferred until the combined license proceeding.[58]

Petitioners' challenge that decision on two grounds. First, Petitioners argue that NEPA requires consideration of the need for power as part of *any* alternatives analysis.[59] Second, Petitioners argue that Exelon and the NRC both impermissibly relied upon a presumed need for power.[60] Neither argument can withstand scrutiny.

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57 Petitioners also allege that Exelon can implement energy efficiency programs because Commonwealth Edison, an affiliate of "Exelon Generating" [sic] is "fully capable" of doing so. Petitioners' Brief at 24. Even assuming that this statement is true, it offers no legal or factual basis to question the applicability of the doctrine of separate legal status of all corporations, including affiliates. *See, e.g., Mellon Bank, N.A. v. Metro Communications, Inc.*, 945 F.2d 635, 643 (3rd Cir. 1991) ("[T]here is a presumption that a corporation, even when it is a wholly owned subsidiary of another, is a separate entity. The law recognizes the legal distinction of affiliated corporations . . . ."). Thus, whether or not Commonwealth Edison can implement energy efficiency programs is irrelevant to whether energy efficiency should be considered as an alternative to Exelon's proposed project.

58 Commission Order at A-13; LBP-05-19 at A-22, A-31 to A-32.

59 Petitioners' Brief at 23.

60 *Id.* at 22-24.

1. 10 C.F.R. §§ 52.17 and 52.18, which allow for the deferral of the need for power analysis until the combined license proceeding, are in full compliance with NEPA and NRC's authority to fashion its own rules of procedure.

Petitioners' first argument is essentially a claim that the NRC's regulations in 10 C.F.R. §§ 52.17(a)(2) and 52.18 violate NEPA. There is, however, nothing in these regulations that is inconsistent with NEPA. Under the regulations, an applicant may defer an analysis of the need for power until a combined license application, when construction will be authorized. An early site permit itself does not authorize construction, but instead only represents a partial construction permit. 10 C.F.R. § 52.21.[61] Thus, under the Commission's regulations, an early site permit is a prelude and input to a combined license proceeding. The environmental evaluations conducted at the early site permit stage are intended to provide for early resolution of some—but not all—of the environmental issues that would otherwise be evaluated in the combined license proceeding, at which point actual construction of a new plant would be authorized.

When the holder of an early site permit applies for a combined license, its environmental report must address "any other significant environmental issue not considered" at the early site permit stage. 10 C.F.R. §§ 52.79(a)(1) and 52.89. This would include an analysis of the need for power, if not performed as part of the

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61 As noted previously, under 10 C.F.R. §§ 52.25 and 50.10(e)(1), the holder of an early site permit with a site redress plan may conduct certain limited activities to prepare the site for construction, such as clearing, grading, and construction of temporary access roads, but may not construct any nuclear safety-related structures, systems or components. As provided by § 52.25, the site redress plan must show that the permitted activities will not result in any significant adverse environmental impact which cannot be redressed.

application for an early site permit. The combination of the environmental evaluations performed at the early site permit and combined license stages constitute the complete environmental evaluation required by NEPA for a new nuclear power plant. An applicant may not construct the nuclear plant until the full environmental analysis is complete and the combined license is issued. In this case, Exelon will not be able to begin construction of a nuclear plant at the Clinton site until a need for power analysis is completed in the combined license proceeding.

There is no bar under NEPA to deferring the need for power analysis to the combined license proceeding. Courts have permitted agencies to defer issues in an EIS for a multistage project when detailed useful information on the topic is not "meaningfully possible" to obtain, and the unavailable information is not essential to determinations at the earlier stage. *See County of Suffolk v. Secretary of the Interior*, 562 F.2d 1368, 1378 (2d Cir. 1977) *cert. denied,* 434 U.S. 1064 (1978). In *Suffolk*, the court considered a challenge to an EIS for a proposed leasing program for oil and gas exploration and development on the Outer Continental Shelf. *Id.* at 1372-73. The agency deferred consideration of the environmental impacts of specific transportation routes until a later EIS that would authorize oil or gas production. *Id.* at 1377. The court upheld this deferral because analysis of specific pipeline routes would be speculative, and the agency would be in a much better position to conduct its analysis after the lessees submitted their development plans. *Id.* at 1377-82.

The NRC has similarly determined that an analysis of need for power would be speculative at this stage. As noted previously, under NRC's regulations, an early site permit is effective for up to twenty years, 10 C.F.R. § 52.27, and can be renewed for another twenty years, 10 C.F.R. § 52.33. Given these long periods, it would be unreasonable and illogical to require applicants to analyze the need for power at the early site permit stage, since the factors affecting the need for power are likely to change substantially before actual construction is authorized.[62] Considering the uncertainty inherent in any need for power analysis at the early site permit stage, NEPA does not require the NRC "to engage in endless hypothesizing as to remote possibilities." *Suffolk*, 562 F.2d at 1379. Thus, NRC regulations permitting deferral of the need for power analysis to the combined license proceeding are not contrary to NEPA.

Finally, it is important to emphasize that agencies such as the NRC have broad discretion under the APA to implement procedural rules to carry out their administrative functions. "Absent constitutional constraints or extremely compelling circumstances," administrative agencies are "free to fashion their own rules of procedure and to pursue methods of inquiry capable of permitting them to discharge their multitudinous duties." *Vermont Yankee*, 435 U.S. at 543. Courts have also recognized the "*increased* deference due NRC procedural rules because of

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62 Under 10 C.F.R. §§ 52.17 and 52.18, an applicant for an early site permit may choose to address benefits of the proposed project at this early stage. However, Petitioners cannot force a private applicant to address issues that it "need not" address. Commission Order at A-5 n.24. As the Commission explained in its analysis of Petitioners' similar arguments on economic costs, discussed below, "it is not [Petitioners'] prerogative to introduce the issue at this juncture." *Id.* at A-14.

the unique degree to which broad responsibility is reposed in the [Commission], free of close prescription in its charter as to how it shall proceed in achieving the statutory objectives." *Union of Concerned Scientists v. NRC*, 920 F.2d 50, 54 (D.C. Cir. 1990) (internal quotations omitted) (emphasis in original); *see also Massachusetts v. NRC*, 924 F.2d at 324. Consistent with these principles, the NRC has determined that the need for power analysis may be conducted as part of the combined license proceeding. *See* 10 C.F.R. §§ 52.17(a)(2) and 52.18. Accordingly, the NRC's decision not to consider energy efficiency as part of the early site permit proceeding is entitled to deference and is not arbitrary and capricious or contrary to NEPA.

The Licensing Board and NRC decisions in this case clearly recognize that deferral of the need for power analysis is not, as Petitioners claim, a "refusal" to consider need for power.[63] The Licensing Board in this case indicated that the regulatory decision to defer the need for power analysis was based on the unique characteristics of the early site permit proceeding: "In the *particular case of an application for an early site permit* . . . the EIS need not include an assessment of the benefits (for example, need for power) of the proposed action."[64] The Commission confirmed that this decision is a procedural deferral within the agency's regulatory discretion: "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

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63 Petitioners' Brief at 22.

64 LBP-05-19 at A-32 (emphasis added).

deferred the issue until the future combined license proceeding."[65] In short, need for power will be considered by the NRC before it authorizes construction.[66] Thus, the NRC's decision below is in compliance with NEPA and NRC regulations and is not arbitrary and capricious or otherwise not in accordance with the law.

The cases and regulations cited by Petitioners do not establish the contrary. Petitioners suggest that the Council on Environmental Quality ("CEQ") regulations and *City of Carmel-By-The-Sea v. U.S. Department of Transportation*, 123 F.3d 1142 (9th Cir. 1997) somehow require consideration of "need" in any alternatives analysis under NEPA.[67] However, CEQ regulations are not binding on an agency unless specifically adopted by that agency, *Limerick Ecology Action, Inc. v. NRC*, 869 F.2d 719, 743 (3rd Cir. 1989), and the NRC has not adopted the CEQ regulations.[68] More importantly, the CEQ regulation cited by Petitioners, 40 C.F.R. § 1502.13, does not even address whether an agency may defer a consideration of need until a later stage in the proceeding. Furthermore, *Carmel-By-The Sea* simply held that the agency's discussion of "Purpose and Need" for the proposed project was acceptable; it did not hold that an agency must consider need at each stage of a multi-stage NEPA analysis. 123 F.3d at 1155-57. Thus the holding in *Carmel-By-The-Sea* cannot be relied upon to require NRC consideration of need for power at the early

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65 Commission Order at A-13.

66 Petitioners acknowledge that an early site permit does not authorize construction of a nuclear power plant. Petitioners' Brief at 6.

67 Petitioners' Brief at 23.

68 LBP-05-19 at A-30.

site permit stage when its own regulations expressly permit deferral of the issue to the combined license stage.

The remaining cases Petitioners cite involve judicial intervention to correct erroneous cost-benefit analyses. Contrary to Petitioners' suggestion, none of those decisions forces an agency to conduct a full cost-benefit analysis before it is required by statute or regulation. *See Natural Resources Defense Council v. U.S. Forest Service*, 421 F.3d 797, 813 (9th Cir. 2005) (EIS invalid due to misleading economic information); *Hughes River Watershed Conservancy v. Glickman*, 81 F.3d 437, 446-448 (4th Cir. 1996) (EIS invalid due to inflated economic benefits); *N.C. Alliance for Transportation Reform, Inc. v. U.S. Dept. of Transportation*, 151 F.Supp 2d 661, 693 (M.D.N.C. 2001) (finding any alleged inaccuracies in traffic projections harmless and finding cost-benefit analysis in EIS adequate). Therefore, the NRC's decision to defer a need for power analysis until the combined license proceeding is not inconsistent with the cases cited by Petitioners.

2. Petitioners' claim that Exelon and the NRC impermissibly presumed a need for power is baseless.

Petitioners argue that Exelon and NRC impermissibly "presumed" a need for power, without taking into account alleged energy efficiency factors. Petitioners' argument is baseless.

Exelon's environmental report did not address the need for power. Petitioners can cite to nothing in the record to support their claim that Exelon "identified and relied on a presumed need for power."[69] Exelon's environmental report explicitly

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69 Petitioner's Brief at 23.

states that it does not include a need for power analysis, and that the need for power analysis is being deferred to the combined license proceeding.[70] Furthermore, both the Licensing Board and the Commission in their decisions explicitly stated that issues related to need for power were being deferred to the combined license proceeding.[71] The NRC regulations expressly allow deferral of the need for power analysis, and Petitioners' claim that such a deferral somehow did not occur here is baseless.

C. NRC's Decision to Grant Exelon's Motion for Summary Disposition of Contention 3.1 is in Full Compliance with NEPA and NRC's Regulations.

Petitioners' Contention 3.1 alleged that Exelon failed to evaluate a "combination" of energy alternatives including combinations of wind/solar facilities and fossil fueled facilities and that Exelon used "flawed and outdated information regarding wind and solar power generation methods."[72] In response to Exelon's Motion for Summary Disposition, the Licensing Board ruled that Exelon's response cured the alleged omission of the analysis of a combination of alternatives, and also cured the alleged reliance on outdated and erroneous information by considering the information Petitioners supplied and by providing additional new evidence that Petitioners did not adequately challenge.[73] Because there was no genuine dispute of material fact related to alternatives involving combinations of wind/solar and fossil fueled facilities, the Board granted Exelon's Motion. The Commission upheld the

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70 ER at B-2 (Supplementary Appendix).

71 Commission Order at A-13; LBP-05-19 at A-33 n.124.

72 LBP-05-19 at A-67.

73 *Id.* at A-69 to A-70.

Licensing Board decision, finding that any alleged factual disputes amounted to "bare assertions" by Petitioners, "lacking any support and the requisite specificity" under the NRC's pleading rules.[74]

Petitioners claim that the NRC's grant of summary disposition of Contention 3.1 was contrary to NEPA and that Petitioners were entitled, under NEPA, to participate in the ESP licensing hearing.[75] In support of this claim, Petitioners argue that NRC's finding that there was no genuine dispute of material fact was clearly erroneous.[76] As discussed below, NEPA does not require a hearing when, as here, there is no genuine dispute of material fact, and NRC's finding to that effect was not arbitrary, capricious, or an abuse of discretion.

1. NEPA does not mandate hearings.

Petitioners cite no legal support for their argument that NEPA mandates a hearing on the Petitioners' contention.[77] That is because NEPA simply does not mandate hearings on environmental issues. Agencies are only required to use the same process they would use under any other applicable statute. *See, e.g., Union of Concerned Scientists*, 920 F.2d at 56 ("NEPA . . . does not itself provide for a hearing on [environmental] issues."); *Scenic Rivers Association of Oklahoma v. Lynn*, 520 F.2d 240, 246 (10th Cir. 1975), *rev'd on other grounds sub nom. Flint Ridge*

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74 Commission Order at A-10 to A-12.

75 Petitioners' Brief at 25-30.

76 Petitioners' Brief at 27. As noted in Section VI, Standard of Review, the appropriate standard of review of an agency's grant of summary disposition is an abuse of discretion standard, not the clearly erroneous standard cited by Petitioners in their Brief.

77 Petitioners' Brief at 30.

Development Co. v. Scenic Rivers Association of Oklahoma, 426 U.S. 776 (1976) ("[T]he question whether a public hearing [on a NEPA issue] is to be held is within the agency's discretion . . . . The courts have consistently held to this proposition."); 40 C.F.R. § 1506.6(c) ("Agencies shall . . . . [h]old or sponsor public hearings or public meetings whenever appropriate or *in accordance with statutory requirements applicable to the agency.*") (emphasis added); *see also Vermont Yankee*, 435 U.S. at 543 ("Absent constitutional constraints or extremely compelling circumstances the administrative agencies should be free to fashion their own rules of procedure and to pursue methods of inquiry capable of permitting them to discharge their multitudinous duties.") (internal quotations omitted).

In this case, the NRC has established general rules of procedure applicable to all issues (safety and environmental) in licensing proceedings. Those regulations authorize the NRC to dispense with hearings when there is no genuine dispute of material fact. 10 C.F.R. §§ 2.309 (f)(1)(vi), 2.1205, and 2.710. Furthermore, the courts have consistently held that the NRC may grant summary disposition in lieu of hearings. *Massachusetts v. NRC*, 924 F.2d at 333; *Union of Concerned Scientists v. NRC*, 735 F.2d at 1448. The NRC complied with its regulations in granting summary disposition and dismissing Petitioners' contention. Since the NRC's decision not to hold hearings on that contention complied with its rules of procedure, the decision did not violate NEPA.

2. Petitioners have identified no genuine dispute of material fact regarding Contention 3.1.

Petitioners offer two arguments to support their claim that NRC erred in finding no genuine dispute of material fact regarding Contention 3.1. First, they argue that a nuclear plant would impact significantly more resources than Petitioners' proposed combination of alternatives.[78] Second, they argue that Exelon and NRC over-estimated the impacts of the combination of alternatives and under-estimated the environmental impacts of a nuclear plant.[79]

As the Commission observed, the Petitioners seek to "flyspeck" the NRC's technical analysis.[80] All of Petitioners' allegations were addressed in detail in Exelon's Motion for Summary Disposition and in the NRC's Draft EIS and subsequent administrative decisions. Petitioners are impermissibly asking this Court to substitute its technical judgment for that of the agency. Under NEPA and the APA, courts have a narrow scope of review and do not evaluate the merits of an agency's decision. *See Porter County Chapter of the Izaak Walton League of America, Inc. v. Atomic Energy Commission*, 533 F.2d 1011, 1019 (7th Cir. 1976).

a. *Number of resources impacted.*

Petitioners claim that because the environmental report and Draft EIS identify numerically more areas that would be impacted by nuclear power than by wind, that fact alone should make wind preferable.[81] As correctly noted by the Licensing

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78 Petitioners' Brief at 28-29.

79 *Id.* at 29-30.

80 Commission Order at A-12.

81 Petitioners' Brief at 28-29.

Board, this is a "bare assertion" because Petitioners "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."[82] The Commission upheld this analysis by the Licensing Board.[83] Thus, the NRC gave reasoned consideration to Petitioners' assertions, and found them lacking.[84] As a result, the Commission's rejection of Petitioners' first argument is not arbitrary or capricious. As this court has held in *Mineta*, 349 F.3d at 952-53, and *Van Abbema*, 807 F.2d at 636, as long as the agency has considered the relevant factors and has reached a reasoned decision, its decision is entitled to deference.

b. *Environmental impacts of wind power.*

Petitioners also claim that Exelon and NRC underestimated the generating potential of wind power and thereby overestimated the associated land impacts.[85]

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82 LBP-05-19 at A-55. Petitioners also argue that Exelon and the NRC underestimated the land use impacts of uranium mining and waste storage. Petitioners' Brief at 29-30. However, as the Licensing Board ruled, Petitioners' arguments constituted an impermissible challenge to the NRC's regulations, which provide for a generic resolution of these issues. "[Exelon] is permitted by 10 C.F.R. §§ 51.51 and 51.23, respectively, to rely upon Table S-3 [in 10 C.F.R. § 51.51] to evaluate the effects of the uranium fuel cycle, and the Waste Confidence Rule . . . for its findings regarding waste disposal." LBP-05-19 at A-57.

83 Commission Order at A-11.

84 The Draft EIS categorized *all* of the environmental impacts of the proposed Clinton facility as "SMALL," i.e. "environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource." Draft EIS at B-6 (Supplementary Appendix). Since all of the impacts of the nuclear project are SMALL, the NRC concluded that the alternatives are not environmentally preferable to the nuclear project. Draft EIS at A-218. Petitioners have failed even to address this aspect of the NRC's analysis, much less demonstrate that it is arbitrary and capricious.

85 Petitioners' Brief at 34-35.

As discussed below, both the Licensing Board and the Commission fully considered these same arguments and ruled that Petitioners had failed to raise a genuine dispute of material fact related to these issues.[86]

With regard to land impacts of wind power, the Licensing Board found that Petitioners' conclusions regarding the land impacts of wind power did not differ materially from those of Exelon.[87] More importantly, the NRC staff and the Licensing Board did not attribute any environmental impacts to wind power in evaluating alternatives: "the [Draft EIS] found the nuclear option to be environmentally preferable even though it . . . *assumed no adverse environmental impact* from the solar and wind generation . . . ."[88]

The Commission's decision upheld the Licensing Board, noting that one of the "underpinnings" of the decision below was that the Draft EIS "found that the wind and solar portions of the [alternative] analyzed combination facility would have no environmental impacts."[89] Therefore, there is ample justification for the Commission's conclusion that Petitioners failed to raise a genuine dispute of material fact related to the impacts of wind power. Furthermore, since the NRC assumed that wind power would have no environmental impacts, the NRC's

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86 LBP-05-19 at A-57 to A-58; Commission Order at A-12.

87 LBP-05-19 at A-58. Petitioners mischaracterize the NRC's assessment of the "severity and duration" of comparative land impacts of the Clinton plant and wind power alternatives. Petitioners' Brief at 30. They point to an alleged conclusion of the Licensing Board, that "Exelon properly determined that wind power would impact approximately the same or more acres of land as a new nuclear plant." Petitioners' Brief at 29 (citing LBP-05-19 at A-57 to A-58). The Licensing Board did not offer such a determination anywhere in its Order.

88 LBP-05-19 at A-52 (emphasis added).

89 Commission Order at A-9 to A-10.

decision on the impacts of wind power clearly did not prejudice the Petitioners. Finally, since the issues on wind power raised by the Petitioners were not material to the NRC's decision regarding the combination of alternatives, the Petitioners have not provided a sufficient basis for reversing the NRC's decision.

c. Role of wind power in combination of alternatives.

Finally, Petitioners argue that Exelon should have assumed a greater role for wind power in the combination of alternatives (which in turn would displace some of the fossil fueled facilities and thereby reduce their environmental impacts), that Exelon ignored alleged reliability problems that nuclear plants pose for operators of electrical grids, and that Exelon should have assumed that the fossil fueled facilities would continue to operate even when the wind and solar facilities were operating.[90]

Suffice to say that none of Petitioners' arguments disputes or even challenges any of the material facts found by the NRC. In particular, none of Petitioners' arguments challenges the NRC's finding that a new nuclear power plant is environmentally preferable to a combination of new wind/solar and fossil fueled facilities.

Even if it is assumed *arguendo* Petitioners are correct that more credit should have been given to wind power which in turn would displace and reduce some of the environmental impacts from the fossil fueled facilities, Petitioners have not provided any facts that would dispute that the nuclear plant would be environmentally preferable to the combination involving wind/solar facilities and

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[90] Petitioners' Brief at 35.

fossil fueled facilities. In fact, Exelon fully considered the reduction of the environmental impacts attributable to displacement of fossil fuel by wind power.[91]

The NRC also addressed and found untenable Petitioners' argument alleging "reliability problems" related to large generating units.[92] The NRC found this claim to be a "bare assertion lacking any support and the requisite specificity" under the NRC's procedural regulations.[93] Petitioners' argument is also simply immaterial to the NRC's decision, which was based upon the conclusion that a nuclear plant is environmentally preferable.

Finally, as the Licensing Board pointed out, Petitioners argument that the fossil fueled facilities would continue to operate even if the wind/solar facilities were operating, actually cuts against the Petitioners because such a scenario would increase the environmental impacts of the combination.[94]

In summary, Petitioners' arguments are not material to the NRC's finding that a nuclear plant is environmentally preferable. Therefore, even if true, those arguments provide no basis for reversing NRC's decision.

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91 Petitioners' Brief at 34-36 states that Exelon overestimated that environmental impacts of a combination of alternatives, because it gave no credit to wind power in the combination and instead should have assumed that the wind facilities would operate with a 20% to 35% capacity factor. In actuality, in determining the environmental impacts of the combination, Exelon gave credit for the power produced by a wind facility and assumed that the environmental impacts from operation of the fossil fueled facility would be reduced in proportion to the amount of power produced by wind facilities. RAI Response at A-171 to 173. Exelon further assumed that the wind facilities would have a capacity factor of 25%, possibly rising to 35% in 2020 assuming improvements in wind technology. *Id.* at A-161. Therefore, Petitioners' claims do not raise a genuine dispute of material fact.

92 Petitioners' Brief at 35.

93 Commission Order at A-12.

94 LBP-05-19 at A-52,

3. The NRC properly decided that issues related to costs of alternatives were not material given that none of the alternatives is environmentally superior to the proposed nuclear project.

The Licensing Board ruled that economic cost is a factor in evaluating an alternative only if the alternative is environmentally preferable.[95] The Board further ruled that the proposed nuclear plant is environmentally preferable to the combination of alternatives postulated by the Petitioners. As a result, the Board concluded that NRC was not required to perform an economic cost comparison of the alternatives.[96] Petitioners criticize the NRC's decisions, arguing that NEPA mandates an economic analysis as part of any consideration of alternatives.[97] There is no such mandate, and thus the Licensing Board's ruling is not contrary to law.

NEPA is an environmental law, not an economic law, and it is intended to ensure that the environmental consequences of agency action are adequately considered. *Southern Louisiana Environmental Council, Inc. v. Sand*, 629 F.2d 1005, 1013 (5th Cir. 1980) ("NEPA is concerned with the disclosure and consideration of environmental consequences."). Analysis of economic costs is therefore relevant only to the extent that it is relevant to the environmental analysis. *Id.* at 1011 ("Determination of economic benefits and costs that are tangential to environmental consequences are within this wide area of agency discretion [recognized by *Vermont Yankee*].").

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95 LBP-05-19 at A-64. None of the alternatives at issue is environmentally superior to the proposed action. Commission Order at A-10 ("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.").

96 LBP-05-19 at A-62, A-64 to A-65.

97 Petitioners' Brief at 30-31.

Further, the cases cited by Petitioners simply require accurate consideration of costs *when they are relevant* to the NEPA analysis. None of the cases Petitioners cite holds that an agency must conduct an economic analysis of alternatives in cases in which the alternatives are not environmentally superior.

For example, in *Southern Louisiana*, the Fifth Circuit recognized that economic considerations are relevant to the NEPA analysis only when they affect the environmental analysis. 629 F.2d at 1011-13. In *Hughes River*, the court invalidated an EIS because an "inflated estimate of the Project's . . . benefits . . . impaired fair consideration" under NEPA. 81 F.3d at 448. In *Communities, Inc. v. Busey*, the court upheld the agency's analysis of environmentally comparable alternatives based in part on cost, and did not, as Petitioners suggest, require courts to invalidate agency decisions if they disagree with an agency's cost analysis. *See* 956 F.2d 619, 627 (6th Cir. 1992). Thus, none of these cases provides a legal basis for reversing the NRC's decision that issues related to cost are not material, given that the combination of alternatives proposed by Petitioners is not environmentally preferable to the proposed Exelon project.[98]

Therefore, the NRC's decision that economic cost is a factor in evaluating an alternative only if the alternative is environmentally preferable is not arbitrary or capricious, or contrary to law.

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98 Finally, none of the cases cited by Petitioners is inconsistent with the NRC's holding that consideration of costs of the proposed project can be deferred to the cost-benefit analysis in the combined license proceeding under 10 C.F.R. §§ 52.17(a)(2) and 52.18. LBP-05-19 at A-60 to A-65; Commission Order at A-12 to A-14.

VIII. CONCLUSION

The NRC's rulings were not arbitrary, capricious, an abuse of discretion, or in violation of law. Therefore, the Court should affirm the Commission's decision.

Respectfully submitted,

Steven P. Frantz, Esq.
Paul M. Bessette, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 739-5460
(202) 739-3001 (fax)

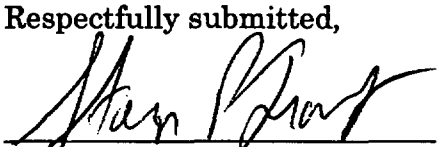
Thomas S. O'Neill, Esq.
Vice President for Regulatory and
Legal Affairs
Exelon Nuclear
4300 Winfield Rd.
Warrenville, Illinois 60555
(630) 657-3770
(630) 657-4333 (fax)

June 7, 2006

CERTIFICATE OF COMPLIANCE WITH RULE 32(a)(7)(B)

Steven P. Frantz, counsel for the Intervenor-Respondent, hereby certifies pursuant to Fed. R. App. P. 32(a)(7)(C) that the Brief of Intervenor-Respondent contains 11,189 words and complies with the volume limitation set forth in Rule 32(a)(7)(B)(i).

Respectfully submitted,



Steven P. Frantz, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 739-5460
(202) 739-3001 (fax)

Dated: June 7, 2006

CERTIFICATE OF SERVICE

I, Paul M. Bessette, hereby certify that copies of the Brief of Intervenor-Respondent and Appendix have been filed with the Clerk of the United States Court of Appeals for the Seventh Circuit via FedEx overnight delivery, and served on the following by e-mail and FedEx overnight delivery, on this 7th day of June, 2006.

Jared K. Heck, Esq. U.S. Nuclear Regulatory Commission Office of the General Counsel Mail Stop – 0 – 15 D21 Washington, D.C. 20555 (e-mail: jkh3nrc.gov)	Howard A. Learner, Esq. Shannon Fisk, Esq. Brad Klein, Esq. Environmental Law & Policy Center 35 East Wacker Drive, Suite 1300 Chicago, Illinois 60601 (e-mail: hlearner@elpc.org; sfisk@elpc.org)
Thomas P. Walsh, Esq. Office of the United States Attorney 219 S. Dearborn Street Chicago, Illinois 60604 (e-mail: thomas.walsh2@usdoj.gov)	Diane Curran, Esq. Harmon, Curran, Spielberg & Eisenberg LLP 1726 M Street N.W., Suite 600 Washington, D.C. 20036 (e-mail: dcurran@harmoncurran.com)

Paul M. Bessette, Esq.
Morgan, Lewis & Bockius LLP
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 739-3000
(202) 739-3001 (fax)

Dated: June 7, 2006

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Environmental Report for the Exelon Generation Company, LLC Early Site Permit

CHAPTER 8

Need For Power

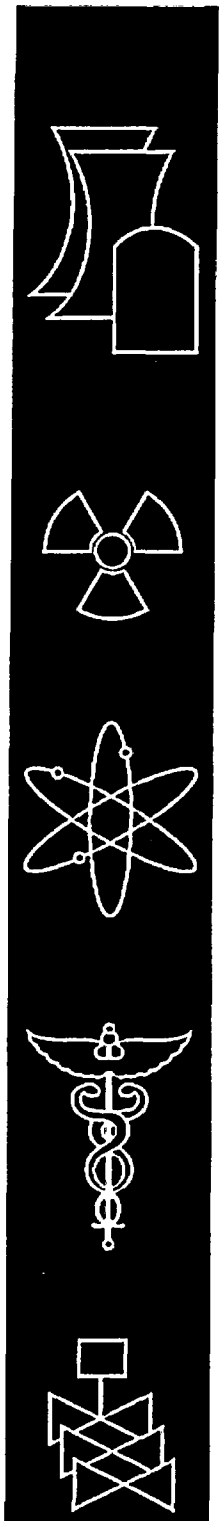
The Applicant is not currently seeking approval for the construction or operation of nuclear reactor(s) at the CPS as part of this Application for the EGC ESP. Although, the Applicant believes future demand for power will warrant future construction of additional generating capacity, 10 CFR 52.18 and 52.17(a)(2) do not require the evaluation of a need for power to be provided in an ESP application. Therefore, this evaluation will be provided at the time an application for a construction permit or COL is submitted, in accordance with the applicable regulations (USNRC, 1999).

CHAPTER 8

References

10 CFR 52. Code of Federal Regulations. "Early Site Permits, Standard Design Certifications, and Combined Licenses for Nuclear Power Plants."

U.S. Nuclear Regulatory Commission (USNRC). *Standard Review Plans for Environmental Reviews of Nuclear Power Plants*. NUREG-1555. Office of Nuclear Reactor Regulation. October 1999.



Environmental Impact Statement for an Early Site Permit (ESP) at the Exelon ESP Site

Draft Report for Comment

U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, DC 20555-0001

Executive Summary

On September 25, 2003, the U.S. Nuclear Regulatory Commission (NRC) received an application from Exelon Generation Company, LLC (Exelon) for an early site permit (ESP) for a location identified as the Exelon ESP site, adjacent to the Clinton Power Station (CPS), Unit 1. The Exelon ESP site is located in DeWitt County, Illinois, approximately 10 km (6 mi) east of the City of Clinton. An ESP is a Commission approval of a location for siting one or more nuclear power facilities and is a separate action from the filing of an application for a construction permit (CP) or combined CP and operating license (combined license or COL) for such a facility. An ESP application may refer to a reactor's or reactors' characteristics or plant parameter envelope (PPE), which is a set of postulated design parameters that bound the characteristics of a reactor or reactors that might be built at a selected site; alternatively, an ESP may refer to a detailed reactor design. The ESP is not a license to build a nuclear power plant; rather, the application for an ESP initiates a process undertaken to assess whether a proposed site is suitable should Exelon decide to pursue a CP or COL.

Section 102 of the National Environmental Policy Act of 1969 (NEPA) (42 USC 4321) directs that an environmental impact statement (EIS) be prepared for major Federal actions that significantly affect the quality of the human environment. Subpart A of Title 10 of the Code of Federal Regulations (CFR) Part 52 contains the NRC regulations related to ESPs. The NRC has implemented Section 102 of NEPA in 10 CFR Part 51. As set forth in 10 CFR 52.18, the Commission has determined that an EIS will be prepared during the review of an application for an ESP. The purpose of Exelon's requested action, issuance of the ESP, is for the NRC to determine whether the Exelon ESP site is suitable for a new nuclear unit by resolving certain safety and environmental issues before Exelon incurs the substantial additional time and expense of designing and seeking approval to construct such a facility at the site. Part 52 of Title 10 describes the ESP as a "partial construction permit." An applicant for a CP or COL for a nuclear power plant or plants to be located at the site for which an ESP was issued can reference the ESP, thus reducing the review of siting issues at that stage of the licensing process. However, a CP or COL to construct and operate a nuclear power plant is a major Federal action and will require an EIS be issued in accordance with 10 CFR Part 51.

Three primary issues – site safety, environmental impacts, and emergency planning – must be addressed in the ESP application. Likewise, in its review of the application, the NRC assesses Exelon's proposal in relation to these issues and determines if the application meets the requirements of the Atomic Energy Act and the NRC regulations. This EIS addresses the potential environmental impacts resulting from the construction and operation of a new nuclear unit at the Exelon ESP site.

In its application, Exelon requested authorization to perform certain site-preparation activities after the ESP is issued. The application, therefore, includes a site redress plan that specifies how Exelon would stabilize and restore the site to its pre-construction condition (or conditions

consistent with an alternative use) in the event a nuclear power plant is not constructed on the approved site. Pursuant to 10 CFR 52.17(a)(2), Exelon did not address the benefits of the proposed action (e.g., the need for power). In accordance with 10 CFR 52.18, the EIS is focused on the environmental effects of construction and operation of a reactor, or reactors, that have characteristics that fall within the postulated site parameters.

Upon acceptance of the Exelon ESP application, the NRC began the environmental review process described in 10 CFR Part 51 by publishing in the *Federal Register* a Notice of Intent (68 FR 66130) to prepare an EIS and conduct scoping. The staff held a public scoping meeting in Clinton, Illinois, on December 18, 2003, and visited the Exelon ESP site in March 2004. Subsequent to the scoping meeting and the site visit and in accordance with NEPA and 10 CFR Part 51, the staff determined and evaluated the potential environmental impacts of constructing and operating a new nuclear unit at the Exelon ESP site. Included in this EIS are (1) the results of the NRC staff's analyses, which consider and weigh the environmental effects of the proposed action (issuance of the ESP) and of constructing and operating a new nuclear unit at the ESP site, (2) mitigation measures for reducing or avoiding adverse effects, (3) the environmental impacts of alternatives to the proposed action, and (4) the staff's recommendation regarding the proposed action.

During the course of preparing this EIS, the staff reviewed the application, including the Environmental Report (ER) submitted by Exelon, consulted with Federal, State, Tribal, and local agencies, and followed the guidance set forth in review standard RS-002, *Processing Applications for Early Site Permits*, to conduct an independent review of the issues. The review standard draws from the previously published NUREG-0800, *Standard Review Plans for the Review of Safety Analysis for Nuclear Power Plants*, and NUREG-1555, *Environmental Standard Review Plan (ESRP)*. In addition, the staff considered the public comments related to the environmental review received during the scoping process. These comments are provided in Appendix D of this EIS.

Following the precedent of NUREG-1437, *Generic Environmental Impact Statement for License Renewal of Nuclear Plants*, and supplemental license renewal EISs, environmental issues are evaluated using the three-level standard of significance – SMALL, MODERATE, or LARGE – developed by NRC using guidelines from the Council on Environmental Quality. Table B-1 of 10 CFR Part 51, Subpart A, Appendix B, provides the following definitions of the three significance levels:

SMALL – Environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource.

MODERATE – Environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource.

LARGE – Environmental effects are clearly noticeable and are sufficient to destabilize important attributes of the resource.

Mitigation measures were considered for each environmental issue and are discussed in the appropriate sections.

The staff plans to conduct a public meeting near the Exelon ESP site to describe the results of the NRC environmental review, answer questions, and provide members of the public with information to assist them in formulating comments on this EIS. After the comment period, the staff will consider and disposition all the comments received. These comments will be addressed in Appendix E of the final EIS.

The staff's preliminary recommendation to the Commission related to the environmental aspects of the proposed action is that the ESP should be issued. The staff's evaluation of the site safety and emergency preparedness aspects of the proposed action have been addressed in the staff's draft safety evaluation report dated February 10, 2005.

This recommendation is based on (1) the application, including the ER submitted by Exelon; (2) consultation with other Federal, State, Tribal, and local agencies; (3) the staff's independent review; and (4) the staff's consideration of public comments related to the environmental review that were received during the scoping process; and (5) the assessments summarized in the EIS, including the potential mitigation measures identified in the ER and this EIS. In addition, in making its recommendation to the Commission, the staff has determined that there are no environmentally preferable or obviously superior sites. Finally, the staff has concluded that the site-preparation and construction activities allowed by 10 CFR 50.10(e)(1) would not result in any significant adverse environmental impact that cannot be redressed.