

POLICY ISSUE NOTATION VOTE

September 27, 2002

SECY-02-0175

FOR: The Commissioners

FROM: William D. Travers
Executive Director for Operations

SUBJECT: DENIAL OF PETITION FOR RULEMAKING TO ELIMINATE REVIEW OF
ALTERNATIVE SITES, ALTERNATIVE ENERGY SOURCES AND NEED FOR
POWER IN NUCLEAR POWER REACTOR SITING AND LICENSING
REVIEWS (PRM-52-2)

PURPOSE:

The purpose of this paper is to obtain Commission approval to:

(1) deny a petition for rulemaking to eliminate reviews of alternative sites, alternative energy sources, and need for power in nuclear power reactor siting and licensing reviews; and

(2) continue with current staff efforts to develop the technical bases for rulemaking to specifically define the requirements for consideration of alternative sites, which the staff expects would address some of the petitioner's concerns in this area.

SUMMARY:

The NRC staff is recommending denying a petition for rulemaking (PRM) submitted by the Nuclear Energy Institute (NEI or the petitioner) (PRM 52-2). The petitioner requested that the NRC amend its regulations in Part 52 of Title 10 of the *Code of Federal Regulations* (10 CFR Part 52), "Early Site Permits, Design Certifications, and Combined Licenses for Nuclear Power Plants," to eliminate the requirement for an early site permit (ESP) applicant to include, and for the NRC to review, alternatives to the site proposed in an ESP application. The petitioner further requested that the NRC initiate a rulemaking to remove requirements in Parts 2, 50, and 51 that applicants and licensees analyze and the NRC evaluate alternative sites, alternative energy sources, and need for power with respect to the siting, construction, and operation of nuclear power plants.

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The staff recommends denying the petition because the NRC must continue to consider alternative sites, alternative energy sources, and need for power to meet its responsibilities under the National Environmental Policy Act of 1969, as amended, (NEPA), notwithstanding the legal arguments presented in the petition.

BACKGROUND:

By letter dated July 18, 2001, NEI submitted a petition for rulemaking to amend 10 CFR Part 52, Subpart A, "Early Site Permits." The petitioner requested that the NRC eliminate the requirement that an ESP applicant include and the NRC review alternatives to the site proposed in an ESP application. The petitioner further requested that the Commission amend 10 CFR Part 51 and related provisions in 10 CFR Parts 2 and 50 to remove the requirements that applicants and licensees analyze and the NRC evaluate alternative sites, alternative energy sources, and need for power with respect to the siting, construction, and operation of nuclear power plants. The petitioner stated that the need for these changes is a direct outgrowth of the dramatic changes that have occurred in the electric power industry, most notably the passage of the Energy Policy Act of 1992 and the resultant actions by the Federal Energy Regulatory Commission (FERC) to impose open access transmission requirements on electricity transmission providers. The petitioner stated that these changes have fundamentally altered both the marketplace for electricity and the makeup of electricity generating companies, and that the regulatory framework that the NRC uses to implement its responsibilities under NEPA should be revised accordingly.

The regulations in 10 CFR Part 52 govern the issuance of ESPs, standard design certifications, and combined licenses (COLs) for nuclear power facilities licensed under Section 103 or 104b of the Atomic Energy Act of 1954, as amended (68 Stat. 919), and Title II of the Energy Reorganization Act of 1974 (88 Stat. 1242). The provisions of 10 CFR Part 52, Subpart A, apply to applicants seeking an ESP. The purpose of 10 CFR Part 52, Subpart A, is to resolve site suitability issues in a licensing proceeding as early as possible, before the applicant makes large commitments of resources. The ESP process allows an applicant to "bank" sites and is expected to improve the effectiveness of the nuclear power plant licensing process. The regulations in 10 CFR Parts 2, 50, and 51 referenced by the petitioner relate to requirements for filing and acceptance of licensing applications, review of site suitability issues, environmental reports, and environmental impact statements (EIS).

A notice of receipt of the petition was published in the *Federal Register* on September 24, 2001 (66 FRN 48828). The comment period ended on November 8, 2001. There were 12 comments received on this petition. Nine of the commenters supported the petition. Seven of those were nuclear power plant owners and/or operators, one was a nuclear steam supply system vendor, and one was the petitioner. Three commenters opposed the petition. One was a private citizen and the other two were commenting on behalf of public advocacy groups.

DISCUSSION:

NEPA requires Federal Government agencies to study the impacts of their "major Federal actions significantly affecting the quality of the human environment" and prepare detailed statements on the environmental impacts of the proposed actions and on alternatives to the proposed actions (NEPA §102(C); 42 U.S.C. § 4332(C)). The act of granting a permit or

license for a nuclear power plant qualifies as a major Federal action significantly affecting the quality of the human environment; therefore, NEPA applies to NRC licensing activities.

Cost-Benefit Balancing and Need for Power

The NRC currently requires an EIS in connection with new power plant construction. The EIS must include a balancing of costs and benefits and an assessment of need for power (10 CFR 51.71 and 10 CFR Part 51, Appendix A(4)). Although NEPA does not explicitly mention cost-benefit balancing, it is well-established through judicial interpretations of the statute that an EIS for a proposed major action must include some kind of cost-benefit analysis. The principal benefit of constructing and operating a power reactor is the electric power. "Hence, absent some 'need for power,' justification for building a facility is problematical" (*Duke Power Co. v. Federal Energy Regulatory Commission*, 400 F.2d 1071, 40 NRC 397, 405 (1976)).

Commission practice regarding need-for-power assessments is consistent with judicial precedent. As part of the Commission's NEPA compliance, need for power must be addressed in connection with new power plant construction so that the NRC may weigh the likely benefits (e.g., electrical power) against the environmental impacts of constructing and operating a nuclear power reactor. In considering the need for power, the NRC does not supplant the States that have traditionally been responsible for assessing the need for power facilities and their economic feasibility, and for regulating rates and services. Moreover, in the non-regulated environment foreseen by the petitioner, the NRC consideration of the need for power may become "more, not less, crucial" (in the words of a commenter) because a State decision maker may no longer do need-for-power assessments.

With regard to the petitioner's discussion of the relevance of the NRC's actions under NEPA in the license renewal context, the staff notes that, in the case of license renewal, the significant environmental impacts associated with the siting and construction of the nuclear power plant have already occurred. In the case of siting and construction of a new nuclear power plant, the NRC must do a need for power assessment to accurately characterize the cost (i.e., environmental impact) and benefits associated with the proposed action and to assist the NRC in determining the scope of alternatives to consider. For these reasons, the license renewal example is not relevant to consideration of need-for-power issues for the site approval or new reactor construction processes.

In conclusion, the petitioner has not shown any change in judicial consideration of the NEPA obligations of Federal regulatory agencies responsible for privately proposed licensing actions, or other factors underlying the Commission's current policies for considering need for power in a NEPA context, that would lead the staff to conclude that consideration of need for power is no longer a necessary part of the Commission's NEPA obligations for reactor siting and licensing decisions.

Alternatives Addressed in EIS

The NRC's obligation to review alternatives to nuclear power plant licensing is based on NEPA Section 102(2)(C)(iii) which requires that an EIS discuss the "alternatives to the proposed action." In accordance with NEPA, 10 CFR 51.45 requires that an applicant submit an environmental report that contains alternatives to the proposed action. Similarly, 10 CFR 51.71 requires that an EIS include an analysis that considers the environmental impacts of

alternatives to the proposed action. In addition, it is the NRC's policy to follow the Council on Environmental Quality's (CEQ) "Regulations for Implementing NEPA" (CEQ Guidelines), subject to certain conditions (10 CFR 51.10). Section 1502.14 of the CEQ Guidelines requires the EIS to "rigorously explore and objectively evaluate all reasonable alternatives." The CEQ Guidelines state that the discussion of impacts of the proposed action and its alternatives is the "heart" of the EIS.

The NEPA phrase "alternatives to the proposed action" is understood to mean "alternatives to achieve the underlying purpose and need for the action." (See the remarks of Sen. Jackson in 115 Cong. Rec. 40,420, Dec. 20, 1969). NRC regulations require the EIS to include a statement of the purpose of and need for the action (10 CFR Part 51, Appendix A to Subpart A, 1(a)(4) & 4). Once the purpose of and need for the action are understood, the agency is expected to follow a rule of reason in deciding which alternatives are "reasonable" or "feasible." This "rule of reason" governs both *which* alternatives the agency must discuss and the *extent* to which it must discuss them.

Alternative Energy Sources

The NRC currently considers alternate energy sources at the construction permit (CP) stage because alternatives to the construction of a nuclear power plant need to be considered before the environmental impact of construction is realized. The agency's practice is reflected in Footnote 4 to 10 CFR 51.71(e) which states:

The consideration of reasonable alternatives to a proposed action involving nuclear power reactors (e.g., alternative energy sources) is intended to assist the NRC in meeting its NEPA obligations ...

The footnote conveys the agency's understanding that it considers alternative energy sources in order to comply with its NEPA obligations.

The Commission's practice was acknowledged in the statements of consideration for the final rule amending 10 CFR Part 51 to bar the consideration of alternative energy source issues from consideration at operating license hearings for nuclear power plants (47 FR 12940, March 26, 1982). The Commission stated that "in accordance with the Commission's NEPA responsibilities, the need for power and alternative energy sources are resolved in the construction permit proceeding." The Commission added that "[a]lternative energy source issues receive and will continue to receive *extensive* consideration at the CP stage" (emphasis added). Thus, the Commission has committed itself to consider alternative energy sources at the CP stage and believes it must do so to meet its NEPA responsibilities. Under 10 CFR Part 52, alternative energy sources are considered at the ESP stage or, in the absence of reference to an ESP, at the COL stage.

Finally, the NRC's position on consideration of alternative energy sources is consistent with other agencies' practice. Agencies have consistently included alternative energy sources within their consideration of alternatives when preparing an EIS for a new power generation project.

In conclusion, the petitioner has not shown any change in judicial consideration of the NEPA obligations of Federal regulatory agencies responsible for privately proposed licensing actions, or other factors underlying the Commission's current policies for considering alternative energy

sources in a NEPA context, that would lead the staff to conclude that consideration of alternative energy sources is no longer a necessary part of the Commission's NEPA obligations for reactor siting and licensing decisions.

Alternative Sites

The Commission uses a two-part process to ensure that alternative locations for constructing power generation facilities are adequately considered. The first part of this process requires that the applicant submit a slate of alternative sites that are "among the best that could reasonably be found" inside a region in which it is reasonable to construct a plant to meet the projected need for power. The second part of the process requires the NRC to determine whether an obviously superior site has been identified.

The statement of consideration for the final 10 CFR Part 51 rule (49 FR 9352; March 12, 1984) explains why the NRC considers alternative sites:

The reason for considering alternative sites is that many environmental impacts can be avoided or significantly reduced through proper selection of the location for a new generating facility. These significant impacts which can be avoided or reduced are also readily detected at the planning stage of a power plant. For this reason alternative site reviews are encouraged as early as possible in the process of licensing a power plant and the use of reconnaissance-level information for making the comparative analysis is urged.

The "obviously superior" standard has been upheld by the courts.

The petitioner has not demonstrated any change in the NEPA practice of other Federal regulatory agencies responsible for licensing privately proposed actions, or other factors underlying the Commission's current policies for considering alternative sites in a NEPA context, that would lead the staff to conclude that consideration of alternative sites is no longer a necessary part of the Commission's NEPA obligations for reactor siting and licensing decisions.

Although the staff does not agree that it can eliminate alternative site reviews, it has initiated work to develop the technical bases for rulemaking to specifically define the requirements for consideration of alternative sites.¹ The staff expects that such a rulemaking would address some of the petitioner's concerns in this area by reducing unnecessary regulatory burden and by introducing more certainty in the alternative site review process. The staff agrees that it should consider the changes in the electricity market (e.g., applicants may be unregulated merchant generators) in this effort. Current NRC regulations were designed for plants owned by public utilities. The staff believes that the first part of the process for considering alternative sites needs to be revisited to define an adequate assessment. With the changes taking place in the power market, it is apparent that the staff should also revisit the process to address the

¹ This rulemaking (RM#313) was most recently addressed in a Commission memorandum dated December 18, 2000, in which the staff stated that RM#313 will account for industry deregulation and restructuring, consider the recent evolution of the siting process, and reduce uncertainty in the licensing process. In this memorandum, the staff stated that it planned to start the alternative sites rulemaking in mid-fiscal year (FY) 2002.

complexities presented by merchant plants that have no particular regional boundary for business purposes. In addition, the staff believes that it is appropriate to clarify the “obviously superior” standard in the upcoming rulemaking. The staff has recently initiated technical assistance for this work at a national laboratory. Within about a year, the staff expects to develop the technical bases for the rulemaking and submit a rulemaking plan to the Commission.

NRC Performance Goals

The staff also considered the petitioner’s proposals in the context of the NRC performance goals. The staff believes that its recommendation to deny the petition upholds the NRC performance goal of maintaining safety, protecting the environment, and the common defense and security because it will ensure that the NRC continues to meet its NEPA obligations. The staff also believes that its recommendation to deny the petition upholds the goal of increasing public confidence. The staff believes that reducing the scope of the staff review of alternatives, which is at the heart of the NEPA review process, would undermine public confidence. Because the staff believes that it has a statutory obligation to conduct the reviews that the petitioner seeks to eliminate, it does not believe that the performance of such reviews in itself poses an *unnecessary* regulatory burden. However, the staff does intend to consider the changes in the electricity marketplace as it develops regulations and guidance pertaining to these reviews so that it can reduce any unnecessary burden associated with the *processes* used to conduct the reviews. As a result, the staff will make its reviews of these matters more effective and, therefore, more efficient.

Conclusion

The petitioner has not shown any change in judicial consideration of the NEPA obligations of Federal regulatory agencies responsible for licensing privately proposed actions, or other factors underlying the Commission’s current policies for considering alternative sites, alternative energy sources, and need for power in a NEPA context, that would lead the staff to conclude that consideration of these issues is no longer a necessary part of the NRC’s NEPA obligations for reactor siting and licensing decisions. For site approval applications (i.e., ESP applications, and CP and COL applications that do not reference an ESP), alternative energy sources and alternative sites must be addressed in the NRC’s EIS, and for construction approval applications (i.e., CPs and COLs), the benefits assessment (e.g., need for power) must be addressed in the NRC’s EIS. For the reasons cited in this paper, the staff recommends denying the petition.

COORDINATION:

The Office of the General Counsel has no legal objection to the denial of this petition.

RECOMMENDATIONS:

That the Commission:

1. approve the denial of the petition for rulemaking and publication of the *Federal Register* notice of the denial (Attachment 1);
2. approve continuation of current staff efforts to develop the technical bases for rulemaking to specifically define the requirements for consideration of alternative sites;

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3. inform appropriate Congressional committees; and
4. note that a letter informing the petitioner of the Commission's decision to deny the petition is attached for the Secretary's signature (Attachment 2).

/RA/

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Executive Director
for Operations

Attachments:

1. *Federal Register* Notice
2. Letter to Petitioner

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DISTRIBUTION: See attached.

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