



The Commonwealth of Massachusetts

Department of Public Utilities

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Donald P. Cleary
Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission
5650 Nicholson Lane
Rockville, MD 20852

Dear Mr. Cleary:

Please find enclosed the comments of the Massachusetts Department of Public Utilities regarding the treatment of need and alternative energy sources in the proposed 10 CFR Part 51 rule for license renewal.

If you have any questions or require additional information, please contact Brian Abbanat of our Electric Power Division at (617) 727-9748. Thank you for your attention to this matter.

Sincerely,

Kenneth Gordon, Chairman

Barbara Kates-Garnick, Commissioner

Mary Clark Webster, Commissioner

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COMMENTS OF THE MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES
REGARDING THE TREATMENT OF NEED AND ALTERNATIVE ENERGY SOURCES
IN THE PROPOSED 10 CFR PART 51 RULE FOR LICENSE RENEWAL

March 4, 1994

I. OVERVIEW

The Massachusetts Department of Public Utilities ("Massachusetts DPU") offers the following comments with regard to the solicitation of the Nuclear Regulatory Commission ("NRC") staff to provide written comments on the matters covered in the January 1994 NRC staff discussion paper "Addressing the Concerns of States and Others Regarding the Role of Need for Generating Capacity, Alternative Energy Sources, Utility Costs, and Cost-Benefit Analysis in NRC Environmental Reviews for Relicensing Nuclear Power Plants."¹ We appreciate this opportunity to address the proposed rule changes and the use of a Generic Environmental Impact Statement ("GEIS") in license renewal decisions for nuclear plants.

Although we support the concept of reducing regulatory duplication inherent in the GEIS approach, we share similar concerns as those noted in the staff discussion paper as they relate to the need for energy and the best combination of resource alternatives, which are specific to electric companies that receive power from a nuclear power plant for which license renewal is being sought. These non-safety related components of the review process historically have been overseen by the states and, under current integrated resource planning approaches to regulation of the electric power industry, it is important for the states to retain

¹ The Massachusetts DPU notes that the staff discussion paper was a response to initial comments provided to the NRC pursuant to proposed amendments to the NRC's environmental protection regulations, 10 CFR Part 51, which were published in the Federal Register (56 FR 47016), dated September 17, 1991. These proposed amendments would establish new requirements for the environmental review of applications to renew operating licenses for nuclear power plants.

this oversight. "Need" and "alternatives" are fundamentally resource planning issues. A specific review of these issues by the NRC within the context of license renewal processes could result in findings that would (1) be inconsistent with the findings of state public utility commissions in integrated resource planning proceedings and, thus, contrary to Congress' objectives as set forth in the Energy Policy Act of 1992 ("EPAct"), (2) undermine the emerging competitive wholesale generation market, and (3) be impractical for nuclear plants serving New England, which often meet the needs of several electric companies operating in different states. These potential problems would become even more significant if the NRC were to review an individual license renewal as early as twenty years in advance of license expiration since projecting need, or resource alternatives, over such an extended period would produce results that might not be meaningful.²

In order to meet the NRC's environmental review obligations under 10 CFR Part 51 in the most effective way, the Massachusetts DPU urges the NRC to adopt license renewal

² The regulations promulgated by the Council on Environmental Quality, the federal agency empowered to review and appraise the various programs and activities of federal agencies under the National Environmental Policy Act of 1969 ("NEPA") including the NRC's program for reviewing the licenses of nuclear power plants, support such an approach. See, 40 CFR 1506.2. These regulations require cooperation with State and local agencies "to the fullest extent possible to reduce duplication." Id.

The United States Environmental Protection Agency ("EPA") has also acted in such a manner in its review of the Environmental Assessment ("EA") of a "new source" in Taunton, Massachusetts. See, Attachment 1. In its review of the EA for the Taunton Energy Center, the EPA deferred to a Massachusetts agency on the issue of need for the new source, noting that the state review process "requires a rigorous evaluation of project need and site-specific environmental effects, and therefore is an important complement to EPA's role in project review on the issue of energy needs, as well as other issues." Id. at 12.

regulations that will permit it to rely on state review processes with respect to issues that are within the states' jurisdiction. In particular, the NRC should restrict any proposed rule changes that would incorporate a GEIS approach to only those issues that are clearly applicable to all affected nuclear power plants, and to defer to the individual states on the review of need and resource alternatives as they relate to the relicensing of a specific nuclear power plant that would provide electric power to electric companies within a state. Such an approach could be accomplished using Options 2, 3, or 4 as set forth in the staff discussion paper; however, Option 4 would be the most appropriate choice.

II. INDEPENDENT ASSESSMENTS OF NEED AND ALTERNATIVES BY THE NRC WOULD BE INCONSISTENT WITH INTEGRATED RESOURCE PLANNING PRINCIPLES AND LAW

Findings that affect resource selection processes must properly occur within state reviews (or coordinated multi-state reviews) of electric company planning. This is wholly consistent with judicial precedent, which dictates that the states have a primary right to evaluating decisions regarding the inclusion of new and continuing resources in an electric company's resource portfolio. See Commonwealth Electric Company v. Department of Public Utilities, 397 Mass 361 (1986), cert. denied, 481 U.S. 1036 (1987). See also, Gulf States Utilities v. Public Utility Commission of Texas, 841 S.W.2d 459 (Tex.App.-Austin 1992); Pennsylvania Power Company v. Pennsylvania Public Utility Commission, 561 A.2d 43 (1989); Pike County Light and Power Company v. Pennsylvania Public Utility Commission, 465 A.2d 735 (1983).

In the EPAct, Congress has recognized the importance of integrated resource planning in energy policy and the authority of states in this area by encouraging all states to implement integrated resource planning processes. 16 USC §§ 2602, 2621, 2622. Actions of the Massachusetts DPU are in concert with Congress' mandate to implement integrated resource planning at the state level. In response to the EPAct, the Massachusetts DPU declared that it already had implemented integrated resource planning. Investigation Pursuant to Section 712 of the Energy Policy Act, D.P.U. 93-135 (1993). Several years ago the Massachusetts DPU enacted a comprehensive set of regulations that prescribe procedures by which jurisdictional electric companies must construct and submit for review their integrated resource plans. See Rulemaking, D.P.U. 89-239 (1990); 220 Code of Massachusetts Regulations ("C.M.R.") §§ 10.00 et seq.

Integrated resource planning is not a misnomer. If resource planning is to produce results that reflect an optimal balancing resource costs, environmental impacts and other attributes, resource planning must be performed in a fully integrated manner. This means, among other things, that each resource that would properly be included in a least-cost portfolio must be evaluated against available alternatives within the context of a company's entire resource portfolio.

It can be anticipated that "non-integrated" decision processes would lead to inappropriate results. For example, the capacity associated with a given facility in the supply portfolio of an electric company with substantial excess capacity might be declared "unnecessary" if viewed on a stand-alone basis, even though that facility might represent the least costly resource in the supply portfolio. In an alternative scenario, a facility might be

deemed "needed" with respect to an electric company that indeed exhibits a need for additional capacity, even though that facility might be extraordinarily costly compared to market alternatives. Finally, a facility that might appear undesirable from the standpoint of cost alone might be very appealing once the environmental and diversity benefits of that facility are considered within the context of the company's entire resource portfolio.

For the NRC to conduct independent assessments of the need for, and alternatives to, a particular facility outside of any fully integrated resource planning process would be to invite such inappropriate results. In implementing their obligations under the EPCRA, the states will address the need for, and alternatives to, continued operation of nuclear power facilities. Therefore, any similar effort by the NRC would, at best, represent unnecessary and duplicative regulatory process.³ Rather than address matters that are clearly within the regulatory authority of the states, the NRC should pursue opportunities to rely on state planning processes in fulfilling its NEPA obligations.

³ Findings on "need" or "alternatives" that the NRC may issue years in advance of the expiration of an operating license, could have serious ramifications for state public utility commissions. For example, an NRC finding that a particular nuclear power plant may not be needed may precipitate highly controversial proceedings at the state level initiated by those seeking to eliminate from rates the very substantial revenues that typically accompany nuclear power facilities in ratebase. While such public utility commission investigations may be appropriate under certain circumstances, the Massachusetts DPU would prefer to avoid the risk that such investigations would be driven by findings on "need" and "alternatives" developed outside of integrated resource planning processes before relevant state commissions.

III. INDEPENDENT ASSESSMENTS OF NEED AND ALTERNATIVES BY THE NRC AT THE TIME OF A LICENSE RENEWAL APPLICATION COULD UNDERMINE THE EMERGING COMPETITIVE WHOLESALE GENERATION MARKET

The proposed options that would address "need" and "alternatives" more than several years in advance of the expiration of an operating license fail to consider the real constraints on identifying future need and technological innovation, and would thus lead to proceedings and findings that would lack reliability. The NRC appears to be considering rules by which it would address license renewal applications between twenty and five years prior to the expiration of an operating license, and would grant renewed licenses for a period of perhaps twenty years.

For the NRC to seek to assess the need for a given nuclear power facility across the term of a renewed operating license would not be meaningful. First, the need for a power plant cannot be accurately projected decades in advance; neither can resource alternatives and their environmental and other characteristics be known. For the NRC (or any federal or state agency) to initiate plant-specific evaluations of "need" and "alternatives" more than several years in advance of a renewal period would be to initiate resource-intensive proceedings that cannot produce meaningful results.

Second, it is not necessary for the NRC to seek to predict the need for a facility years in advance of the expiration of its operating license because the emerging competitive wholesale generation market offers "real-time" solutions to questions of "need" and "alternatives." If a facility is needed, it will be able to secure power sales contracts at the time that it is needed. If a facility is not needed, it will not be able to secure power sales contracts necessary to support continued operation. In the absence of a "real-time"

evaluation of need, it is unlikely that the NRC would be able to make findings on need that would not be subject to future changes in market conditions. As such, any findings on need (or "alternatives") in advance of the period during which the facility would operate under renewed license would represent an unnecessary barrier to entry (or, in this instance, re-entry) to the competitive market place. In this way, the NRC's actions could needlessly undermine free competition in the emerging wholesale generation market.

State integrated resource planning processes often establish frameworks by which an electric company can routinely "test" the need for various existing and new resource options against alternative available in competitive wholesale generation market.⁴ Resource solicitations from the wholesale generation market, coupled with rigorous utility-specific reviews of the economic, environmental, and other characteristics of competing resource alternatives, as occur within the context of state integrated resource planning proceedings, thus represent the best means by which to determine if a given facility is truly needed and optimal vis-a-vis alternatives. Facilities that are successful in such evaluations by virtue of their economic, environmental, and other characteristics will de facto be needed and will compare favorably to alternatives.⁵

⁴ The need for, and alternatives to, continued operation of a nuclear power facility that is the subject of a license renewal application would certainly be focal point of future investigations under Massachusetts' integrated resource planning regulations.

⁵ In keeping with the planning principles set forth herein, Massachusetts' regulations require jurisdictional electric companies to assess the need for additional capacity across a planning period that is limited to ten years; importantly, new need projections must be submitted every eighteen to thirty months. See 220 C.M.R. §§ 10.03(1), 10.03(8). The need for, cost-effectiveness of, and alternatives to a given facility are not issues for a single point in time (e.g., at the time of an operating

IV. INDEPENDENT ASSESSMENTS OF NEED AND ALTERNATIVES BY THE NRC WOULD BE IMPRACTICAL FOR THE NUCLEAR FACILITIES SERVING NEW ENGLAND

Individual nuclear power facilities operating in New England often meet the needs of customers of several electric companies in different states. To accurately assess "need" and "alternatives" for any given facility would thus require an evaluation of the needs and alternatives of several electric companies from different state jurisdictions. Under the planning model set forth above, the results of the integrated resource planning evaluations of the states receiving power from a particular facility can demonstrate whether that facility is needed and desirable vis-a-vis alternatives (i.e., if state integrated resource planning processes result in new power purchase contracts and investment approvals in a relicensed nuclear power facility, that facility can be presumed both needed and desirable vis-a-vis alternatives). However, from a practical perspective, it is unlikely that an accurate assessment of the needs and alternatives of the several electric companies that receive power from such a facility could be achieved by the NRC without analyses from the various state commissions responsible for the review of the supply planning of the utilities in their respective jurisdictions.

license renewal); rather they properly represent continuing questions for all resources within a company's resource portfolio. Therefore, Massachusetts' integrated resource planning regulations make accommodation for the routine reassessment of the need for, cost-effectiveness of, and alternatives to existing generating facilities, pursuant to established standards. See 220 C.M.R. § 10.03(7)(a).

V. CONCLUSIONS

The Massachusetts DPU recommends that the NRC focus its review on critical safety issues that the renewal of an operating licenses will introduce, to ensure that relicensed nuclear power facilities meet high standards where public safety is concerned. Issues of "need" and "alternatives" pertain almost exclusively to plant economics and are inexorably linked to the resource planning processes that are properly within the jurisdiction of the states. Therefore, in fulfilling its obligations under NEPA, the NRC should recognize that state integrated resource planning proceedings represent the appropriate forum and most effective means by which to resolve these issues.

Electric company ratepayers, the nuclear power industry and the emerging wholesale generation market would best be served if the NRC were to "decouple" findings on "need" and "alternatives" from its license renewal process. This would permit the NRC to address plant safety and other important relicensing issues substantially in advance of license expiration dates, while permitting the states to resolve "need" and "alternatives" within the context of integrated resource planning proceedings that can fully explore real market alternatives.

The NRC should rely on findings in integrated resource planning reviews by the states that have purchased power from a given nuclear facility in order to evaluate the need for power from that facility and the alternatives that would be available to replace that power. NEPA allows for NRC reliance on such findings to reduce duplicated efforts; the NRC should respond to its obligations under NEPA accordingly. Thus, in the course of evaluating applications for renewed operating licenses, the NRC should collect information regarding

the resource planning processes of the states in which the power from each relicensed facility is or would be marketed. In keeping with Option 4 as identified by NRC staff, the NRC's rules should permit the NRC to defer to affected states the evaluation of "need" and "alternatives" if the NRC can find that the states will evaluate these issues within the context of integrated resource planning proceedings.