07-324-ag(L)

07-1276-ag(CON)

United States Court of Appeals
for the
Second Circuit

ANDREW J. SPANO, as County Executive of the County of Westchester, COUNTY OF WESTCHESTER, NEW JERSEY ENVIRONMENTAL FEDERATION, and NEW JERSEY CHAPTER OF THE SIERRA CLUB

Petitioners

v.

UNITED STATES NUCLEAR REGULATORY COMMISSION and UNITED STATES OF AMERICA

Respondents

ON APPEAL FROM THE NUCLEAR REGULATORY COMMISSION

BRIEF AMICUS CURIAE OF THE NUCLEAR ENERGY INSTITUTE, INC. IN SUPPORT OF RESPONDENTS AND AFFIRMANCE

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Dated: September 6, 2007

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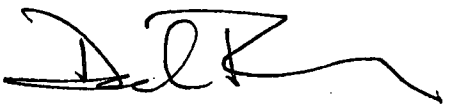
CORPORATE DISCLOSURE STATEMENT

The Nuclear Energy Institute, Inc. ("NEI") is a nonprofit corporation exempt from taxation pursuant to Section 501(c)(6) of the Internal Revenue Code. NEI functions as a trade association representing the nuclear energy industry. Its objective is to ensure the development of policies that promote the beneficial uses of nuclear energy and technologies in the United States and around the world. NEI has no parent companies, and no publicly held company has a 10% or greater ownership interest in NEI.

Respectfully submitted,



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INTEREST OF THE AMICUS CURIAE

The Nuclear Energy Institute represents the commercial nuclear energy industry in regulatory and other matters. NEI's members include every entity licensed by the Nuclear Regulatory Commission to generate electricity at a commercial nuclear power plant or to store used commercial nuclear fuel in the United States. Members also include nuclear plant designers, architect-engineer firms, nuclear fuel fabricators, and other organizations and individuals involved in the nuclear energy industry. The instant appeals raise issues having the potential to significantly affect the utilization of nuclear energy in the United States.

NEI and its members have an interest in ensuring that nuclear energy is available in the United States. The NRC's license renewal process directly affects the ability of NEI's members to continue the generation of electricity and plan for the future. That process should not be modified without good reason.

Pursuant to Fed. R. App. P. 29(a), this brief is permitted because all parties have consented to its filing.

STATEMENT OF THE ISSUE

The issue presented in this case for review is set forth in the "Statement of the Issue" section of the Brief for the Federal Respondents.

SUMMARY OF THE ARGUMENT

The NRC properly denied these petitions on substantive grounds because (1) the NRC had previously exercised its broad statutory authority through extensive, focused, and in depth rulemakings to establish its license renewal rules; (2) the NRC had, in those rulemakings, carefully considered all of the issues raised in the petitions and had based its license renewal rules on reasoned determinations and policy judgments well supported in both fact and logic; and (3) the petitions offered no information that warranted overturning or even reconsidering the NRC's determinations and policy judgments. Furthermore, the NRC's denial was proper because the current regulatory framework reflects a robust process that adequately addresses the issues raised in the petitions, and it would be both illogical and inefficient to duplicate the Commission's ongoing regulatory oversight during the license renewal process.

ARGUMENT

I. THE COMMISSION PROPERLY DENIED THE RULEMAKING PETITIONS BECAUSE IT HAD ALREADY CONSIDERED PETITIONERS' ISSUES WHEN EXERCISING ITS BROAD DISCRETION IN DEVELOPING THE LICENSE RENEWAL RULES AND BECAUSE PETITIONERS FAILED TO PRESENT NEW INFORMATION TO DISTURB THE NRC'S JUDGMENTS

A. The NRC Exercised Its Broad Statutory Authority in Establishing the Scope of License Renewal Through Careful, Reasoned Rulemaking

The Atomic Energy Act gives the Commission considerable latitude in determining how to achieve its statutory mandate to protect the public health and safety.

> Congress . . . enact[ed] a regulatory scheme which 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.

Siegel v. AEC, 400 F.2d 778, 783 (D.C. Cir. 1968).[1] This is particularly true with respect to license renewal, where both the statute and legislative history are silent concerning how license renewal is to be accomplished and what standards apply.

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[1] See also North Anna Envtl. Coal. v. NRC, 533 F.2d 655, 658-59 (D.C. Cir. 1976); Duke Power Co. v. NRC, 770 F.2d 386, 390 (4th Cir. 1985). The Commission may, for example, establish generalized presumptions and decide issues generically by rule. See Coal. for the Env't v. NRC, 795 F.2d 168, 173-74 (D.C. Cir. 1986) (upholding an NRC rule eliminating financial qualifications review of operating license applications based on NRC's generic determination that the ratemaking process reasonably assures such financial qualification); Minn. v. NRC, 602 F.2d 412, 416-19 (D.C. Cir. 1979) (upholding NRC's waste confidence determination); see also Baltimore Gas & Elec. Co. v. NRDC, 462 U.S. 87, 103 (1983) (recognizing the propriety of NRC rule generically determining fuel cycle impacts for NEPA purposes).

See Committee on Nuclear Technology and the Law, The Renewal of Nuclear Power Plant Operating Licenses—Executive Summary, 46 The Record 899 (1991).

The NRC's license renewal rules represent a careful, reasoned, and permissible exercise of this statutory authority. As the Commission explained in denying the rulemaking petitions (71 Fed. Reg. 74,848, 74,851 (Dec. 13, 2006); Jt. App. at A-147), the NRC established its license renewal regulations after extensive deliberations, based on its determination that existing regulatory processes are adequate to ensure that the licensing bases of currently operating plants provide and maintain an adequate level of safety (60 Fed. Reg. 22,461, 22,464, 22,481-82 (May 8, 1995)). The license renewal rules further reflect the NRC's considered policy judgments that (1) issues relevant to both current operation and extended operation (during the license renewal period) should be addressed when they arise, not postponed until a license renewal decision (60 Fed. Reg. at 22,481; 56 Fed. Reg. 64,943, 64,946 (Dec. 13. 2001)), and (2) duplicating the Commission's ongoing regulatory review in a license renewal proceeding would waste NRC resources, which are better focused on aging management concerns (56 Fed. Reg. at 64,946; Florida Power & Light Co. (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 N.R.C. 3, 7 (2001)).

These agency determinations are well supported in fact and logic. In promulgating its license renewal rules, the Commission carefully explained how its

regulatory processes reasonably assure that each plant's current licensing basis ("CLB")[2] maintains an adequate level of safety.

> Since initial licensing, each plant has continually been inspected and reviewed as a result of new information gained from operating experience. Ongoing regulatory processes provide reasonable assurance that, as new issues and concerns arise, measures needed to ensure that operation is not inimical to the public health and safety and common defense and security are "backfitted" onto the plants.

56 Fed. Reg. at 64,945.

Further, the Commission explained:

> [T]he Commission engages in a large number of regulatory activities which, when considered together, constitute a regulatory process that provides ongoing assurance that the licensing bases of nuclear power plants provide an acceptable level of safety. This process includes research, inspections, audits, investigations, evaluations of operating experience, and regulatory actions to resolve identified issues. The Commission's activities may result in changes to the licensing bases for nuclear power plants through the promulgation of new or revised regulations, acceptance of licensee commitments for the modification to nuclear power plant designs and procedures, and the issuance of orders or confirmatory action letters or confirmation that there is no need to change the licensing basis. In this way, the Commission's consideration of new information provides ongoing assurance that the licensing bases of all nuclear power plants provide an acceptable level of safety. The process will continue through the term of a renewed license.

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[2] The current licensing basis (or "CLB") is "the set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within applicable NRC requirements and the plant-specific design basis (including all modifications and additions to such commitments over the life of the license) that are docketed and are in effect." 10 C.F.R. § 54.3 (2007); see also 56 Fed. Reg. at 64,949. The CLB encompasses all of the NRC requirements that a plant must meet in order to continue operating, whether these requirements come from NRC regulations, orders, license conditions, or a number of other sources. See 10 C.F.R. § 54.3; see also Respondents' Br. at 5-7.

Id. at 64,947; 71 Fed. Reg. at 74,857. The Commission also explained in considerable detail the inspection program that is conducted to ensure each licensee remains in compliance with its current licensing basis. 56 Fed. Reg. at 64,951.

The NRC's explanation of how it reviews operating experience illustrates the effectiveness of NRC's oversight process:

> As a requirement of the current licensing basis, and one that would continue during the renewal term, each licensee is required to notify the Commission promptly of any plant event that meets or exceeds the threshold defined in 10 CFR 50.72 and to file a written licensee event report for those events that meet or exceed the threshold defined in 10 CFR 50.73. The NRC reviews this information daily and follow-up efforts are carried out for events that appear to be potentially risk significant or are judged to be a possible precursor to a more severe event. Depending on the significance, further actions may be taken to notify all licensees or to impose additional requirements. . . . If a licensee's action does not adequately address items described in [an NRC communication], the staff may consider issuing an order to impose the specific requirement. The total program offers a high degree of assurance that events that are potentially risk significant or precursors to potentially significant events are being reviewed and resolved expeditiously.

56 Fed. Reg. at 64,947.[3]

Further, the Commission's regulations allow any person to petition the Commission at any time to modify, suspend or revoke a license, or to take any

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[3] The Commission's determination was further supported by a detailed report, NUREG-1412, "Foundation for the Adequacy of the Licensing Bases" (Dec. 1991). For a discussion of how the NRC's regulatory process maintains each plant's current licensing basis to provide an acceptable level of safety, see The Renewal of Nuclear Power Plant Operating Licenses—Executive Summary, supra; see also Committee on Nuclear Technology and the Law, Report on the Renewal of Nuclear Power Plant Operating Licenses (May 10, 1991) (on file with author).

other action deemed necessary to protect the public health and safety. 10 C.F.R. § 2.206. Anyone who believes that the current licensing basis of a nuclear plant does not sufficiently protect public health and safety may use this vehicle to bring such issues to the Commission's attention.

As a matter of policy, the Commission was clearly correct in determining that any existing issue at an operating nuclear facility must be addressed under the current license, instead of postponing the matter until the license renewal period. Obviously, the resolution of any current safety concern should not be deferred. By the same token, the resolution of current issues may have little or no relevance to safety during the period of extended operation, because those issues may be obviated by future changes in circumstances or regulatory requirements. For example, roadways, technology for public alerts, and other factors affecting emergency preparedness may be quite different in a future period of extended operation. Indeed, as the Commission held, it makes no sense for the NRC or parties to spend valuable resources litigating allegations of *current* deficiencies in a proceeding that is directed to *future*-oriented issues. Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3), CLI-05-24, 62 N.R.C. 551, 561 (2005).

Given the NRC's extensive, ongoing regulation of nuclear reactors and its sound judgment that resolution of safety concerns should not be deferred, it was well within the Commission's statutory discretion and well within the realm of reasoned decision-making for it to determine that redundant licensing reviews of matters that are continually addressed on a day-by-day basis were not necessary as part of license renewal. In doing so, the NRC avoided wasting agency resources and instead allowed its Staff to focus "on the most significant safety concerns at issue during the renewal term." Turkey Point, CLI-01-17, 54 N.R.C. at 7.

Moreover, the NRC's rules include a "safety valve" allowing consideration of additional issues in a license renewal proceeding on a case-by-case basis.[4] Thus, the NRC rules reasonably allow expansion of the scope of a license renewal proceeding when appropriate.

B. The NRC License Renewal Process Is Thorough and Rigorous

Although the scope of NRC review for renewal of the license of a plant that is already sited, built and has years of safe operation is understandably different from initial plant licensing, the license renewal process that the NRC has established is nonetheless thorough, rigorous and appropriately focused. A license

[4] The standards governing issuance of a renewed license require that any issues raised under 10 C.F.R. § 2.335 be addressed. 10 C.F.R. § 2.335 allows the NRC to waive any rule upon a showing of special circumstances. By this means, the Commission may broaden individual license renewal proceedings to consider other issues relevant to safety during the period of extended operation, if justified. See Turkey Point, CLI-01-17, 54 N.R.C. at 10; 56 Fed. Reg. at 64,961.

renewal application must include an extensive Integrated Plant Assessment demonstrating that the aging of certain systems, structures and components ("SSCs") will be managed reasonably, assuring that they will perform their intended functions during the period of extended operation. 10 C.F.R. § 54.21(a). This assessment identifies SSCs that (1) are relied upon to prevent or mitigate events or accidents; (2) could prevent safety-related SSCs from performing their intended functions; or (3) are relied upon to address specific regulations. 10 C.F.R. §§ 54.4(a)(1)-(3), 54.31(a)(1). These SSCs are then analyzed to identify those structures and components that are passive and long-lived. 10 C.F.R. § 54.21(a)(1)(i)-(ii).[5] For each such structure and component, the applicant's assessment must then demonstrate that aging is being adequately managed. 10 C.F.R. § 54.21(a)(3). This requires identifying the materials in the components, the environments to which they are exposed, and the aging effects that result, and providing an aging management program that meets NRC acceptance criteria. See U.S. NRC, "Standard Review Plan for Review of License Renewal Applications," NUREG-1800 at 3.0-1 (Rev. 1, Sept. 2005).

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[5] These structures and components include, for example. the reactor vessel, the reactor coolant system pressure boundary, steam generators, the pressurizer, piping, pump casings, valve bodies, the core shroud, component supports, pressure retaining boundaries, heat exchangers, ventilation ducts, the containment, the containment liner, electrical and mechanical penetrations, equipment hatches, seismic Category I structures, electrical cables and connections, cable trays, and electrical cabinets, excluding, but not limited to, pumps (except casing), valves (except body), motors, diesel generators, air compressors, snubbers, the control rod drive, ventilation dampers, pressure transmitters, pressure indicators, water level indicators, switchgears, cooling fans, transistors, batteries, breakers, relays, switches, power inverters, circuit boards, battery chargers, and power supplies. 10 C.F.R. § 54.21(a)(1)(i).

The license renewal application must also evaluate all time-limited aging analyses on which initial licensing was based to demonstrate that such analyses remain valid for or have been projected to the end of the period of extended operation, or will otherwise be adequately managed. 10 C.F.R. § 54.21(c). For example, these analyses must address reactor vessel neutron embrittlement, concrete containment tendon prestress, metal fatigue, environmental qualification of electrical equipment, metal corrosion allowance, flaw growth analyses, local metal containment corrosion analyses, and high-energy line-break postulation based on fatigue cumulative usage factor. NUREG-1800 at 4.1-5.

In addition, a license renewal applicant must submit an environmental report (see 10 C.F.R. §§ 51.53(c), 54.23) that assists the NRC staff in preparing an environmental impact statement ("EIS") (see 10 C.F.R. § 51.95(c)).[6] The applicant's environmental report and the NRC's EIS include, *inter alia*, consideration of plant cooling-water systems (10 C.F.R. § 51.53(c)(3)(ii)(A)-(B)) and an evaluation of possible alternatives to mitigate severe accident risk (10 C.F.R. § 51.53(c)(3)(ii)(L)). The evaluation of severe accident mitigation

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[6] The NRC's environmental review in a license renewal proceeding tiers off of a Generic Environmental Impact Statement for License Renewal of Nuclear Plants ("GEIS"), NUREG-1437 (1996), the findings of which are codified in Appendix B to 10 C.F.R. Part 51. Those issues that could be resolved generically for all plants are designated as Category 1 issues and are not evaluated further in a license renewal proceeding (absent waiver or suspension of the rule by the Commission based on new and significant information). Environmental Review for Renewal of Nuclear Power Plant Operating Licenses, 61 Fed. Reg. 28,467, 28,468, 28,470, 28,474 (June 5, 1996); see generally Turkey Point, supra. The remaining (i.e., Category 2) issues that must be addressed in an applicant's environmental report are defined specifically in 10 C.F.R. § 51.53(c). See Turkey Point, CLI-01-17, 54 N.R.C. at 11-12.

alternatives is a cost-benefit assessment "to ensure that any plant changes – in hardware, procedures, or training – that have the potential for significantly improving severe accident safety performance are identified and assessed." Duke Energy Corp. (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 N.R.C. 1, 5 (2002). The evaluation uses site-specific probabilistic risk analysis to assess risk in terms of averted public health consequences, on-site cleanup costs, property damage, occupational radiation exposure, and replacement power costs. Id. at 7, 8 n.14. This analysis includes consideration of the site demography and projected evacuation time estimates. See, e.g., Entergy Nuclear Generation Co. (Pilgrim Nuclear Power Station), LBP-06-23, 64 N.R.C. 257, 340-41 (2006).

Thus, a license renewal application requires an extensive technical evaluation. Indian Point's license renewal application, for example, is nearly 3,000 pages long.[7] The applications typically require months to prepare and "[t]he cost to the owner of pursuing a license renewal has been estimated at between $10 million and $20 million per reactor, and requires detailed descriptions of expected aging effects and how they will be addressed to maintain safe operation."[8]

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[7] See Indian Point Nuclear Generating Unit Nos. 2 and 3 – License Renewal Application, http://www.nrc.gov/reactors/operating/licensing/renewal/applications/indian-point.html.

[8] Statement of Mary J. Hutzler, Energy Info. Admin., U.S. Dep't of Energy, Hearing on Nuclear Power before the Subcomm. on Energy and Air Quality of the House Comm. on Energy and Commerce (Mar. 27, 2001).

The NRC Staff's review of each license renewal application is equally rigorous, typically requiring from 22 to 30 months, depending on whether a hearing is requested,[9] and involving approximately 19,000 person-hours. 69 Fed. Reg. 4,439, 4,445 (Jan. 30, 2004). As part of this review, the NRC conducts audits and inspections to verify the applicant's license renewal program, verify that the material condition of SSCs will be adequately managed, and verify that required information is retrievable and auditable.[10] These inspections include walk-downs of SSCs to verify that any observable aging effects have been identified and that aging management programs will provide sufficient opportunity to detect, monitor, trend, and correct age-related degradation through performance and/or condition monitoring, technical specification surveillances, and other aging management activities. Id. at 3.

C. The NRC's License Renewal Rules Were Established Through Comprehensive Rulemaking That Provided Extensive Opportunity for Public Involvement

The Commission has emphasized that its current license renewal regulations "derive from years of extensive technical study, review, interagency input, and public comment." Turkey Point, CLI-01-17, 54 N.R.C. at 7.

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[9] See http://www.nrc.gov/reactors/operating/licensing/renewal/process.html#review-time.

[10] NRC Inspection Procedure 71002 (Feb. 18, 2005), available at http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/ip71002.pdf.

One of the NRC's initial steps was to solicit public comments on basic policy issues, including the proper scope of renewal applications and whether applicants should be required to demonstrate conformance to regulations in effect on the date of the extension application.[11] 51 Fed. Reg. 40,344 (Nov. 6, 1986). The NRC then prepared a report on the regulatory options for nuclear plant license renewal, focusing on the central question of what constitutes an adequate licensing basis for license renewal and whether renewal applicants should be required "to demonstrate, de novo, compliance with all regulatory requirements applicable to startup of a new plant." U.S. NRC, "Regulatory Options for Nuclear Plant License Renewal," NUREG-1317 at 2-4 (Aug. 1988); see 53 Fed. Reg. 32,919 (Aug. 29, 1988).

In an advance notice of proposed rulemaking, the Commission solicited comments on the approaches considered in NUREG-1317 as well as other possible regulatory options for license renewal. 53 Fed. Reg. at 32,919. It prepared an analysis of the resulting public comments, developed a preliminary rulemaking philosophy and statement of regulatory requirements, and conducted a workshop (noticed in the Federal Register) to receive further comments on policy and technical issues. 54 Fed. Reg. 41,981 (Oct. 13, 1989).

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[11] The NRC's technical research on plant aging began earlier in the 1980's. See 55 Fed. Reg. 29,043, 29,044 (July 17, 1990).

Thereafter, the NRC published a proposed rule that articulated the fundamental principles on which the current license renewal process is based and the Commission's determination that license renewal should focus on aging management issues. 55 Fed. Reg. 29,043. Of particular interest, the proposed rule explained how the NRC's regulatory requirements and programs maintain adequate emergency planning and security programs, and, therefore, why the NRC did not propose to re-review such operational programs during license renewal. Id. at 29,053-54.

The proposed rule was supported by a number of NRC reports, including NUREG-1412, "Foundation for the Adequacy of the Licensing Bases" (Dec. 1991), which provides a "substantial detailed examination" of the adequacy of plants' current licensing basis "for the full range of specific areas of major safety issues." NUREG-1412 at 1-1; Supp. Jt. App. at A-705; see 55 Fed. Reg. at 29,048, 29,055. For each of these areas, NUREG-1412 describes the safety issues, the key features of the regulatory requirements, the evolution of the CLB, and the conclusions regarding the acceptability of the CLB for both older and newer plants. NUREG-1412 at 1-1; Supp. Jt. App. at A-705. This report included consideration of site-related issues, including demography and potential site-vicinity hazards, emergency planning, and security. Id. at 2-1 to 2-10, 13-4 to 13-6, and 13-9 to 13-11; Supp. Jt. App. at A-711 to A-720, A-785 to A-787, A-790 to A-792.

These rulemaking activities culminated in the 1991 promulgation of a new 10 C.F.R. Part 54. See 56 Fed. Reg. 64,943. The Supplementary Information published with the rule addressed the comments received and thoroughly explained the rationale for focusing on aging management (including how the NRC regulatory process maintains the adequacy of emergency planning and security at each plant). 56 Fed. Reg. at 64,966-67. In addition, the Supplementary Information identified key supporting studies, including a final version of NUREG-1412 and NUREG-1428, "Analysis of Public Comments on the Proposed Rule on Nuclear Power Plant License Renewal" (Dec. 1991). None of the Petitioners is listed in NUREG-1428 as having participated in the rulemaking.

Following publication of the 1991 rule, the NRC developed regulatory guidance and a standard review plan, interacted with lead applicants, and reviewed generic industry reports. When these activities identified certain implementation issues, the Commission initiated additional rulemaking proceedings to resolve them. See 59 Fed. Reg. 46,574 (Sept. 9, 1994). This effort culminated in 1995 amendments to the license regulations that reaffirmed the regulatory philosophy and approach underlying the 1991 regulations and clarified the two principles of license renewal. See 60 Fed. Reg. at 22,463-66.

D. The Petitioners Provided No Basis to Disturb the Well-Founded Determinations and Policy Judgments on Which the NRC's License Renewal Rules Are Based

In denying the rulemaking petitions, the Commission correctly found that "the petitions raised issues that the Commission had already considered at length in developing the license renewal rule." 71 Fed. Reg. at 74,851; see also 56 Fed. Reg. at 64,943. Indeed, the NRC has specifically considered and rejected Petitioners' assertion that license renewal should be based on a de novo review against initial licensing criteria. See discussion at Section I.C supra. Significantly, neither rulemaking petition provided any information that contradicts or undermines the agency positions set forth in the license renewal rulemaking or demonstrates that the current regulations warrant revision. 71 Fed. Reg. at 74,851; Jt. App. at A-147. Rather, an examination of the Petitioners' concerns serves to validate the basis for the license renewal rules.[12]

For example, the Commission specifically addressed emergency planning, security, and demographic considerations (on which the Spano and Scarpelli petitions were principally focused) in promulgating its license renewal regulations.

[12] Petitioners also alleged that the discovery of corrosion on the Davis-Besse reactor vessel head shows that the NRC's regulatory process cannot be relied upon. Corrosion is a typical aging management issue that must be considered during license renewal. Contrary to Petitioners' claim, therefore, the NRC has not relied on its regulatory processes to exclude consideration of this issue from license renewal. Further, the Commission reacted promptly and decisively when this corrosion was discovered, issuing an order requiring licensees of pressurized water reactors to increase the frequency and scope of reactor pressure vessel inspections, and issuing new regulatory guidance concerning such inspections. Letter from M. Fertel, Senior Vice President and Chief Nuclear Officer, Nuclear Energy Inst., to Sec'y, U.S. NRC at 15 (Aug 29, 2005); Jt. App. at A-69.

It devoted considerable attention to explaining how the NRC's ongoing processes maintain the adequacy of emergency preparedness and security. 56 Fed. Reg. at 64,966-67. The discussion of emergency planning explained how, through its standards, "the Commission ensures that existing plans are adequate throughout the life of any plant even in the face of changing demographics and other site-related factors."[13] Id. at 64,966; see also id. at 64,959 (explaining how the NRC's regulatory processes consider changes in population, transportation and traffic factors, and location of nearby hazards).

1. Emergency Planning

As the Commission explained in promulgating its license renewal rules, its regulations "require the routine evaluation of the effectiveness of existing emergency preparedness plans against the 16 planning standards and the modification of emergency preparedness plans when the 16 standards are not met." 56 Fed. Reg. at 64,966. These standards require licensees to conduct periodic exercises to evaluate major portions of emergency response capabilities and to perform periodic drills to develop and maintain key skills. 10 C.F.R. § 50.47(b)(14); see also 10 C.F.R. Part 50, App. E at § IV.F(1). Deficiencies in

[13] The Commission explained in denying the rulemaking petitions that the NRC does not prohibit higher population density sites per se but periodically factors population growth into the emergency planning for a site. 71 Fed. Reg. at 74,852-53; Jt. App. at A-147. Thus, the acceptability of changes in demographics is judged by the adequacy of the emergency plans to take protective actions in the event of an accident.

emergency plans identified from these exercises and drills must be corrected. 10 C.F.R. § 50.47(b)(14).

Licensees also must "ensure that the emergency plan, its implementing procedures, and emergency equipment and supplies are maintained up to date." 10 C.F.R. Part 50, App. E at § IV.G. Evacuation time estimates (time needed to evacuate the public from various sectors and distances around the facility) are part of each emergency plan and thus must be kept current.

In addition, the NRC places great weight on Federal Emergency Management Agency (FEMA) findings and determinations as to whether state and local emergency plans are adequate. 10 C.F.R. §§ 50.47(a)(2), 50.54(s)(2)(ii). Under a Memorandum of Understanding with the Commission, FEMA furnishes NRC with assessments, findings and determinations as to whether state and local emergency plans are adequate. 44 C.F.R. § 350.3(e).[14]

The Witt Report, which Petitioners cite as evidence that emergency planning should be considered during license renewal proceedings (Petitioners N.J. Envtl. Fed'n & N.J. Chapter of Sierra Club Br. 23 ("N.J. Br."); Petitioners A. J. Spano & County of Westchester Br. 23 ("Spano Br.")), actually provides an example of this

[14] FEMA requires states and local agencies to participate in exercises and evaluates the results. See 44 C.F.R. § 350.9(c)-(e). If FEMA finds a deficiency in an emergency plan, the county or state has 120 days to cure the deficiency, or FEMA will withdraw its approval of the plan and notify the NRC. 44 C.F.R. § 350.13(a); see also 10 C.F.R. § 50.54(s)(2)(ii).

ongoing oversight. After the Witt Report was published, FEMA evaluated the Indian Point emergency plan and addressed the Witt Report in detail in a report entitled FEMA Reviews of the State and County Radiological Emergency Response Plans for the Indian Point Energy Center and Comments on the REP Program, Planning and Exercise Issues Raised by Others.[15] Following this review, FEMA made a finding of reasonable assurance of offsite emergency preparedness for Indian Point (that is, appropriate measures to protect the health and safety of communities surrounding Indian Point can be taken and are capable of being implemented). 68 Fed. Reg. 57,702 (Oct. 6, 2003).

In response to Westchester County's request that FEMA reconsider this finding, FEMA reaffirmed its finding and explained how it had satisfactorily addressed the Witt report issues. Letter from R. David Paulison, Director, Preparedness Division, FEMA to A. J. Spano, County Executive, County of Westchester at 5 (June 1, 2004). Thus, rather than demonstrating any deficiency in the NRC's regulatory processes, the response to the Witt report demonstrates how FEMA and the NRC review concerns raised (including allegations in a draft report commissioned by nuclear plant opponents) to confirm that emergency preparedness remains adequate.

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[15] See Attachment B to Federal Emergency Management Agency Region II, Exercise Report Indian Point 2 Nuclear Power Station – Exercise Date: September 24, 2002 (Feb. 21, 2003).

Additionally, unrelated to the Witt report, the NRC evaluated the Indian Point emergency plan and security measures and specifically determined that they are adequate and appropriate to respond to a radiological emergency, including a spectrum of attacks. See Entergy Nuclear Operations, Inc. (Indian Point, Units 1, 2, and 3), DD-02-6, 56 N.R.C. 296, 304 (2002).

2. Security

Similarly, the NRC's regulatory process adequately ensures plant security:

> [N]uclear power plants are among the most hardened and secure industrial facilities in our nation. The many layers of protection offered by robust plant design features, sophisticated surveillance equipment, physical security protective features, professional security forces, access authorization requirements, and NRC regulatory oversight provide an effective deterrence against potential terrorist activities that could target equipment vital to nuclear safety.

See Riverkeeper, Inc. v. Collins, 359 F.3d 156, 160 (2d Cir. 2004) (quoting Indian Point, DD-02-6, 56 N.R.C. at 300). Far from indicating any laxity in the NRC's oversight of plant security, the Commission's timely and robust response to the events of 9/11 illustrates how the NRC's regulatory process maintains a high level of security even in the face of new threats.

For example, between February 25, 2002 and April 29, 2003, the NRC issued four orders to all operating commercial nuclear power plants requiring implementation of additional security measures for the heightened threat

environment.[16] These orders required "enhancements such as increased patrols, augmented security forces and capabilities, additional security posts, additional physical barriers, vehicle checks at greater standoff distances, enhanced coordination with law enforcement and military authorities, augmented security and emergency response training, equipment, and communication, and more restrictive site access controls for personnel." 71 Fed. Reg. 62,664, 62,665 (Oct. 26, 2006); see also Riverkeeper, 359 F.3d at 161.

In addition, the NRC recently conducted a rulemaking and amended its regulations pertaining to Design Basis Threats ("DBTs"). 72 Fed. Reg. 12,705 (Mar. 19, 2007).[17] DBT requirements define general adversary characteristics; NRC licensees must show they are capable of defending against and repelling these specified threats with high assurance. Id. at 12,705. Further, the Commission has instituted another rulemaking to codify the security measures from the 2002-2003 orders. See 71 Fed. Reg. at 62,664.

In arguing that the NRC's regulatory process is insufficient regarding security issues, the New Jersey Petitioners assert that the NRC's denial of their

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[16] All Operating Power Reactor Licensees; Order Modifying Licenses, 67 Fed. Reg. 9,792 (Mar. 2, 2002); In the Matter of All Operating Power Reactor Licensees; Order Modifying Licenses, 68 Fed. Reg. 1,643 (Jan. 13, 2003) (see also 68 Fed. Reg. 24,510 (May 7, 2003)); All Operating Power Reactor Licensees; Order Modifying Licenses, 68 Fed. Reg. 24,514 (May 7, 2003); All Operating Power Reactor Licensees; Order Modifying Licenses, 68 Fed. Reg. 24,517 (May 7, 2003). The specific requirements of these orders are considered Safeguards Information protected against disclosure. See 71 Fed. Reg. at 62,665.

[17] This final rule is subject to petitions for review currently pending in the Ninth Circuit. Pub. Citizen v. NRC, No. 07-71868 (9th Cir. May 11, 2007).

rulemaking petition did not sufficiently address a National Academy of Sciences ("NAS") report stating that the NRC did not complete an assessment of plant vulnerability regarding spent nuclear fuel storage facilities. (N.J. Br. 36.) In his petition for rulemaking, Mayor Scarpelli asserted: "In recent weeks, two studies by the National Academy of Sciences have raised serious concerns about nuclear plant security and the health effects of low level radiation upon people who reside near nuclear plants." Jt. App. at A-189. Although the Petitioner failed to specify the NAS reports to which he was referring or how they should be considered in the Oyster Creek renewal application, the NRC addressed this concern in its denial of the petitions. See 71 Fed. Reg. at 74,857; Jt. App. at A-178. The NRC explained that it "sent a report to Congress on March 14, 2005, describing the specific actions the NRC took to respond to the Academy's recommendations."[18] Id. The NRC's response to the NAS report is yet another example of the way the Commission has aggressively protected the public health and safety as well as the common defense and security through its regulatory process.

In summary, the issues of emergency planning and security in fact demonstrate how the NRC's regulatory processes work to continuously maintain an acceptable level of safety. Rather than undercutting the license renewal regime, these examples reinforce its reasonableness and efficiency.

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[18] For the report sent to Congress, see attachment to letter from N. Diaz, Chairman, U.S. NRC, to P. Domenici, Chairman, House Comm. on Energy and Water Development (Mar. 14, 2005); Supp. Jt. App. at A-818.

E. It is Illogical to Review Issues During a License Renewal Proceeding That Are More Properly Addressed in Real Time

Petitioners request an emergency planning review because they believe the current emergency plans for their local facilities (i.e., Indian Point and Oyster Creek) are insufficient to protect the public health and safety. (Spano Br. 23; N.J. Br. 22.) They request a security review for similar reasons. Petitioners' concerns with the *current* adequacy of plans underscore the fact that the license renewal process is the wrong forum to address such issues.

License renewal proceedings are typically held years in advance of the period of extended operation: a licensee may, if it opts for license extension, apply for renewal up to 20 years before the current license expires.[19] 10 C.F.R. § 54.17(c). Thus, if a party believes that a plant's emergency plan or security measures are insufficient at the time of the renewal application, it is illogical to propose that these programs be reviewed and revised for the renewal period, which may be up to 20 years away. A problematic emergency plan or inadequate security measures should be dealt with at the time problems arise. The public health and safety and common defense and security are far better protected by the ongoing regulatory oversight of emergency plans and plant security (coupled with post 9/11

[19] Significantly, an NRC reactor licensee is not *required* to seek renewal of its license. If Petitioners are concerned about emergency planning and security at *all* nuclear plants, addressing these issues through the license renewal process seems ineffective.

security enhancements) than if the NRC adopted Petitioners' approach and considered emergency planning and security issues during license renewal proceedings.

Further, current issues are not necessarily germane to whether operation during the period of extended operation should be permitted. See, e.g., Millstone CLI-05-24, 62 N.R.C. at 561 ("Emergency planning is, by its very nature, neither germane to age-related degradation nor unique to the period covered by the . . . license renewal application. Consequently, it makes no sense to spend the parties and our own valuable resources litigating allegations of *current* deficiencies in a proceeding that is directed to *future*-oriented issues of aging." (emphases in original)).

II. THE AMENDMENTS SOUGHT WOULD UNNECESSARILY IMPEDE THE LICENSE RENEWAL PROCESS AND UTILITY PLANNING AT A CRITICAL TIME

Nuclear power facilities are substantial assets that are very important in providing baseload generation[20] and maintaining the reliability of the electric power supply. Adoption of the amendments Petitioners seek would require a complete reformulation of the license renewal rules that would fundamentally alter the Commission's license renewal process without improving it. These revisions

[20] "Baseload" plants are those designed to produce electricity continuously at or near full capacity, with high availability. Envtl. Law & Policy Ctr. v. NRC, 470 F.3d 676, 679 (7th Cir. 2006).

would increase substantially the time, expense and effort involved in obtaining a renewed operating license. Such unwarranted changes to the regulatory framework would adversely impact companies that may seek license renewal for existing nuclear facilities. By erecting an onerous and gratuitous procedural hurdle to the license renewal process, the petitions threaten to discourage the substantial capital investment needed to obtain a renewed license and thereby keep nuclear plants operating to meet the Nation's energy needs.

Such licensing hurdles would place pointless burdens on the Commission's license renewal process at a time when there is a significant need for energy resources in general and nuclear power in particular. Nuclear power currently provides about 20% of the Nation's electricity demands. Without a substantial boost in domestic supplies, U.S. energy consumption will increasingly outpace production. See National Energy Policy Development Group, Reliable, Affordable, and Environmentally Sound Energy for America's Future: Report of the National Energy Policy Development Group viii-ix (May 2001) ("National Energy Policy"). Over the next 10 years, the utility industry expects demand to increase by almost 20%, while "committed capacity resources" are expected to increase only 6%. North America Electric Reliability Council, 2006 Long-Term Reliability Assessment: The Reliability of the Bulk Power Systems in North

America 6 (Oct. 2006).[21] The challenge to increase energy production is compounded by the problems associated with fossil-fuel energy sources. Reliance on imported oil threatens our national security, and tapping domestic fossil-fuel reserves will increase the release of air pollutants such as nitrogen oxides, sulfur dioxide, and mercury, as well as greenhouse gases. National Energy Policy xiii, 1-6. Nuclear energy can reduce dependence on foreign oil without emission of the greenhouse gases and other pollutants associated with fossil fuels. Id. at xii, 1-5 to 1-6. Thus, nuclear power is a crucial component of any long-term strategy to meet the Nation's energy needs in ways that are reliable, affordable, and environmentally sound. To continue to meet the Nation's current and future need for nuclear power, the NRC's license renewal process should continue under the safe, efficient regulatory framework that the Commission now employs.

Granting the relief that Petitioners request also would interfere with utilities' ability to plan effectively to ensure a reliable electrical supply. Exelon Nuclear Comments, Jt. App. at A-201. The Commission developed the regulatory framework for license renewal to "meet the need of utilities to be informed of license renewal requirements sufficiently early so that utilities can either prepare for license renewal or pursue alternative sources of generating capacity." 53 Fed.

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[21] "Committed capacity resources" is defined as generating capacity that is "existing, under construction, or planned" and expected to be available. 2006 Long-Term Reliability Assessment at 11.

Reg. at 32,919. Similarly, because it may take twelve years to plan, site, engineer, procure, and construct a replacement facility, the NRC allows license renewal applications to be filed up to 20 years in advance of the expiration of initial licenses. 56 Fed. Reg. at 64,963. Nine nuclear power plants, including Indian Point and Oyster Creek, are now involved in the license renewal process, and additional license renewal applications for approximately twenty-five plants are expected to be filed in the next few years.[22] The broad reformulation of the rules that Petitioners seek would undo the NRC's efforts to establish its renewal process early enough to accommodate generation planning and would likely prevent the current and near-term applicants from obtaining timely decisions.

For this reason, too, the Commission's denial of the petitions was reasonable. Petitioners had ample opportunity to participate in the NRC rulemakings establishing the license renewal rules. Their conclusory assertions in 2005, ten years after completion of the NRC rulemaking process, that the NRC got it all wrong are both untimely and inaccurate.

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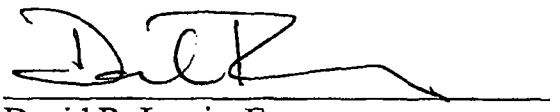
[22] See Status of Renewal Applications and Industry Activities, http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html.

CONCLUSION

For the foregoing reasons and those presented in the Brief for the Federal Respondents, the petitions for review should be denied.

Respectfully submitted



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David R. Lewis

Dated: September 6, 2007

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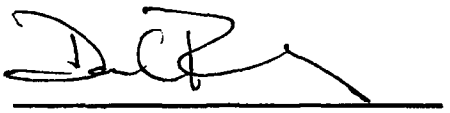

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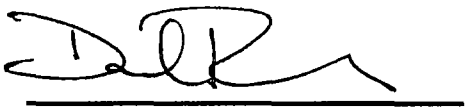

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