



DOCKET NUMBER
PETITION FILE PRM 54-02
(70 FR 34700)

Entergy Nuclear Northeast
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601
Tel 914 375 2500

DOCKETED
USNRC

August 29, 2005 (4:11pm)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

August 29, 2005

Via Fax: (301) 415 - 1101 and U.S. Mail

Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
Attention: Rulemakings and Adjudications Staff

Re: PRM-54-02, (70 Fed. Reg. 34,700; June 15, 2005)

To the Secretary:

Entergy Nuclear Operations, Inc. ("Entergy") submits the attached comments to the petition for rulemaking docketed as PRM-54-02, in response to the June 15, 2005 Federal Register notice issued by the U.S. Nuclear Regulatory Commission (the "Commission") at 70 Fed. Reg. 34,700 *et seq.*

Entergy appreciates the Commission's consideration of its comments on this matter. For the reasons discussed in the attached comments, Entergy urges the Commission to deny the relief requested in referenced petition for rulemaking in its entirety.

If further information is needed on this matter, please contact the undersigned at (914) 272-3202.

Sincerely,

Travis C. McCullough
Assistant General Counsel

Template = SECY-067

SECY-02

**RESPONSE TO PETITION FOR RULEMAKING
SUBMITTED BY WESTCHESTER COUNTY, NEW YORK
PRM 54-02 (70 FR 34700)**

Entergy Nuclear Operations, Inc. ("Entergy") herein sets forth its opposition to the petition for rulemaking (the "Petition") filed with the U.S. Nuclear Regulatory Commission (the "Commission") on May 10, 2005 by Andrew J. Spano, County Executive for Westchester County, New York (the "Petitioner"). In addition to the comments expressed herein, Entergy endorses the comments submitted in this docket by the Nuclear Energy Institute (referred to herein as the "NEI Comments"), and refers to specific portions of the NEI comments from time to time herein.

For the reasons set forth herein, Entergy urges the Commission to deny the Petitioner's request for rulemaking set forth in the Petition in its entirety. Petitioner's proposed amendments to the Commission's license renewal rule set forth in 10 C.F.R. Part 54 represent a substantial and unnecessary departure from the Commission's carefully developed, stable and predictable approach to license renewal. If adopted, the proposed amendments would impose duplicative and unnecessary regulation upon licensees and a substantial burden on the Commission's resources, and would result in a cumbersome, unpredictable and ultimately unworkable regulatory framework and process for relicensing; at the same time, adoption of the proposed amendments would provide little or no benefit in terms of advancing the Commission's regulatory mandate to protect public health and safety, protect the environment, and protect and safeguard nuclear materials and nuclear power plants in the interest of national security.

I. The Proposed Amendment.

The Petition proposes that the Commission amend its regulations pertaining to license renewal set forth in 10 C.F.R. Part 54, to provide that "a renewed license will be issued only if the plant operator demonstrates that the plant meets all criteria and requirements that would be applicable if the plant were being proposed *de novo* for initial construction."¹ The Petition suggests amendments to specific NRC regulations to implement its proposed license renewal standards, including Parts 2, 19, 20, 21, 26 30, 40, 50, 51, 54, 55, 73 and 100 and related appendices, as well as 10 C.F.R. §§ 54.4, 54.19, 54.21 and 54.23, and proposes rescission of 10 C.F.R. §54.30. Finally, the Petition suggests that the criteria to be examined in considering renewals of operating licenses "should include such factors as demographics, siting, emergency evacuation, site security, etc.," and states that "[t]his analysis should be performed in a manner that focuses the NRC's attention on the critical plant-specific factors and conditions that have the greatest potential to affect public safety."²

¹ Petition at 1.

² Petition at 1.

II. Entergy's Interest In the Proposed Amendment.

While the Petitioner's proposed amendment to the NRC's relicensing process would apply generically to all commercial nuclear power plants seeking relicensing, the Petition is obviously focused on any potential relicensing of Entergy Nuclear's Indian Point Nuclear Generation Stations Units 2 and 3 (collectively, "Indian Point") located in Westchester County, New York. Entergy Nuclear Operations, Inc., a subsidiary of Entergy Corporation, is a co-licensee (together with Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear Indian Point 3, LLC) and operator of Indian Point. In addition to Indian Point, Entergy Corporation owns and operates eight additional nuclear power generation stations located in the northeastern and southern United States. As owner and operator of Indian Point, as well as the owner and operator of the second largest fleet of commercial nuclear power generation facilities in the United States, Entergy has a vital interest in the matters raised by the Petition.³

III. The Existing License Renewal Process.

The Atomic Energy Act of 1954, as amended, authorizes the NRC to issue operating licenses for nuclear power reactors, which may be issued for a period of up to forty years and renewed upon expiration.⁴ License renewal has been the subject of extensive NRC research and rulemaking efforts over a period of several years that has considered a broad range of technical, safety, and regulatory policy issues, and that has resulted in the final rulemaking set forth in 10 C.F.R. Part 54 (referred to herein as the "License Renewal Rule" or the "Rule").⁵ The Rule is based on two fundamental principles:

- (i) "with the possible exception of the detrimental effects of aging on the functionality of certain plant systems, structures and components in the period of extended operation, and possibly a few other issues related to safety only during extended operation, the regulatory process is adequate to ensure that the licensing bases of all currently operating plants provides and maintains an acceptable level of safety so that the operation will not be inimical to public health and safety or common defense and security"; and

³ No application for renewal of the operating licenses for either of the Indian Point units has been filed with the Commission as of the date hereof. However, the issues raised in this docket are of vital importance to Entergy in that they are critical to maintaining the viability of the license renewal option with respect to Indian Point, as well as the other facilities that Entergy owns or may acquire in the future.

⁴ 42 U.S.C. §2133(c); 10 CFR §50.51

⁵ The NEI has provided a thorough and insightful history of the Commission's development of the License Renewal Rule, including the history of the Commission's deliberative rulemaking with respect to both the original and amended versions of the Rule, in the NEI Comments and in its *amicus curiae* brief submitted *In re: Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3)*, U.S. Nuclear Regulatory Commission, Docket Nos. 50-336-LR and 50-423-LR (referenced herein as the "NEI Brief").

- (ii) "the plant-specific licensing basis must be maintained during the renewal term in the same manner and to the same extent as during the original licensing term."⁶

Accordingly, the focus of the existing license renewal process is to ensure that the detrimental effects of aging of systems, structures and components are identified and adequately managed during the renewal term. Put another way, having determined that a plant's current licensing basis provides a sufficient legal and technical basis upon which to extend plant operation for an additional term of up to twenty years, the Commission determined that the appropriate scope of license renewal was upon management of age-related effects during the renewal term.

The focus of the existing process is premised upon the NRC's conclusion that a plant's current licensing basis provides an adequate basis for license renewal. As defined in 10 C.F.R. § 54.3, the current licensing basis 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 in effect."⁷ The current licensing basis includes, among other things, specified NRC regulations and appendices, orders, license conditions, exemptions, technical specifications, the plant-specific design basis, and licensee commitments.⁸ The current licensing basis evolves as necessary during the life of the plant in order to ensure an adequate level of public health and safety, and as part of its ongoing regulatory processes the NRC has the authority to impose additional requirements on licensees as necessary to protect the public health and safety -- all of which requirements are incorporated into a plant's current licensing basis.⁹ A plant's continuing compliance with its current licensing basis is monitored by the NRC's regulatory, inspection and oversight processes, and the NRC has the regulatory authority to enforce compliance with the current licensing basis.

As the Nuclear Entergy Institute has recently detailed in a proceeding in another docket,¹⁰ the fundamental purpose of the License Renewal Rule was to ensure a reasoned process for license renewal and provide regulatory guidance for the extension of nuclear power plant licenses.¹¹ In developing the Rule, the Commission explicitly acknowledged the need for having a "predictable and stable" regulatory process that clearly sets forth standards that must be met for license renewal, as well as the need for licensees to make decisions regarding seeking license renewal "without being

⁶ 60 Fed. Reg. at 22,464.

⁷ 10 C.F.R. § 54.3.

⁸ 10 C.F.R. § 54.3.

⁹ An example of the NRC's exercises of its authority to impose additional requirements on licensees is provided below in the discussion of the NRC's evolving regulatory requirements with respect to security and emergency planning.

¹⁰ See the NEI Brief at 3.

¹¹ 56 Fed. Reg. 64,943 (1991); see also the NEI Brief at 3.

influenced by a regulatory process that is perceived to be uncertain, unstable, or not clearly defined."¹²

IV. Discussion.

a. Petitioner's Stated Issues with the Current Process. The Petitioner asserts that the process and criteria presently employed in the license renewal process are "seriously flawed," and criticizes the existing process as focusing too narrowly on passive systems, structures and components. As a remedy to these perceived deficiencies, the Petition asserts that the applicable regulations should be "broadened and sufficiently comprehensive to cover all of the facets that were considered for initial construction, and alternatively, that the license renewal process should examine all issues related to the plant and its original license, and then concentrate on issues that are new to that plant or changed since the original license was issued or that deviate from the original licensing basis."¹³ The Petition points to changes that occur over time, such as population growth, regulatory evolution, changes in public awareness, technological improvements and plant economics, as important factors that affect nuclear power plants, and asserts that these changes should be examined and weighed in the relicensing process. Finally, the Petition identifies several plant-specific "key renewal issues" that the Petitioner believes should be given full consideration in the relicensing process, illustrating those "key renewal issues" with examples from its experience with Indian Point.

As background information in support of its proposed amendments, the Petition provides one view of the history of the development of nuclear power generation facilities, alluding to an informal compact between the utilities that developed the nuclear generation facilities and local communities that hosted them, in which both parties would obtain certain economic and benefits, and in which the utilities would enjoy forty years of operations unimpeded by local scrutiny, after which the plants would be decommissioned.¹⁴ The Petition goes on to cite a series of events that "changed that landscape," suggesting that these events provide a justification for Petitioner's suggested alternative approach to the license renewal process.¹⁵

¹² 60 Fed. Reg. 22,461 (1995) sets forth the Commission's objectives and principles and establishing the current version of the Rule; see also the NEI Brief at 3.

¹³ Petition at 3.

¹⁴ Petition at 3. The Petitioner apparently submits this alternate history of commercial nuclear energy development in order to establish that the owners of nuclear generation facilities have either received everything that they were entitled to from host communities, or that they breached their commitments to host communities, but that either case supports the proposed amendment. Petitioner provides no support for these statements, nor is Entergy aware of anything to support these assertions; in any event, these assertions are not particularly relevant to the issues at hand and should not be given any weight in evaluating the Petition's proposal.

¹⁵ Petition at 3. The Petition recites the customary litany of headline-making events such as Three Mile Island, the Browns-Ferry fire, utility bankruptcies, the Chernobyl accident, delays at Yucca Mountain, Davis-Besse reactor head problems, and the events of 9/11, as examples of incidents justifying its proposed approach to license renewal. While Entergy does not underestimate the serious nature of each of these events, the implication is that the license renewal process must be amended to take these

b. *Maintenance of a Plant's Current Licensing Basis Adequately Addresses Petitioner's Concerns.* The Petition observes that "[m]any key factors that affect nuclear plant licensing evolve over time ..." and that "[a]ll of these factors should be examined and weighed in the formal 10 C.F.R. Part 54 relicensing process."¹⁶ In taking this position, the Petition implies that the "evolving key factors" are not taken into account in regulating the facility after issuance of the original license. This is simply not accurate; changes to a plant's current licensing basis are made throughout the current term of a plant's license to incorporate, among other things, new or revised regulations, licensee commitments, or the issuance of NRC orders or action letters. The NRC monitors compliance with the current licensing basis through a well-developed system of inspections and oversight, and has the regulatory authority to enforce a plant's compliance with the current licensing basis. Accordingly, the current license renewal process does, in fact, take into account the impacts of changes since initial plant licensing. In no way does the license renewal process relieve any licensee of the obligation to maintain and demonstrate continuing compliance with the host of legal and technical requirements and commitments, all of which are encompassed within the licensee's current licensing basis, that ensure public health and safety.

Entergy concurs that emergency planning, plant security, appropriate monitoring methods and protocols, and regulatory compliance, as well as a host of other activities, procedures and behaviors not mentioned by the Petitioner, are essential for ensuring the public's health and safety.¹⁷ The importance of these concerns, however, is neither reduced nor heightened when plant relicensing is under consideration; they are essential considerations for a well-regulated plant and must be addressed on a daily basis whether the plant has been running for forty years or forty days. Because they are of such importance, they are actively monitored and regulated under the NRC's current regulatory process, under which the NRC has plenary power to address health and safety issues as well as all issues bearing on the appropriateness of the license. Those issues raised by the Petitioner as "missing" from relicensing considerations are in fact not "missing" – they exist in the current licensing basis which much be maintained as a condition to operating under the current operating term as well as any renewal term. Those issues are not unique or limited to the relicensing decision and

events into consideration because they are not otherwise addressed in the Commission's regulatory processes and oversight, which is incorrect and misleading.

¹⁶ The Petition identifies certain "public policy" issues, particularly concerning emergency planning and security, that the Petitioner presumably believes would support the Petitioner's oft-stated arguments in favor of closing Indian Point. However, the Petition fails to identify those public policy issues that would support continued operations of and license renewal for Indian Point, such as (i) regional needs for a reliable and economic source of adequate power and national energy security, (ii) ensuring the stability and reliability of the regional electric grid, (iii) environmental benefits provided by nuclear power that does not generate greenhouse gases, and (iv) substantial employment and economic benefits provided to the region by an operating generation facility, all of which were reflected in several provisions of the broad-based federal energy legislation enacted earlier this month.

¹⁷ Emergency planning and security issues raised by Petitioner with respect to Indian Point are addressed in more detail below.

consideration of these issues is not (and should not be) deferred until license renewal, but addressed on a continuing basis.¹⁸

Entergy notes that the Petition also urges consideration of certain issues in the relicensing process that are simply beyond the scope of the NRC's jurisdiction; for instance, "public awareness" and "local societal and infrastructure factors that influenced the original plant licensing" are arguably beyond the NRC's jurisdiction and are not an appropriate subjects for NRC rulemaking in any event, even assuming that Petitioner could articulate definitive, objective, or measurable means for evaluating and applying such vague concepts in a relicensing process.

c. Effects of Aging of Identified Systems, Structures and Components are an Appropriate Focus of License Renewal. As discussed above, the Petition's criticism of the existing process as focusing too narrowly on passive systems, structures and components suggests a misunderstanding of the sound fundamentals that form the basis of the Rule. Given the NRC's ongoing regulatory processes, the NRC has appropriately focused the license renewal process on the management of the effects of aging on certain systems, structures and components during the period of extended operation. Such a focus does not, however, imply ignorance or neglect of other important issues that could affect the public health, safety and welfare; rather, this focus results from the NRC's informed judgment after years of study that the focus of the Rule is upon issues that are most likely to affect the public health, safety and welfare during a period of extended operation, in addition to the safeguards applied to a plant on a continuing basis, and are in addition to an already vigorous regulatory structure.

d. The License Renewal Rule as Currently Developed and Implemented Represents Sound and Rational Regulatory Policy and Adequately Protects Public Health and Safety. The License Renewal Rule's focused approach is intentionally so. The License Renewal Rule is the result of many years of careful, deliberate rulemaking by the Commission, taking into account over twenty years of technical review and analysis and a deliberative rulemaking process (including opportunities for public input and comment). In developing the Rule, the Commission in fact considered, and rejected, formulations of the rule that would have required a party to justify license renewal upon a finding that the facility would qualify for a new license.

The focused approach of the License Renewal Rule has its basis upon sound policy considerations. In developing the Rule, the Commission determined that its program of regulatory oversight was sufficiently broad and rigorous to establish that consideration during license renewal of the issues and criteria such as those suggested by the petition would not add significantly to public health and safety. Since initial licensing, each operating plant has continually been inspected and reviewed as a result of new information gained from operating experience, and ongoing regulatory processes

¹⁸ The question of the extent to which emergency planning issues should be taken into consideration in the license renewal process is currently before the Commission in *In re: Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3)*, U.S. Nuclear Regulatory Commission, Docket Nos. 50-336-LR and 50-423-LR. See discussion in Note 5 above.

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 are applied to plants. In appropriately limiting the scope of issues in the license renewal process, the Commission ensured that its license renewal process would avoid redundant, "unnecessary" and wasteful reassessments of issues at the license renewal stage, while still protecting public health and safety. To duplicate in the relicensing process the regulation of matters that are the subject of ongoing regulation would place an unnecessary burden on Commission resources and cause an unnecessary dilution of regulatory focus, and would unduly burden a licensee's license renewal efforts as it attempted to comply with duplicative regulatory oversight.

Finally, the Petition fails to establish any basis upon which the Commission might conclude that its policy decisions underlying the current Rule were unsound, or that the Rule was improperly derived or is improperly applied from the application of these policies.

e. Entergy's Response to Particular Issues Relative to Indian Point. In support of its Petition Petitioner cites several examples of alleged safety and security issues at Indian Point as "Key Renewal Issues" that should be taken into account during the relicensing process. The first three of these issues appear to be closely related – part of Petitioner's proposal for incorporating emergency planning and security issues into the license renewal process.¹⁹ Those issues are:

- *Could a new plant, designed and built to current standards, be licensed on the same site today?*
- *Have local societal and infrastructure factors that influenced the original plant licensing changed in a manner that would make the plant less apt to be licensed today?*
- *Can the plant be modified to assure public health and safety in a post-9/11 era?*

The NRC has specifically determined, both in the original rulemaking for and amendments to the License Renewal Rule, that the license renewal process need not

¹⁹ Concerns regarding emergency planning and security are prominent throughout the Petition. However, rather than demonstrating in any substantive fashion a lack of or deficiencies in adequate emergency planning and security at Indian Point, the Petition makes generalized references to highly publicized and emotional events such as Three Mile Island, Chernobyl, and 9/11, and states that issues of plant safety are of particular concern around Indian Point "because of its proximity to major population centers, because of periodic leaks of radioactive material, because of difficult (if not impossible) evacuation issues, and because of its proximity to the World Trade Center." In fact, there is no record of radioactive leaks at Indian Point that posed any material threat to public health and safety. Petitioner also states that "Indian Point cannot be made sufficiently safe according to James Lee Witt, former head of FEMA." In fact, both the NRC and Entergy have addressed the issues raised by the Witt Report.

include determinations regarding emergency planning,²⁰ and the Petition provides no basis upon which the Commission should conclude that those earlier determinations were incorrect or inappropriate. The relicensing process in no way affects the NRC's existing security or emergency preparedness requirements, and licensees are required in 10 CFR 50.71(e) to ensure the FSAR contains current and accurate information, including information on a plant's environs and population density. Through its inspection program and verification of licensee activities, the NRC is able to determine whether a licensee is in compliance with its regulatory requirements. For example, in February 2002 the NRC issued orders to all nuclear power plant licensees regarding security and emergency planning improvements, and subsequently amplified these orders and expectations. In July 2005, the NRC issued Bulletin 2005-02 describing emergency planning enhancements. These examples demonstrate that areas such as security and emergency planning are continuously monitored and regularly evaluated with action taken as necessary to improve performance against contemporary standards. With regard to changing population demographics and factors that might affect emergency response actions, NRC requires that licensees perform regular evaluations and updates to programmatic elements that might be impacted by such changes. Such evaluations are used to ensure that emergency planning elements such as evacuation planning are current. In short, these valid concerns are fully addressed pursuant to the NRC's existing programs of oversight and regulation of the safety and security of operating reactors.

- *Have state and local regulations changed that would affect the plant's continued operations?* This issue incorrectly implies that nuclear generation facilities are not required to comply with state and local regulations if those regulations have changed in any way since the original license was issued. This is not the case; nothing exempts nuclear generation facilities from compliance with applicable federal, state and local laws, rules, and regulations in effect from time to time during their license term. Specifically in regard to this issue, the Petitioner asserts that "Indian Point must convert from once-through cooling to a closed-cycle design using cooling towers." This statement is not only inaccurate,²¹ but the Petition fails to demonstrate or

²⁰ The NEI provided a thorough history of the Commission's consideration of emergency planning issues in the context of rulemaking for license renewals in its *amicus curiae* brief submitted *In re: Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3)*, U.S. Nuclear Regulatory Commission, Docket Nos. 50-336-LR and 50-423-LR. Entergy endorses NEI's position set forth in that brief.

²¹ The New York Department of Environmental Conservation ("NYDEC") has issued a *draft* SPDES permit that *could* require Indian Point to construct cooling towers if the facility is relicensed, but only if the construction and operation of cooling towers at the facility is deemed to be "feasible and safe." The NYDEC has acknowledged that substantial questions remain regarding the technical feasibility of building cooling towers at Indian Point. Additionally, Entergy has challenged the draft permit in an administrative proceeding before the NYDEC and has challenged the state regulatory basis of the permit in state court. In addition, Entergy believes that a retrofit at Indian Point to install cooling towers would not be required under the recently published federal rules concerning the implementation of section 316(b) of the federal Clean Water Act (regarding cooling water intake structures). In summary, Entergy believes that the construction of cooling towers at Indian Point is not properly required by either New York or federal law or regulation.

explain why, even if the statement was accurate, the issue should have any bearing on relicensing, or how it would be taken into consideration.

- *The original design basis of older nuclear power plants did not include extended on-site storage of spent nuclear fuel (SNF).* This statement implies that the Interim Spent Fuel Storage Facility currently being implemented at Indian Point presents a hazard to public health and safety. Interim spent-fuel storage systems are subject to separate licensing processes and regulatory oversight that have been determined adequate to protect the public health and safety. The Petition does not explain why re-evaluation of such facilities in the context of relicensing provides any incremental protection to the public health and safety.

V. Conclusion

Nothing in this response should be read to question, minimize, or make light of the Petitioner's interest in protecting the health and safety of its residents. Entergy is committed to ensuring the safe and secure operation of its facilities, and supports and cooperates with efforts by the NRC and other governmental and regulatory authorities, including state and local authorities, to protect the public health, safety, and environment and to promote the common defense and security. Nor should these comments be read as opposition to the Petitioner's participation in the regulatory process through NRC's rulemaking activities, as such participation provides a forum for dialogue on issues that are of vital importance to all stakeholders.

In this case, however, the Petition's proposed amendments to the License Renewal Rule are misguided and contrary to sound regulatory and public policy. The Petitioner relies upon a fundamental misunderstanding or mischaracterization of the current license renewal process as a basis for its proposed amendments to the License Renewal Rule, and ignores the nature, extent, and effectiveness of the Commission's ongoing regulatory oversight over nuclear generation facilities.

Even if adopted, the proposed amendments would not produce the results that the Petition claims that it is seeking. Rather than providing any incremental protections for the public health, safety, and the environment, the amendments would duplicate existing regulations, impose an additional burden on the Commission's resources, and thereby reduce the Commission's overall effectiveness. The amendments would also infuse the license renewal process with vague and elusive criteria and standards, compliance with which would be impossible to measure or evaluate, resulting in a license renewal process that would be difficult for the NRC to administer, and difficult and unpredictable for licensee to implement.

The License Renewal Rule as currently drafted and implemented provides predictable and rational approach to license renewal that adequately ensures the protection of the public health and safety. The Petition provides nothing upon which to reasonably conclude that the proposed amendments would represent an improvement

over the existing process. Accordingly, there is no basis for adoption of any of the Petitioner's proposals.

For the reasons set forth above, Entergy urges the Commission to deny the Petition for Rulemaking PRM-54-02.