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NUCLEAR REGULATORY COMMISSION

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OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

BEFORE THE COMMISSION

In the Matter of AMERGEN ENERGY COMPANY, LLC (Oyster Creek Nuclear Generating Station)	)))))	Docket No. 50-219-LR
In the Matter of ENTERGY NUCLEAR OPERATIONS, INC. (Indian Point Nuclear Generating Units 2 and 3)	)))))	Docket Nos. 50-247-LR and 50-286-LR
In the Matter of ENTERGY NUCLEAR OPERATIONS, INC. (Pilgrim Nuclear Power Station)	)))))	Docket No. 50-293-LR
In the Matter of ENTERGY NUCLEAR OPERATIONS, INC. (Vermont Yankee Nuclear Power Station)	)))))	Docket No. 50-271-LR

PETITION BY NUCLEAR INFORMATION AND RESOURCE SERVICE; JERSEY SHORE NUCLEAR WATCH, INC.; GRANDMOTHERS, MOTHERS AND MORE FOR ENERGY SAFETY; NEW JERSEY PUBLIC INTEREST RESEARCH GROUP; NEW JERSEY SIERRA CLUB; NEW JERSEY ENVIRONMENTAL FEDERATION; RIVERKEEPER, INC.; PILGRIM WATCH AND NEW ENGLAND COALITION TO SUSPEND LICENSE RENEWAL REVIEWS FOR OYSTER CREEK, INDIAN POINT, PILGRIM, AND VERMONT YANKEE NUCLEAR POWER PLANTS PENDING INVESTIGATION OF NRC STAFF REVIEW PROCESS AND CORRECTION OF DEFICIENCIES

TEMPLATE = SECY-037

SECY-02

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I. INTRODUCTION AND SUMMARY

Pursuant to the Atomic Energy Act ("AEA"), 42 U.S.C. §§ 2133(d), 2201(b) and (c), 2232(a), and 2239(a)(1)(A); and implementing regulations 10 C.F.R. §§ 2.323, 54.27, and 54.29, Nuclear Information and Resource Service; Jersey Shore Nuclear Watch, Inc.; Grandmothers, Mothers and More for Energy Safety; New Jersey Public Interest Research Group; New Jersey Sierra Club; New Jersey Environmental Federation; ("Oyster Creek Organizations"); Riverkeeper, Inc. ("Riverkeeper"); Pilgrim Watch ("Pilgrim Watch"); and New England Coalition ("NEC") (collectively "Petitioners") hereby request the U.S. Nuclear Regulatory Commission ("NRC" or "Commission") to suspend the currently pending license renewal proceedings for the Oyster Creek, Indian Point, Pilgrim, and Vermont Yankee nuclear power plants (collectively "Facilities") including NRC Staff technical reviews and/or adjudicatory hearings, and conduct a comprehensive overhaul of the manner in which reviews of license renewal applications are carried out. At minimum, such an overhaul should consist of:

1. A comprehensive investigation, to be conducted by a body independent of the NRC Staff, into the question of whether the NRC Staff is now conducting or has conducted searching, independent, and thorough technical reviews of license renewal applications or whether it is largely repeating statements by license renewal applicants (which in turn often repeat NRC guidance documents);
2. Commission oversight of the preparation and/or revision of NRC procedures for license renewal reviews to ensure that key applicant-supplied facts are independently verified by the Staff;

3. Commission oversight of the establishment of a quality assurance program for NRC Staff review of license renewal applications to ensure the reviews are complete, consistent, logical, and well documented;
4. Commission oversight of the conduct of NRC Staff safety reviews for the Facilities in a manner that meets the requirements of the revised procedures;
5. Independent verification by the Commission of whether the newly conducted NRC Staff safety reviews for the Facilities provide sufficient basis for the safety findings required by the AEA. If they do not, the Commission should establish a process for the reviews to be supplemented.
6. For the Oyster Creek proceeding and any other proceedings where the record closes prior to a final determination of the outcome of this Petition, the Commission should reopen the record so that the revised safety reviews can form the basis of new contentions to the ASLB.

The independent reviews requested above could either be carried out directly by the Commission or could be delegated to the NRC's Atomic Safety and Licensing Board ("ASLB"), the Office of the Inspector General ("OIG"), or the Advisory Committee on Reactor Safeguards ("ACRS"). If the reviews are delegated, ultimate responsibility for their results should rest with the Commission.

For each of the Facilities, the requested actions are essential to ensure NRC compliance with the safety requirements of the AEA and NRC implementing regulations, and to ensure that members of the public who request a hearing on license renewal applications have an adequate opportunity to be heard on the adequacy of those applications.

This Petition is based primarily on a recent report by the NRC Office of the Inspector General ("OIG"), *Audit of NRC's License Renewal Program* (OIG-07-A-15) (September 6, 2007) ("OIG Report") (*available on ADAMS as* ML072490486). The OIG's audit revealed a review process so weak that in over 97% of the 458 representative NRC safety reports sampled by the OIG, NRC Staff reviewers failed to demonstrate they had conducted an independent safety review. Disturbingly, well over a third of the report sampled parroted statements by licensees -- some of which, in turn, parroted statements in NRC guidance documents – without providing evidence of independent verification. In short, the OIG auditors did not find enough documentation to conclude that NRC Staff reviewers did, in fact, perform an independent review of license renewal applications. And many of the sampled reports failed entirely to address the key license renewal issue of the licensee's operating experience. Finally, the OIG found that the agency neither had clear and consistent guidelines nor a quality assurance program for the license renewal safety reviews.

The Petition is also based on the license renewal proceeding for Oyster Creek, which further illustrates the types of deficiencies identified by the OIG. Finally, this Petition is based on recent ASLB decisions in several early site permit ("ESP") cases, which also demonstrate a consistent failure by the NRC Staff to document or logically explain the basis for its safety findings.

As demonstrated by the OIG Report, the Oyster Creek proceeding, and the ESP permit decision, without significant enhancement of the existing NRC safety reviews, the NRC does not have an adequate basis to determine whether the NRC's aging management programs for long lived passive components at Oyster Creek, Indian Point, Pilgrim, and

Vermont Yankee, would provide adequate protection to public health and safety during the license renewal term, as required by 42 U.S.C. § 2232(a) and 10 C.F.R. § 52.29(a). Nor does the NRC have any basis for concluding that continued operation of nuclear power plants under license renewal terms would not be inimical to the common defense and security or public health and safety, as required by 42 U.S.C. § 2133(d).

II. DESCRIPTION OF PETITIONERS AND THEIR INTERESTS

The Petitioners are environmental and civic organizations, who are participants in ASLB hearings regarding the renewal of operating licenses for nuclear power plants. All of the Petitioners have standing to bring this Petition.

A. Oyster Creek Organizations

The Oyster Creek Organizations are national, New Jersey-specific and local organizations concerned about the safety of the Oyster Creek nuclear power plant, whose standing to intervene in the Oyster Creek license renewal proceeding has been established. *AmerGen Energy Co. LLC* (License Renewal for Oyster Creek Nuclear Generating Station), LBP-06-07, 63 NRC 188, 195-96 (2006).

The Oyster Creek Organizations seek the relief requested above in Section I with respect to the Oyster Creek nuclear power plant because the NRC Staff's evaluation of the Oyster Creek license renewal application has failed to comply with the AEA and NRC implementing regulations that are intended to ensure safe operation of the plant. [1]

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[1] In bringing this petition, neither the Oyster Creek organizations nor any of the other Petitioners concede that compliance with the current NRC regulations for renewal of nuclear power plant operating licenses is sufficient to provide adequate assurance that public heath and safety will be protected during the license renewal term. In fact, New Jersey Sierra Club and New Jersey Environmental Federation have appealed a decision by the Commission refusing to expand the scope of its license renewal program to include such issues as the adequacy of the evacuation plans and the vulnerability of spent fuel

B. Riverkeeper

Riverkeeper is a 501(c)(3) non-profit membership organization whose mission is to safeguard the ecological integrity of the Hudson River, its tributaries, and the watershed of New York City (protecting the city's water supply) by tracking down and stopping polluters. Riverkeeper has requested a hearing before the NRC on the license renewal application for the Indian Point nuclear power plant. Riverkeeper, Inc.'s Request for Hearing and Petition to Intervene in Indian Point License Renewal Proceeding (November 30, 2007) ("Hearing Request"). As demonstrated in Riverkeeper's Hearing Request, Riverkeeper's office lies approximately 22 miles from the Indian Point nuclear power plant, and Riverkeeper also has members who live within 50 miles of the Indian Point plant. Therefore Riverkeeper has both organizational and representational standing to challenge the Indian Point license renewal application.

Riverkeeper seeks the relief requested above in Section I with respect to the Indian Point nuclear power plant because it is concerned that the NRC Staff's evaluation of the Indian Point license renewal application will fail to comply with the AEA and NRC implementing regulations that are intended to ensure safe operation of the plant.

C. Pilgrim Watch

Pilgrim Watch, a non-profit citizens' organization with members living within ten miles of the Pilgrim nuclear power plant, is an intervenor in the license renewal proceeding for the Pilgrim nuclear power plant. Pilgrim Watch was found to have standing in *Entergy*

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storage systems to terrorist attack. *New Jersey Sierra Club et al. v. NRC,* (Second Cir. No. 07-1267). Nevertheless, compliance with the current license renewal rules is minimally and absolutely essential to any assurance of safety during the license renewal term.

Nuclear Generation Co. and Entergy Nuclear Operations, Inc. (Pilgrim Nuclear Power Station), LBP-06-23, 64 NRC 257, 271 (2006).

Pilgrim Watch seeks the relief requested above in Section I with respect to the Pilgrim nuclear power plant because it is concerned that the NRC Staff's evaluation of the Pilgrim license renewal application has failed to comply with the AEA and NRC implementing regulations that are intended to ensure safe operation of the plant.

D. New England Coalition

New England Coalition ("NEC") is a non-profit 501(c)(3) educational organization based in Brattleboro, Vermont, with members living in the vicinity of the Vermont Yankee nuclear power plant. NEC is an intervenor in the Vermont Yankee license renewal proceeding and was found to have standing in *Entergy Nuclear Vermont Yankee L.L.C. and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), LBP-06-20, 64 NRC 131 (2006).

NEC seeks the relief requested above in Section I with respect to the Vermont Yankee nuclear power plant because it is concerned that the NRC Staff's evaluation of the Vermont Yankee license renewal application has failed to comply with the AEA and NRC implementing regulations that are intended to ensure safe operation of the plant.

III. NATURE OF PETITION

This Petition constitutes a request to the Commission to exercise its supervisory authority to ensure that NRC decisions with respect to the re-licensing of the Facilities comply with the Commission's obligations under the AEA to protect public health and safety, and to ensure that the NRC provides a meaningful opportunity for public participation in its licensing decisions. *Consolidated Edison Co. of N.Y., Inc.* (Indian

Point, Units 1, 2 and 3), CLI-75-8, 2 NRC 173 (1975) (holding that the Commission has an "overriding responsibility for assuring public health and safety in the operation of nuclear power facilities"). *See also Pacific Gas and Electric Company* (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-02-23, 56 NRC 230, 236-237 (2002) (holding it appropriate for the Commission to exercise its "ultimate supervisory control" over NRC proceedings).

Petitioners do not seek enforcement action against a licensee under 10 C.F.R. § 2.206, nor do Petitioners request a rulemaking under 10 C.F.R. § 2.802. Instead, Petitioners seek an investigation and comprehensive overhaul of the NRC's process for implementing the NRC Staff reviews of license renewal applications, in order to ensure that the NRC's licensing decisions for renewal of nuclear power plant licensees fulfill the requirements of the AEA and NRC regulations. Because this Petition is neither a request for rulemaking nor a request for enforcement of NRC's ongoing operating requirements, it should be treated as a "general motion" filed directly with the Commission, consistent with *Pacific Gas and Electric Co.*, 56 NRC at 236-237.

Petitioners recognize that the Commission discourages participants in adjudicatory hearings from bypassing the ASLB. *Id.*, 56 NRC at 237. However, Petitioners believe that this Petition is correctly filed with the Commission because the subject of the Petition is the performance of the NRC Staff in license renewal proceedings, a subject the Commission has excluded from the purview of the ASLB:

> The Commission has made it clear that '[t]he adequacy of the applicant's license application, not the NRC staff's safety evaluation, is the safety issue in any licensing proceeding, and under longstanding decisions of the agency, contentions on the adequacy of the [content of the] SER are not cognizable in a proceeding.'

U.S. Army (Jefferson Proving Ground Site), LBP-06-26, 64 NRC 438, 456 (2007), quoting Final Rule, Changes to Adjudicatory Process; 69 Fed. Reg. 2182, 2202 (January 14, 2004).[2] In prohibiting challenges to the adequacy of NRC Staff reviews before the ASLB, the Commission reasoned that it is inappropriate to give the ASLB the role of supervising the NRC Staff. 69 Fed. Reg. at 2202. Thus, it is appropriate for Petitioners to raise the issue before the Commission, which has ultimate supervisory authority. *Pacific Gas and Electric Company,* 56 NRC at 236-37.

While the Commission has prohibited Petitioners from raising their concerns about the adequacy of the NRC Staff's review before the ASLB, those concerns are nevertheless material to the NRC's decisions in the license renewal proceedings for the Facilities because, as the Commission has stated, "the NRC may not issue a license until all appropriate safety findings have been made." 69 Fed. Reg. at 2,202 (citations omitted). Accordingly, the Commission must consider the issues raised by this Petition in the course of the license renewal proceedings for the Facilities. *Union of Concerned Scientists v. NRC,* 735 F.2d 1437, 1438-50 (D.C. Cir. 1984), cert. denied, 469 U.S. 1132 (1985). *See also Union of Concerned Scientists v. NRC*, 920 F.2d 50, 53 (D.C. Cir. 1990) (holding that

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[2] In fact, at the recent ASLB hearing concerning Oyster Creek, Judge Abramson explicitly stated that the work of the NRC Staff was not at issue in the proceeding:

> Just for clarification for those of you who are not familiar with our processes here, what's at issue here is the application by AmerGen. The staff's work is not at issue. And even though the staff is formally a party to our proceeding that's a holdover from our old regulations which have recently been revised. Staff is, in fact, here as an amicus to us to help us understand what the staff thought when it reviewed the application. Their work is not at issue.

Transcript of Oyster Creek ASLB Hearing at 9:19-10:3 (September 24 and 25, 2007) (*available at* ML072700833 and ML072700797).

"Section 189(a) [of the Atomic Energy Act, 42 U.S.C. 2239(a),] prohibits the NRC from preventing all parties from ever raising in a hearing a specific issue it agrees is material to [a licensing]. . . decision.")

In any event, if the Commission decides that in fact Petitioners should have first filed with the ASLB, it should remand this Petition to the ASLB.

IV. REGULATORY FRAMEWORK

A. Requirements of Atomic Energy Act and NRC Regulations for Renewal of Operating Licenses.

Section 103 of the Atomic Energy Act, 42 U.S.C. § 2133, grants the Commission authority to issue licenses for the commercial exploitation of special nuclear material. It states that such licenses "may be renewed upon the expiration of" the initial licensed period. 42 U.S.C. § 2133(c). However, the Commission is required to find that the authorized utilization of special nuclear material is "in accord with the common defense and security and will provide adequate protection to the health and safety of the public." 42 U.S.C. § 2232(a). *See also* 42 U.S.C. § 2133(d) ("[N]o license may be issued to any person within the United States if . . . in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security or to the health and safety of the public.")

To implement these requirements, the Commission has promulgated regulations that lay out the specific requirements for relicensing. In 1991, recognizing that "age related degradation will be critical to safety during the term of [a] renewed license," the Commission established a requirement for a plant-wide review of age-related degradation. Final Rule, Nuclear Power Plant License Renewal; 56 Fed. Reg. 64,943, 64,960

(December 13, 1991). The regulations also required licensees to demonstrate that they had effective programs for management of aging equipment. 56 Fed. Reg. at 64,955.

In 1995, the Commission narrowed the scope of the plant-wide review and aging management program to cover only age-related degradation of long-lived passive components. Final Rule, Nuclear Power Plant License Renewal; Revisions; 60 Fed. Reg. 22,461, 22,464 (May 8, 1995). In narrowing the scope of the equipment covered by the rule, however, the NRC did not alter the fundamental principles underlying the 1991 rulemaking, including that: (a) age-related degradation poses a threat to the continued safe operation of nuclear power plants, and (b) safety must be maintained throughout the license renewal period by managing the effects of aging. 60 Fed. Reg. at 22,464. As the Commission explained:

> The objective of a license renewal review is to determine whether the detrimental effects of aging, which could adversely affect the functionality of systems, structures, and components that the Commission determines require review for the period of extended operation, are adequately managed. The license renewal review is intended to identify any additional actions that will be needed to maintain the functionality of the systems, structures, and components in the period of extended operation.

Id. Thus, the proper identification of (a) equipment that is subject to aging effects and (b) adequate measures for managing those effects are critical to the NRC's regulatory process for assuring safety during the license renewal term.

B. NRC Staff Role in License Renewal Reviews

1. Legal responsibility

The NRC Staff has a legal responsibility to make safety findings on all relevant issues before a license or renewed license may issue. *Commonwealth Edison Co.* (Byron Nuclear Power Station, Units 1 and 2), ALAB-678, 15 NRC 1400, 1420 n.36 (1982), citing

South Carolina Electric and Gas Co. (Virgil C. Summer Nuclear Station, Unit 1), ALAB-642, 13 NRC 881, 895-96 (1981). In NRC licensing proceedings, the Commission defers to the Staff's conclusions on safety issues, unless they are contested. *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), CLI-05-17, 62 NRC 5, 35 (2005).

Thus, as a general matter, the Staff's findings on the adequacy of a license renewal application will form the basis for the NRC's decision whether to allow the facility to operate twenty years beyond its original license term. As the NRC Staff has summed up its role, "[t]he responsibility of the NRC is to ensure that plant license renewal is safe – that it does not pose additional risk to public health and safety or to the environment." Hull, et al, *NPP License Renewal and Aging Management: Extrapolating American Experience* at 10, submitted to the First Symposium on Nuclear Pressure Equipment and Regulation (NuPEER), Dijon, France (June 22-24, 2005) ("Hull Report") (*available in ADAMS at* ML051670356).

2. Review process

NRC guidance stipulates that the "key elements" of a license renewal application review consist of a "technical review" of license renewal-related programs by the NRC's Office of Nuclear Reactor Regulation ("NRR"), plus "a series of on-site inspections. NRR Office Letter No. 805, *License Renewal Application Review Process,* Attachment 2 (*Guidelines for Technical and Process Lessons Learned for License Renewal*) at 2 (June 19, 1998). The purpose of the on-site inspections is to verify that:

> (1) the license renewal programs and activities are being documented consistently with the requirements of the rule, quality assurance requirements, and site-approved procedures; (2) the aging management programs are being implemented consistently with information provided in the LRA and the staff safety evaluation (SE); and (3) the aging management programs are effectively managing the effects of aging throughout the period of extended operation.

Id.

Both the scope and the adequacy of a license renewal applicant's program for managing aging passive components are subject to the Staff's review. NRC Inspection Manual, Inspection Procedure 71002 at 1-2 (February 18, 2005). The NRC's Inspection Manual confirms that the Staff is responsible for verifying -- through walk-downs, inspections and audits -- that the license renewal applicant has documented and covered all relevant systems, structures and components ("SSCs") in its license renewal program; and that the applicant's aging management program is adequate. Inspection Procedure 71002 at 2-3. In addition, the NRC Staff must "ensure that operating experience relevant to a specific system, structure, or component was properly considered in the nature and extent of the potential aging effects." NRR Office Letter No. 805, Attachment 1 (*Guide for License Renewal Application Review Process*), Attachment B (*Safety Evaluation Form and Content Template)* at 2 (June 19, 1998).

NRC guidance also requires the NRC Staff to document its safety review. Each safety evaluation report ("SER") "should provide sufficient information to explain the staff's rationale to someone unfamiliar with the licensee's request" for renewal of the license. NRR Office Letter No. 805, Attachment 1 (*Guide for License Renewal Application Review Process*) at 9.

V. EVIDENCE OF DEFICIENCIES IN NRC STAFF REVIEW PROCESS

A. OIG Report

On September 7, 2007, the OIG issued a report regarding its audit of the effectiveness of NRC's license renewal safety review. To conduct the audit, OIG selected 458 "judgmental" samples of narrative passages from NRC Staff audit, inspection and

safety evaluation reports prepared in 13 different license renewal proceedings, for applications submitted over a period of slightly more than five years, between September 2000 and January 2006. OIG Report at 8. The judgmental sample represented a "cross-section of plant ages, technologies, year of renewal, NRC application review process used, and NRC region." *Id.*, n.12. The OIG auditors found the following serious deficiencies in the NRC Staff's safety review process:

1. Failure to document reviews

The OIG's auditors found that *over 97%* of the 458 sample reports provided inadequate documentation of the Staff's safety reviews. OIG Report, Table 2 at 46. Only 11 reports (2.4% of the report samples) actually "provided details regarding the staff's review methodology" and "detailed and independent support for [the Staff's] conclusions in the report." *Id.* at 46-47. Thus, the overwhelming majority of the report samples – 447 out of 458 reports -- did not adequately disclose review methodology or provide adequate information to support the Staff's conclusions.

Of those 447 inadequate report samples, 159 (34.7% of the total) contained "no mention of review methodology or no specific support for the staff's conclusions in the audit, inspection or safety evaluation reports." *Id.* Another 288 report samples (62.9% of the total) "cited anecdotal information provided by the licensee or restated language from the license renewal application to support staff conclusions." *Id.* The Staff's methodology for those report samples "was limited to reviewing the license renewal application and interviewing licensee personnel, or to reviewing anecdotal information provided by the licensee." *Id.*

2. Copying of licensee assertions without documented verification

The OIG also found that of the 458 sample reports, 41.7% contained an "identical or nearly identical word-for-word repetition of renewal application text," but the quotations were not "offset or otherwise marked" to show that the text was actually that of the applicant, not the NRC Staff. *Id.* at 9, 47. Unsurprisingly OIG found that this "makes it difficult for the reader to distinguish between licensee provided data and NRC Staff's independent . . . conclusion." *Id.* at 9. As the OIG explained:

> A reader could conclude that they were reading NRC's independent analysis and conclusions when, in fact, it was the licensee's conclusions. While NRC reviewers may have actually performed such an independent review, a comparison between the license renewal application and the audit report may cast doubt as to what, exactly, NRC did not independently review the licensee's program other than restate what was provided in the renewal program.

OIG Report at 9-10. Examples given by OIG show that these report samples were merely copied directly from license renewal applications. *Id.* at 9, 49. For instance, in the cases of Millstone Unit 2 and Oyster Creek, the body of the text of the NRC report is precisely identical to the license renewal application. *Id.*

3. Indications that audits were not conducted

While the OIG did not set out to determine whether the Staff had, in fact, conducted thorough license renewal audits, the auditors stumbled upon evidence that in fact, the Staff is *not* conducting thorough reviews. An example that vividly illustrates the seriousness of the safety problems that may be caused by the Staff's unquestioning acceptance of licensee statements is the case of the Oconee license renewal application. In evaluating the Staff's review, OIG found a discrepancy between the license renewal application for the Oconee nuclear power plant and the actual situation, even though the

NRC safety review claimed the Staff had verified the application was correct. *Id.* at 21. The application stated that minor coatings failures had been observed and repaired. *Id.* at 21-22. In contrast, OIG's analysis of the corrective program found that the licensee implemented the program in a manner that was inconsistent with the renewal application. *Id.* at 22. In fact, OIG found that "coatings degradation was a continuing problem at Oconee . . ." and showed a photograph illustrating extensive failure of the coating. *Id.* Despite the existence of this continuing problem, an NRC Staff inspection report asserted that the Staff had "verified that this previously existing program [for coatings aging management] was implemented as described in the [license renewal] application." *Id.* at 22-23 (quoting the inspection report).

In reviewing this incident, the OIG found no record in NRC license renewal report samples that NRC reviewers had "independently verified Oconee's operating experience for coatings." OIG Report at 22. Instead, the OIG found that the Staff had relied on its "program document review," and had even "quote[d] or paraphrase[d] passages from the Oconee renewal application, including the licensee's conclusion that the program is based on well-established industry standards and has been revised as necessary on the basis of plant experience." *Id.* at 23. Thus, the example of the Oconee license renewal review indicates that the problem identified by the OIG is more serious than a failure to document the Staff's safety review – in fact, the Staff may not have conducted any independent reviews at all.[3]

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[3] In a follow-up phone call, OIG confirmed to Richard Webster, counsel for the Oyster Creek Organizations, that it had not conducted a systematic search for the type of discrepancies demonstrated in the Oconee case. Rather, the OIG identified discrepancy arose anecdotally. Telephone conversation between Richard Webster and Tony Lipuma (on or around October 17, 2007).

4. Lack of comment about operating experience

The OIG also found that 76% of the report samples failed to provide any substantive NRC comments about operating experience, a "critical facet" of the license renewal review process. *Id.* at 9. In two cases (Ginna and Turkey Point), fully 100% of all report samples lacked any NRC comments on operating experience. *Id.,* Figure 3. Even in the best report, which discussed Vermont Yankee, approximately 35% of the reports sampled lacked such NRC comments. *Id.* Oyster Creek was in the mid-range of report quality with approximately 70% of the report samples lacking any substantive NRC comments about operating experience. *Id.*

5. Inadequate or inconsistent guidance for conduct of NRC Staff safety reviews

According to the OIG Report, managers in the NRC's Division of License Renewal ("DLR") expect the license renewal staff to review plant-specific operating experience, including corrective actions. OIG Report at 19. In addition, DLR management discussed the importance of plant-specific operating experience at one team meeting observed by OIG. *Id.* at 21. However, DLR has not set any formal requirements for review of plant-specific operating experience. *Id.* Furthermore, DLR has no controls in place to monitor and enforce whether the anticipated review of operating experience actually took place. *Id.*

Moreover, despite the expectation that plant-specific operating experience should be reviewed, most license renewal audit team members do not look for any independent verification of licensee statements in this area. *Id.* at 19. For example, some audit team managers said that they expected auditors to carry out their own searches of corrective

actions, but the auditors said that they generally do not conduct such searches. *Id.* One auditor even stated that he only reviews what the licensee provided in its application. *Id.* Another said that it was too time-consuming and difficult for auditors to check corrective action programs. *Id.* at 20.[4]

OIG noted that "the basis for conclusions reached by NRC license renewal staff is important to stakeholders and others who read NRC's reports." *Id.* at 12. Furthermore, the reporting deficiencies could "lead readers to conclude that regulatory decisions are not adequately reviewed and documented." *Id.* The OIG also pointed out that NRC internal users, such as the ACRS, rely on the review reports generated by NRC staff. *Id.*

B. Oyster Creek License Renewal Proceeding

The Oyster Creek license renewal proceeding also revealed the NRC Staff's failure to independently verify whether the licensee was fulfilling its commitments to maintain plant equipment. During the Oyster Creek relicensing review, inspectors accidentally discovered that the licensee had failed for at least eight years to carry out a written commitment to monitor the flow of certain drains. Letter from Jill Lipoti, State of New Jersey, to Samuel J. Collins, NRC (September 13, 2006) (*available at* ML062630218).

Having found such a surprising oversight, the Staff could have thoroughly investigated why it occurred and whether the problem was more widespread than the particular drains. However, instead of doing that, Staff merely accepted an approach in

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[4] To determine how difficult it actually would be to check operating experience and corrective action, OIG then conducted searches of corrective action databases. *Id.* OIG managed to easily find problems regarding past performance of aging management programs. *Id.* Although OIG did not believe such searches would necessarily be sufficient, it noted that they would be one easy way for reviewers to independently check information provided by licensees. *Id.*

which the missed commitment became a new commitment. Safety Evaluation Report Related to the License Renewal of Oyster Creek Generating Station ("Oyster Creek SER") at A-20 - A-21 (March 2007). Thereafter, the Staff merely accepted the applicant's assurance that it would "reinforce strict compliance with commitment implementation in the future." *Id.* at 1-16, 4-68.

Documents obtained through discovery in the Oyster Creek license renewal proceeding showed that the uninspected drain was the symptom of a much larger problem: the commitment tracking database at Oyster Creek was incomplete. A licensee employee reviewing the missed commitment noted that "the age of OC [Oyster Creek] has resulted in an enormous volume of regulatory correspondence that had not been reviewed in searching for commitments. Commitments were not tracked for all the years of OC operation." Memorandum from Kathy Barnes re: Exelon Nuclear Issue – Statement of Confirmation at OCLR 15509-10 (November 13, 2006) (*available at* ML072850059). The consequences of this issue are that "without having a commitment tracking system or proper disposition of these historical commitments renders the site [vulnerable] to potential repeat occurrences of missed commitments. . . ." *Id.* at OCLR 15510.

Although the applicant and the Oyster Creek Organizations were able to readily identify the lack of a commitment tracking system as a programmatic problem, it appears that Staff did not. The Oyster Creek SER makes no mention of the need to improve the tracking of historic commitments. *E.g.* Oyster Creek SER at 1-16, 4-68. The Staff extracted no formal commitment from the applicant to remedy the systemic problems with commitment tracking that were identified by the licensee's internal review. Oyster Creek SER at A-3 to A-63. Thus, in its safety review the NRC Staff failed to even identify an

issue which, according to the applicant's own employee, could cause future commitment violations.

As a consequence, based on the record before the Commission, there is currently no assurance that this issue has been, or will be, adequately dealt with. It also remains unclear whether the applicant has now established an effective commitment tracking system for historic commitments.

C. Early Site Permit Proceedings

In mandatory hearings on ESP applications, the ASLB is obliged to review the Staff's performance with respect to uncontested issues. *Exelon Generation Co.,* CLI-05-17, 62 NRC at 27.[5] In several recent ESP cases, the ASLB has found significant deficiencies in the quality of the NRC Staff's reviews, thereby supporting the need for greater Commission supervision of the NRC Staff.

In the Clinton early site permit ("ESP") proceeding, for example, the ASLB found "many instances" in which "the technical portions of the Staff documents in the record (particularly the SER and to some degree, the EIS) did not support a finding that the Staff's review supported its decisions." *Exelon Generation Co., LLC* (Early Site Permit for Clinton ESP Site), LBP-06-28, 64 NRC 460, 474-75 (2006). In these instances, the ASLB was unable to make judgments about the adequacy of the ESP application because "the record as initially presented to us often did not supply adequate technical information or flow of logic to permit a judgment as to whether the Staff had a reasonable basis for its conclusions(s)." *Id.* at 475. Furthermore, the ASLB was forced make many enquiries due to "the lack of explanation and lack of clarity found in a large portion of the [Final] SER."

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[5] As discussed above in Section III, the Commission bars ASLB review of the NRC Staff's performance in contested licensing hearings.

Id. The ASLB further found that the draft SER contained "a plethora of instances where the Staff's conclusions could only be characterized as conclusory." *Id.* at 480. The final SER, although an improvement, "still failed in a large number of instances to logically connect facts to conclusions." *Id.* at 481.

In addition to the concerns about the lack of clear logic, the ASLB was also concerned that the NRC Staff had not verified the facts asserted by the applicant. *Id.* at 491-93. The Board found that for the relatively simple matters at issue in an early site permit proceeding this was acceptable, but for construction permits or a combined license application, such an approach would be "extremely troubling." *Id.* at 492-93. It also noted that the Board's "confidence in the Staff's judgment would have been materially improved had the more important of those facts [the Staff's factual findings] been checked." *Id.* at 492. The ASLB noted that the wide variation in the level of detail in different sub-sections of the final SER implied, at minimum, a lack of co-ordination, and, at worst, a lack of supervision. *Id.* at 496. Emphasizing its concern with the quality of the reporting, the ASLB explicitly stated that it did not conduct further enquiries into these issues because it felt bound by a Commission instruction to defer to the NRC Staff. *Id.* at 492. Without that instruction from the Commission, the ASLB would have conducted "a much more probing review" into the quality of the review and reporting. *Id.* at 496.

As a result of these issues, the ASLB found nearly ninety safety matters that required further explanation, sixty that required enquiry beyond the first set of questions, and a number that required resolution at an oral hearing. *Id.* at 479. In the end, the ASLB found that issuance of the Clinton ESP would not be inimical to common defense and security or to the health and safety of the public. *Id.* at 497-98. However, the decision

makes clear that to make that finding the ASLB had to prompt the Staff in many areas to provide logical explanations that it could rely upon. In addition, the ASLB would not have been comfortable relying on unverified facts supplied by the applicant, if it had not been instructed by the Commission to do so.

Similarly, in the two other ESP decisions, the Board found many issues that needed clarification and follow-up after the NRC Staff's review was complete. For example, in the *North Anna* ESP proceeding, the ASLB issued a "wave of safety questions" initially and finally concluded that seven topics needed to be addressed by oral testimony. *Dominion Nuclear North Anna, LLC* (Early Site Permit for North Anna ESP Site), LBP-07-09, 65 NRC 539, 563 (2007). The Board found that after the NRC Staff review, "six fundamental questions" remained for which insufficient information was available prior to the ASLB proceeding. *Id.* at 629. Only after taking account of all of the record evidence, including that added by the ASLB proceeding, did the Board find the record was sufficient to support a "not inimical" finding. *Id.* at 599, 629.

Likewise, in the Grand Gulf ESP proceeding the ASLB found that in several instances, it was necessary for the ASLB to "amplify, modify, or change statements" in the SER." *System Energy Resources* (Early Site Permit for Grand Gulf ESP Site), LBP-07-01, 65 NRC 27, 102 (2007). The Board therefore deferred a number of issues to later stages. *Id.* at 102-03.

Thus, in all three ESP proceedings completed to date, the Board felt it necessary to significantly supplement the record of the NRC Staff's safety review in order to have sufficient information to make the findings required by the AEA.

VI. ARGUMENT

A. Standard of Adequacy for NRC Staff License Renewal Reviews

As discussed above in Section IV.B.2, NRC guidance requires that the NRC Staff must document and explain its license renewal reviews in a manner sufficient to allow understanding by someone who is unfamiliar with the license renewal application. This guidance is consistent with ASLB and federal court decisions which have equated "reasonable assurance" with the evidentiary standard of "clear preponderance of the evidence." For example, in a review of an initial licensing decision, the United States Court of Appeals for the District of Columbia found no error when the licensing board likened "reasonable assurance" to a "clear preponderance of the evidence" and rejected claims that reasonable assurance means "beyond a reasonable doubt." *North Anna Envtl. Coalition v. NRC*, 533 F.2d 655, 667-68 (D.C. Cir. 1976). Similarly, the Commission recently recognized the importance of supporting ASLB decisions on uncontested ESP permit applications with adequate Staff reviews:

> [W]hen considering safety and environmental matters not subject to the adversarial process – so-called 'uncontested issues – the boards should decide simply whether the safety and environmental record is 'sufficient' to support license issuance. In other words, the boards should inquire whether the NRC Staff performed an adequate review and made findings with reasonable support in logic and fact.

Exelon Generation Co., LLC, CLI-05-17, 62 NRC at 39 (footnote omitted). Thus, in order to satisfy the AEA, NRC Staff safety findings must be both logical and factually supported.

B. The NRC Staff's Safety Reviews for License Renewal Are Grossly Inadequate to Satisfy the Safety Requirements of the AEA.

As discussed above in Section V.A, the OIG's audit reveals a fundamental failure of accountability by the NRC Staff in conducting its safety reviews for renewal of nuclear

power plant licenses. After reviewing over 450 samples of NRC Staff reports from a representational array of 13 plants, the OIG found that in virtually no case had the Staff provided an adequate degree of documentation for its review. In an alarming number of cases, the Staff merely copied the words of the license renewal application – which in some instances had been copied from NRC guidance, leading to a circular and virtually meaningless safety review. Three quarters of the report samples failed to address the factor of operating experience, despite its critical role in the license renewal process. And the Staff's guidance for conducting license renewal reviews is internally contradictory and incomplete. In the OIG's analysis, these failures "cast doubt as to what, exactly, NRC did to independently review the license's program other that restate what was provided in the renewal application." OIG Report at 10. In addition "readers of the safety reviews could [reasonably] conclude that "regulatory decisions are not adequately reviewed or documented." OIG Report at 12.

Moreover, as discussed above in Section V.A.3, the OIG's inquiry into the Oconee license renewal review indicates that the problem identified by the OIG is more serious than a failure to document the Staff's safety review – in fact, the Staff may not have conducted any independent reviews at all. The record of the Oyster Creek license renewal proceeding further bolsters the Petitioners' concerns that the Staff does not, in fact, audit licensee aging management programs to the degree required. In that case, as discussed above in Section V.B, the NRC Staff failed to inquire whether the licensee's eight-year failure to fulfill its commitment to inspect a particular drain was an indication of more serious problems. In fact, as revealed during the hearing process, the licensee had a systemic problem of failing to track its historic commitments. The Staff not only failed to

identify the systemic problem, but failed to follow up on it after it was identified by the licensee.

Finally, the ASLB's experience in reviewing the Staff's documentation of its safety and environmental reviews in completed ESP cases confirms Petitioners' concern that the Staff's safety reviews are not logical or adequately documented. In no case was the ASLB able to rely on the Staff's safety findings, without providing further analysis, explanation and documentation. *See* discussion in Section V.C above.

In contrast to early site permit decisions, in relicensing proceedings the Commission does not have the benefit of the ASLB's review of the safety reports, except in narrow areas where a contention is admitted and adjudicated. To date, in over 45 license renewals, only one contention has ever been the subject of an adjudicatory hearing.[6] That contention concerned the Oyster Creek containment and raised issues about only a small sliver of the issues reviewed for the Oyster Creek relicensing. Thus, for the most part the Commission itself must play the role played by the ASLB in the ESP cases by ensuring that the quality of the Safety Review reports is sufficient to make the required finding on safety. According to the OIG Report and anecdotal information from the Oyster Creek proceeding, the quality of reporting and factual verification at the license renewal stage is no better than it was for the ESP cases. Therefore, at present the Commission should conclude that without significant improvement in the quality of the safety review reports is insufficient to support the safety findings required by the AEA.

The failings in the NRC Staff's review process are not altogether surprising because OIG found that there is no quality management system in place to ensure the NRC

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[6] While contentions have been admitted in the Pilgrim and Vermont Yankee license renewal cases, no hearings have been held as of this date.

reviews are carried out in accordance with Commission's expectations. In general, such systems set out performance goals, measure how well the goals were met, provide feedback on how well the goals were met, and finally learn lessons that can be used to improve the process.[7] Here, DLR has failed to take the first step towards quality by failing to set formal requirements for report writing [OIG Report at 11], or review of plant-specific operating experience. *Id.* at 20-21. Furthermore, DLR has no controls in place to monitor and enforce whether the anticipated review of operating experience actually took place. *Id.* at 21.

To make a reasonable assurance finding about the adequacy of aging management systems, the Commission must be confident that NRC Staff have not merely relied upon self-serving statements by applicants. Under the current circumstances, it is impossible for the Commission to find that it has reasonable assurance of adequate protection for the Facilities. As a result of the Staff's failure to document or explain its safety reviews, the Commission has no defensible basis for concluding that nuclear plants can operate safety for twenty years beyond their original license term. Even more alarmingly, the examples at Oconee and Oyster Creek, in which the NRC Staff approved demonstrably inadequate aging management programs, raise questions as to whether plants whose licenses have been renewed are, in fact, as safe as the Staff claims they are. The situation calls for urgent action by the Commission to ensure that the license renewal reviews for the Facilities yield

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[7] *See e.g.* http://www.iso.org/iso/iso_catalogue/management_standards/understand_the_basics.htm

a rational and defensible determination as to whether continued operation of the Facilities will be carried out without undue risk to public health and safety, as required by the AEA.[8]

C. NRC Staff's Proposed Remedial Measures Fail to Address the Inadequacy of Already-Conducted License Renewal Reviews.

While the NRC Staff has generally agreed to reform its procedures for conducting license renewal reviews, the measures proposed by the Staff fall far short of addressing the serious safety concerns raised by the Report. In an October 30, 2007, memorandum, the Staff tentatively agreed to implement some of the OIG recommendations to revise its procedures for conducting license renewal reviews by April 30, 2008.[9]

But the measures proposed in the Kane Memorandum are prospective only. The memorandum completely fails to address the patent inadequacy of already-completed license renewal reviews to support Commission license renewal decisions, or explain how the Staff would determine whether already-conducted license renewal audits were performed, or whether the Staff merely copied the licensees' assertions (as appears from the case of the Oconee plant as discussed in the OIG Report at 21-22). Thus, the Staff's response to the OIG Report is completely inadequate to address Petitioners' concerns that

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[8] Formally, this Petition only addresses a few ongoing relicensing proceedings, but the Commission should also consider the need to ensure that approvals that were already granted were based on adequate information.

[9] Memorandum from William F. Kane, NRC Deputy Executive Director for Reactor and Preparedness Programs, to Stephen D. Dingbaum, Assistant Inspector General for Audits, re: Audit of NRC's License Renewal Program (OIG -07-A-15) ("Kane Memorandum") (*available on ADAMS as* ML072630299).

Although the Kane Memorandum was written in late October of 2007, it was not placed on ADAMS until November 29, 2007.

already-conducted license renewal reviews for the Facilities fail to provide any assurance of safe operation during the Facilities' proposed license renewal terms.[10]

D. The Commission Should Take Immediate Action to Investigate the Scope of the Problem and Institute Corrective Measures

The OIG Report demonstrates that for over five years, for a broad spectrum of plants under license renewal review, the NRC Staff did such a poor job of documenting its license renewal reviews as to raise the question of whether any in-depth review was done at all. Coupled with examples of instances where the NRC Staff's assertions regarding the adequacy of a license renewal program were belied by the facts, the evidence demands further investigation by the Commission into the scope of the problem. Action by the Commission is also warranted because it is clear that the NRC Staff does not have sufficient management controls in place to investigate itself. Indeed, were it not for the OIG's oversight, the serious problems with the NRC Staff's review process might never have been revealed.[11]

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[10] As reflected on the NRC's website, the Staff has completed its safety evaluation and issued SERs for the Oyster Creek and Pilgrim nuclear power plants, and has issued a draft SER for the Vermont Yankee nuclear plant. *See* http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html. For the Indian Point plant, the Staff has completed the audit of the aging management program, the crucial step in the license renewal review process that is the principal subject of the OIG Report.

[11] Unfortunately, while the OIG Report sensibly recommends that comprehensive quality assurance programs be set up to guide future reviews [*id.* at 36], OIG has failed to recommend how to ensure ongoing reviews meet appropriate quality goals. In a telephone conversation with Mr. Webster, OIG stated that it has not decided that retrospective recommendations would have been unwarranted. Rather, the OIG focused its recommendations on the future to try to ensure the quality of the reviews improves in the future. Telephone conversation between Richard Webster, Tony Lipuma, and Maryann Grodin (on or about October 17, 2007).

Finally, Commission action is warranted because the Staff, having performed so poorly for such an extended period, has a vested interest in shielding itself from having to repeat license renewal reviews or to defend its previous conduct. Therefore Petitioners respectfully submit that the Commission itself should undertake the investigation of the current review process and identification of appropriate remedial measures, or appoint another entity such as the ASLB or the ACRS to conduct the investigation.

Given the gross inadequacies in the Staff's program for auditing license renewal programs, it is inappropriate to continue pending license renewal reviews until the defects in the Staff's program are cured. Petitioners therefore request the Commission to suspend the ongoing license renewal proceedings for the Facilities and undertake an independent, comprehensive review of the relicensing review process to identify all the issues that need to be resolved. New procedures should be established for the conduct of license renewal reviews, including a quality assurance program. These new procedures should be applied to any of the Facilities for which the Staff has not yet begun its safety evaluation for license renewal. To the extent that any reviews for the Facilities have been conducted to date, they should be re-done in accordance with the new procedures. The review reports must then be revised so that they fully document the nature of the reviews. Only after this level of performance is achieved can the Commission lawfully proceed with its relicensing decisions for the Facilities.

E. By Failing to Document or Explain the Basis for its License Renewal Safety Reviews, the Staff Deprives the Public of Meaningful Hearing Rights.

The AEA requires NRC to offer a chance for intervenors to request an adjudicatory hearing on all material aspects of license review. 42 U.S.C. § 2239(a). As the ASLB

recently recognized, the time to file contentions is placed at a very early stage, when the renewal application is docketed. *Entergy Nuclear Vermont Yankee L.L.C. and Entergy Nuclear Operations, Inc.* (Vermont Yankee Nuclear Power Station), LBP-07-15, __ NRC __, slip op. at 6 n. 12 (November 7, 2007). After the initial time to present contentions has expired, new contentions must meet a timeliness test. When significant new information becomes available this test should be a relatively simple matter to meet. *Id.* at 5; 10 C.F.R. § 2.309(f)(2). However, in the absence of new information the applicable test is more stringent. LBP-07-15 at 6.

In the Vermont Yankee decision, the Board noted that "normally a great deal of new and material information becomes available to the public after the docketing" through application amendments or the safety evaluation report. LBP-07-15, slip op. at 6 n. 12. This information can then be used to file new contentions, satisfying the AEA requirement. *Id.* Unfortunately, the OIG Report shows that license reviews have not been normal. Instead of containing any new information, the review reports have largely parroted that language of the license renewal applications. This has deprived intervenors of opportunities to submit new contentions on issues that were not properly dealt with in license renewal applications.

One example of this is that NRC's review of the license renewal for Oconee. NRC Staff concluded that the aging management of the coating there was adequate, when it was actually deficient. *See* discussion above in Section V.B. Had the NRC Staff's review reported the problem that existed, but went unmentioned in the license renewal application, the public would have been alerted to the problem and would have had the right to submit new contentions on this issue. Similarly, had the NRC review of Oyster Creek highlighted

the commitment tracking problem, Petitioners would have been greatly assisted in identifying the issue.

In enacting the AEA, Congress wisely decided that citizen involvement is an essential check to ensure that commission decisions are based on good information. Thus, even if the problems identified by OIG turn out to primarily concern reporting rather than failure to perform the reviews, the NRC review reports still need to be comprehensively revised to enable the citizen oversight required by the AEA. Furthermore, as Congress no doubt knew and the Oyster Creek proceeding has confirmed, vigorous citizen involvement can lead to intense scrutiny of difficult issues, which inevitably leads to better decision-making. Thus, by depriving Petitioners of chances to file contentions, the NRC Staff has lowered the quality of the information available to the Commission and violated the AEA.

VII. CONCLUSION AND REQUEST FOR RELIEF

For the foregoing reasons, the Commission should immediately suspend the ongoing relicensing proceedings at the Facilities and conduct a comprehensive overhaul of the manner in which reviews of license renewal applications are carried. At minimum, such an overhaul should consist of:

1. A comprehensive investigation, to be conducted by a body independent of the NRC Staff, into the question of whether the NRC Staff is now conducting or has conducted searching, independent, and thorough technical reviews of license renewal applications or whether it is largely repeating statements by license renewal applicants which in turn repeat NRC guidance documents;

2. Commission oversight of the preparation and/or revision of NRC procedures for license renewal reviews to ensure that key applicant-supplied facts are independently verified by the Staff;

3. Commission oversight of the establishment of a quality assurance program for NRC Staff review of license renewal applications to ensure the reviews are complete, consistent, logical, and well documented;

4. Commission oversight of the conduct of NRC Staff safety reviews for the Facilities in a manner that meets the requirements of the revised procedures;

5. Independent verification by the Commission of whether the newly conducted NRC Staff safety reviews for the Facilities provide sufficient basis for the safety findings required by the AEA. If they do not, the Commission should establish a process for the reviews to be supplemented.

6. For the Oyster Creek proceeding and any other proceedings where the record closes prior to a final determination of the outcome of this Petition, the Commission should reopen the record so that the revised safety reviews can form the basis of new contentions to the ASLB.

Respectfully submitted,

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January 3, 2008

January 2, 2008

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE COMMISSION

In the Matter of	)	
ENTERGY NUCLEAR OPERATIONS, INC.	)	Docket No.
(Vermont Yankee Nuclear Power Station)	)	50-271-LR

NOTICE OF APPEARANCE OF ROBERT L. STEWART
ON BEHALF OF NEW ENGLAND COALITION

Pursuant to 10 C.F.R. § 2.314(b), I, Robert L. Stewart, Vice-President of New England Coalition ("NEC"), hereby enter my appearance in this proceeding as the duly authorized representative of NEC, for the limited purposes of representing NEC with respect to Petition by Nuclear Information and Resource Service; Jersey Shore Nuclear Watch, Inc.; Grandmothers, Mothers and More for Energy Safety; New Jersey Public Interest Research Group; New Jersey Sierra Club; New Jersey Environmental Federation; Riverkeeper, Inc.; Pilgrim Watch and New England Coalition to Suspend License Renewal Reviews for Oyster Creek, Indian Point, Pilgrim, and Vermont Yankee Nuclear Power Plants Pending Investigation of NRC Staff Review Process and Correction of Deficiencies.

Respectfully signed and submitted this day, January 2, 2008:

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Before the Atomic Safety and Licensing Board

In the Matter of	)	
	)	
Entergy Nuclear Vermont Yankee, LLC	)	Docket No. 50-271-LR
and Entergy Nuclear Operations, Inc.	)	ASLBP No. 06-849-03-LR
	)	
(Vermont Yankee Nuclear Power Station)	)	

CERTIFICATE OF SERVICE

I, Raymond Shadis, hereby certify that copies of an EMERGENCY PETITION by Nuclear Information and Resource Service; Jersey Shore Nuclear Watch; Grandmothers, Mothers and More for Energy Safety: New Jersey Public Interest Research Group; New Jersey Sierra Club: New Jersey Environmental Federation: Riverkeeper, Inc.; Pilgrim Watch and New England Coalition to Suspend License Renewal Reviews for Oyster Creek, Indian Point, Pilgrim, and Vermont Yankee Power Plants Pending Investigation of NRC Staff Review Process and Correction of Deficiencies, filed in the above-captioned proceeding were served on the persons listed below, by U.S. Mail, first class, postage prepaid; by Fed Ex overnight to Judge Elleman; and, where indicated by an e-mail address below, by electronic mail, on the 3rd day of January 2008.

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