

UNITED STATES COURT OF APPEALS  
FOR THE SECOND CIRCUIT

07-0324/009

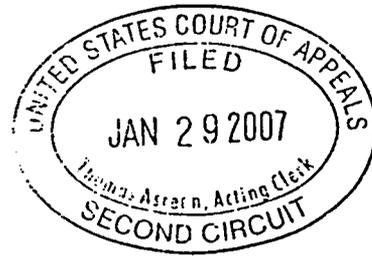
ANDREW J. SPANO, as County  
Executive of the County of Westchester  
and COUNTY OF WESTCHESTER,

Petitioners,

v.

UNITED STATES NUCLEAR REGULATORY  
COMMISSION and the UNITED STATES  
OF AMERICA,

Respondents.



No. \_\_\_\_\_

PETITION FOR REVIEW

Pursuant to Federal Rule of Appellate Procedure Rule 15 and 28 U.S.C. §§ 2342-2344, Petitioners ANDREW J. SPANO, as County Executive of the County of Westchester and COUNTY OF WESTCHESTER, hereby petition the Court for review of an Order of the UNITED STATES NUCLEAR REGULATORY ("NRC" or "Commission") dated December 2, 2006 (Docket No. PRM-54-02). The Order was issued in response to a Petition for Rulemaking dated May 10, 2005 ("Petition"), which requested that the NRC amend certain provisions of its Regulations (10 C.F.R. Part 54 *et seq.*) so as to require that applications for renewal of nuclear power plant operating licenses meet all criteria and requirements applicable to and required for approval of initial construction of nuclear power plants and/or initial issuance of operating licenses related thereto.

Venue is based on 28 U.S.C. § 2343, 28 U.S.C. § 2344 and 28 U.S.C. § 1391, in that Petitioners are parties aggrieved by a final order of the NRC and reside and/or

maintain their principal offices within the jurisdiction of the Court of Appeals for the Second Circuit.

The Petition is annexed hereto as Attachment 1.

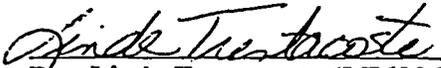
The Order from which Petitioners seek review is annexed hereto as Attachment 2.

Petitioners seek relief upon the grounds that, by refusing to amend its Regulations and by denying the Petition, the NRC violated the 10 C.F.R. § 2.802, the Atomic Energy Act, the National Environmental Policy Act, the Administrative Procedure Act; and abused its discretion. Therefore, Petitioners pray for the following relief: review and reversal of the NRC's December 2, 2006 Order.

DATED: White Plains, New York  
January 29, 2007

Respectfully submitted,

CHARLENE M. INDELICATO  
Westchester County Attorney  
*Attorney for Petitioners*

  
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Andrew J. Spano  
County Executive

DOCKET NUMBER  
PETITION FILE PRM 54-2  
(10 FR 34700)

DOCKETED  
USNRC

May 10, 2005

May 13, 2005 (4:15pm)

U.S. Nuclear Regulatory Commission  
Annette L. Vietti-Cook, Secretary  
Washington, DC 20555-0001

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

Attention: Rulemakings and Adjudications Staff

Subject: Petition for Rulemaking  
*Amendment to 10 C.F.R. Part 54*

Dear Madam Secretary,

Pursuant with NRC Regulation 10 C.F.R. §2.802, which permits interested persons to petition the Commission to issue, amend, or rescind regulations, the County of Westchester (the "County") formally requests that Part 54, Requirements for Renewal of Operating Licenses for Nuclear Power Plants, of the Commission's Regulations (10 C.F.R. Part 54) be amended.

*A. The Proposed Amendment*

The County petitions that 10 C.F.R. Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants", be amended so as 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 was being proposed *de novo* for initial construction. In particular, 10 C.F.R. §54.29 should be amended to provide that a renewed license may be issued by the Commission if the Commission finds that, upon a *de novo* review, the plant would be entitled to an initial operating license in accordance with all criteria applicable to initial operating licenses, as set out in the Commission's regulations, including Parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 54, 55, 73, 100 and the appendices thereto. Corresponding amendments should be made to 10 C.F.R. §§54.4, 54.19, 54.21, and 54.23. 10 C.F.R. §54.30 should be rescinded. The criteria to be examined as part of a renewal application should include such factors as demographics, siting, emergency evacuation, site security, etc. This 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.  
Office of the County Executive

Michaelian Office Building  
White Plains, New York 10601

Telephone: (914)995-2900 E-mail: ceo@westchestergov.com

Template = SECY-067

SECY-02

*B. The County's Interest in the Action Requested*

The County is a political subdivision, and municipality, of the State of New York. The County is located immediately north of New York City. It is 450 square miles in size. It has a southern border with New York City (Bronx County) and a northern border with Putnam County. It is flanked on the west side by the Hudson River and on the east side by Long Island Sound and Fairfield County, Connecticut.

The total population of Westchester County, as measured in the 2000 Census, is 923,459. The 2000 population is over 100,000 more than it was as measured in the 1960 Census.

The County is the host county for the Nuclear Generation Stations at the Indian Point Energy Facility ("Indian Point"), located in the Village of Buchanan, Town of Cortlandt. By reason of the presence of the Indian Point facility, the County has long had an interest and concern with the environmental, emergency, and public safety issues with respect to Indian Point.

There are two nuclear power plants at Indian Point: IP2 and IP3. These are presently operated by single purpose entities controlled by the Entergy Corporation ("Entergy"). IP2 & IP3's operating licenses are scheduled to expire in 2013 and 2015, respectively. In accord with industry trends, Entergy could apply for license extensions for up to an additional twenty years, provided certain operating, environmental, and safety conditions are met.

Westchester is vitally concerned with the criteria that will be used by the Commission in deciding whether to grant license extensions. In particular, Westchester is deeply concerned that the scope of present 10 CFR Part 54 is too limited and that, as a result, the safety of the residents and communities near Indian Point will be in question during any extended operating period. For example, many factors (detailed below) have changed since the construction of IP 2 & 3. These changes have a significant impact on the safety of the community, yet they are not considered under the current license renewal rules.

*C. Specific Issues Which Support the Proposal*

Building a nuclear power plant in the United States in the 1960s and 1970s represented a mutual commitment between the utility owner and the local community for a specific and limited period of time. The atmosphere during those early days (prior to 1979) was generally positive, in which local host communities would receive significant property taxes, the public would be assured of reliable low-cost power, and utility owners had a long period of time to recover their investments. The Indian Point facilities were located in Westchester, after New York City sites were rejected. The local communities perceived the benefits of having direct

access to reliable low-cost power and positive local economic impacts. The projects created massive numbers of employment opportunities and were initially seen as safe technical ventures. Both the local community and the utility had long term commitments to the facility, with the public having little recourse to question safety and operational issues once plant construction started and the utility having the right to the use of the plant for the full term of the license, often 40 years.

After living with nuclear power plants for the past three decades, several events have changed that landscape – TMI-2, 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 a result, plant orders have ceased and the public has become justifiably concerned over the nuclear plant safety. These concerns are particularly sensitive at 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.

It is timely now for the NRC to broaden the scope of license renewal investigations to assess the viability of the plants requesting license extension on a broad scale - one at least as broad as the original license hearings, and one that is site specific and site sensitive to an appropriate degree.

*D. The Problems with the Current Process*

It is respectfully submitted that the process and criteria presently established in Part 54 is seriously flawed. The process for license renewal appears to be based on the theory that if the plant was licensed originally at the site, it is satisfactory to renew the license, barring any significant issues having to do with passive systems, structures, and components (“SSC”s). The regulations, however, should be broadened and sufficiently comprehensive to cover all of the facets (including consideration of a worst-case scenario) that were considered for initial construction. Alternatively, the license renewal process should examine all issues related to the plant and its original license, and then concentrate on any issues that are new to that plant or has changed since the original license was issued or that deviate from the original licensing basis.

Many key factors that affect nuclear plant licensing evolve over time. Population grows, local/state /federal regulations evolve, public awareness increases, technology improves, and plant economic values change. As a result, roads, and infrastructure required

for a successful evacuation may not improve along with population density, inspection methods may not be adopted or may be used inappropriately, and regulations may alter the plant design after commercial operation. All of these factors should be examined and weighed in the formal 10 CFR Part 54 relicensing process.

Prior to concept of life extension for nuclear power plants, it was generally assumed that plants would exist as operating facilities for the rest of their design life, and then would enter a decommissioning phase. In fact, the collection of decommissioning funds from ratepayers initiated in the 1970s was based on a 40-year life.

*E. Key Renewal Issues*

It is time to review, at the end of the 40 years of life, several questions about nuclear power plants on a plant-specific basis. These questions include the following:

- Could a new plant, designed and built to current standards, be licensed on the same site today? For example, given the population growth in Westchester County, it is uncertain if Indian Point would be licensed today. The population in the areas near Indian Point has outpaced the capacity of the road infrastructure to support it, making effective evacuation in an emergency unlikely.
- Have the 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? For example, three of four counties surrounding Indian Point have not submitted certified letters in support of the emergency evacuation plan. Under the current licensing process, that would not be a consideration. However, the inability of local governments to support the safety of the evacuation plan should, at the very least, give serious pause before the licenses of the plants are renewed.
- Can the plant be modified to assure public health and safety in a post-9/11 era? For example, Indian Point cannot be made sufficiently safe according to James Lee Witt, former head of FEMA.
- Have local/ state regulations changed that would affect the plant's continued operation? For example, Indian Point must convert from once-through cooling to a closed-cycle design using cooling towers.

- The original design basis of older nuclear power plants did not include extended on-site storage of spent nuclear fuel (SNF). At Indian Point for example, the current SNF storage plan includes one or more Independent Spent Fuel Storage Installations on-site, which increases the overall risk to the local community.

These issues should be considered in the license renewal process, along with safety, security, and certainly the condition of both passive and active SSCs. Even though a license renewal application has not yet been filed for Indian Point, we believe the NRC should address these license renewal issues for all nuclear plants when the extended operating lives raise widespread and profound safety and security concerns. The current NRC license renewal analyses ignore these issues.

*F. Conclusion*

We trust that the information provided is sufficient to support our request for amendment to 10 CFR Part 54. We would welcome the opportunity to speak with you about the specific sections with which we have concerns and provide you with any further information.

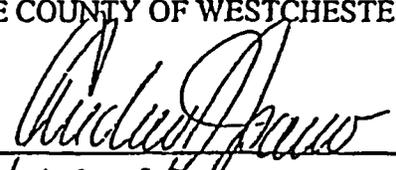
We respectfully request that a docket number be assigned to this petition, that the petition be formally docketed, and that a copy of this petition be made available for public comment.

Should you have any questions, please feel free to contact my Chief Advisor, Susan Tolchin at (914) 995-2932.

Respectfully submitted,

THE COUNTY OF WESTCHESTER

By:

  
Andrew J. Spano  
County Executive

NUCLEAR REGULATORY COMMISSION

10 CFR Part 54

[Docket No. PRM-54-02]

Andrew J. Spano; Denial of Petition for Rulemaking

[Docket No. PRM-54-03]

Joseph C. Scarpelli; Denial of Petition for Rulemaking

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Petitions for rulemaking; Denial.

**SUMMARY:** The Nuclear Regulatory Commission (NRC) is denying two nearly identical petitions for rulemaking submitted by Andrew J. Spano, County Executive, Westchester County, New York (PRM-54-02), and Mayor Joseph Scarpelli of Brick Township, New Jersey (PRM-54-03). The petitioners requested that the NRC amend its regulations to provide that the agency renew a license only if the plant operator demonstrates that the plant meets all criteria and requirements that would apply if it were proposing the plant de novo for initial construction. The petitioners assert that amendments are necessary because they believe the process and criteria established in the Commission's license renewal regulations are seriously flawed and should consider critical plant-specific factors as demographics, siting, emergency evacuation, and site security. The NRC is denying the petitions because the petitioners raise issues that the Commission has already considered at length in developing the license renewal rule. These issues are managed by the on-going regulatory process or under other regulations; or are issues beyond the Commission's regulatory authority. The petitioners did not present new

information that would contradict positions taken by the Commission when the license renewal rule was established or demonstrate that sufficient reason exists to modify the current regulations.

**ADDRESSES:** Publicly available documents related to these petitions, including the petitions, public comments received, and the NRC's letters of denial to the petitioners, may be viewed electronically on public computers in the NRC's Public Document Room (PDR), O-1 F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The PDR reproduction contractor will copy documents for a fee. Selected documents, including comments, may be viewed and downloaded electronically via the NRC rulemaking web site at <http://ruleforum.inl.gov>.

Publicly available documents created or received at the NRC after November 1, 1999, are also available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. From this site, the public can gain entry into the NRC's Agencywide Document Access and Management System (ADAMS), which provides text and image files of NRC's public documents. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the PDR reference staff at (800) 387-4209, (301) 415-4737 or by e-mail to [pdr@nrc.gov](mailto:pdr@nrc.gov).

**FOR FURTHER INFORMATION CONTACT:** Lee Banic, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone (301) 415-2771, e-mail [mjb@nrc.gov](mailto:mjb@nrc.gov).

## **SUPPLEMENTARY INFORMATION:**

### **I. Background**

The NRC received two separate, but nearly identical, petitions for rulemaking in 2005 requesting that part 54, Requirements for renewal of operating licenses for nuclear power

plants be amended. Mr. Andrew J. Spano, the County Executive of Westchester County, New York, filed the first petition on May 10, 2005, which was assigned Docket No. PRM-54-02. The NRC published a notice of receipt of the petition and request for public comment in the *Federal Register* on June 15, 2005 (70 FR 34700). Mayor Joseph C. Scarpelli of Brick Township, New Jersey, filed the second petition on July 20, 2005, which was assigned Docket Number PRM-54-03.<sup>1</sup> The NRC published a notice of receipt of the petition and request for public comment in the *Federal Register* on September 14, 2005 (70 FR 54310). Because of the similarities to PRM-54-02, Mayor Scarpelli also requested that his petition be joined with Mr. Spano's. The NRC agrees that the issues raised in these petitions and some of the public comments are nearly identical, and thus it is appropriate to evaluate the petitions together.

**PRM-54-02 (Mr. Andrew J. Spano)**

Westchester County is a political subdivision and municipality of the State of New York, and is located immediately north of New York City. It is 450 square miles in size. It has a southern border with New York City (Bronx County) and a northern border with Putnam County. It is flanked on the west side by the Hudson River and on the east side by Long Island Sound and Fairfield County, Connecticut. The total population of Westchester County, as measured in the 2000 Census, is 923,459. The 2000 population is over 100,000 more than it was as measured in the 1960 Census.

Westchester County is the host county for the Indian Point Energy Facility (Indian Point or IP), located in the Village of Buchanan, Town of Cortlandt. There are two nuclear power units at Indian Point: IP2 and IP3. These are currently operated by single purpose entities

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<sup>1</sup>Attorney Michelle R. Donato actually filed PRM-54-03 on behalf of Mayor Scarpelli, the New Jersey Environmental Federation (NJEF), and the New Jersey Sierra Club (NJSC). Although Ms. Donato's letter indicates that she is presenting three "formal" petitions to the NRC, the submissions from NJEF and NJSC state that they are submitted "in support of" or joining Mayor Scarpelli's petition. They do not appear to request petitioner status. Thus, any reference in this document to the PRM-54-03 petitioner is limited to Mayor Scarpelli.

controlled by the Entergy Corporation (Entergy). IP2 & IP3's operating licenses are scheduled to expire in 2013 and 2015, respectively, and Mr. Spano believes that in accordance with industry trends, Entergy could apply for license extensions for up to an additional twenty years, provided certain operating, environmental, and safety conditions are met.

Mr. Spano stated that because of the presence of Indian Point, Westchester County has long had an interest and concern with the environmental, emergency, and public safety issues with respect to Indian Point. Mr. Spano further stated that after living with nuclear power plants for the past three decades, several events have changed the local community's perspective on the continued presence of the Indian Point facility: Three Mile Island-2, the Browns Ferry fire, utility bankruptcies, the Chernobyl accident, delays at Yucca Mountain, Davis-Besse reactor head problems, and the events of September 11, 2001. He believes that as a result of these events, orders for the construction of reactor facilities have ceased and the public has become justifiably concerned about nuclear power plant safety. Mr. Spano stated that these concerns are particularly sensitive at Indian Point, because of its proximity to major population centers, periodic leaks of radioactive material, difficult (if not impossible) evacuation issues, and its proximity to the events which occurred at the World Trade Center.

**PRM-54-03 (Mayor Joseph C. Scarpelli)**

Brick Township, New Jersey is situated in the northern part of Ocean County, directly on the border of Monmouth County, and is located approximately 18 miles north of Oyster Creek Nuclear Generating Station (Oyster Creek or OCNGS). Mayor Scarpelli stated that Ocean County is located on the Jersey Shore, approximately 50 miles south of New York City and 50 miles east of Philadelphia, Pennsylvania. Ocean County encompasses nearly 640 square miles. Mayor Scarpelli stated that Ocean County's location on the Atlantic Ocean makes it one of the premier tourist destinations in the United States.

Oyster Creek, which is located in Lacey Township, became operational in 1969. In 1970, one year after Oyster Creek began producing electricity, Ocean County, New Jersey had 208,470 residents. Mayor Scarpelli also stated that according to the 2000 Census, Ocean County today has 510,916 residents, a growth of over 245 percent. Mayor Scarpelli also stated that Brick Township has experienced great growth over the past four decades, and that Brick Township is presently home to over 77,000 residents as compared to the 35,057 residents it claimed in 1970.

Mayor Scarpelli stated that there have been numerous incidents that have occurred since Oyster Creek began operating that have raised concerns about the safety and security of nuclear power, particularly in densely populated areas, including the near catastrophe at Three Mile Island, the realized catastrophe at Chernobyl, the controversy about Yucca Mountain, and the terrorist attacks of September 11, 2001. Mayor Scarpelli is particularly concerned that the evacuation of the communities surrounding Oyster Creek requires extensive review and consideration because of the growing concern of traffic congestion in Ocean County due to an aging infrastructure that has not kept up with the population growth.

#### **The Petitions**

Both petitions present nearly identical issues and requests for rulemaking. Both petitioners believe that the license renewal process and criteria currently established in part 54 are "seriously flawed." They argue that the process for license renewal appears to be based on the theory that if the plant was originally safe to be licensed at the site, it would also be satisfactory to renew the license, barring any significant issues involving passive structures, systems, and components. The petitioners further suggest that many key factors affecting nuclear plant licensing evolve over time, in that the population grows; local, State, and Federal regulations evolve; public awareness increases; technology improves; and plant economic

values change. As a result, roads and infrastructure required for a successful evacuation may not improve along with population density, inspection methods may not be adopted or may be used inappropriately, and regulations may alter the plant design after commercial operation. According to the petitioners, the license renewal process under 10 CFR part 54 inappropriately excludes these factors. Mr. Spano also suggested that, before the concept of license renewal for nuclear power plants was established, it was generally assumed that plants would exist as operating facilities for the rest of their design life and then would enter a decommissioning phase. He stated that this assumption is supported by the fact that the collection of decommissioning funds from ratepayers initiated in the 1970s was based on a 40-year life of the facility.

Both petitions set forth a list of "key renewal issues," that are stated as questions the petitioners believe are necessary to confront during the license renewal process. Mr Spano lists five such "key renewal issues:"

(1) Could a new plant, designed and built to current standards, be licensed on the same site today? For example, given the population growth in Westchester County, it is uncertain if Indian Point would be licensed today. The population in the areas near Indian Point has outpaced the capacity of the road infrastructure to support it, making effective evacuation in an emergency unlikely.

(2) Have the 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? For example, three of four counties surrounding Indian Point have not submitted certified letters in support of the emergency evacuation plan. That would not be a consideration under the current licensing process. However, the inability of local governments to support the safety of the evacuation plan should, at the very least, give serious pause before the licenses of the plants are renewed.

(3) Can the plant be modified to assure public health and safety in a post-9/11 era? For example, Indian Point cannot be made sufficiently safe according to James Lee Witt, former head of FEMA.

(4) Have local/State regulations changed that would affect the plant's continued operation? For example, Indian Point must convert from once-through cooling to a closed-cycle design using cooling towers.

(5) The original design basis of older nuclear power plants did not include extended onsite storage of spent nuclear fuel (SNF). At Indian Point for example, the current SNF storage plan includes one or more Independent Spent Fuel Storage Installations onsite, which increases the overall risk to the local community.

Mayor Scarpelli identifies six similarly phrased "key renewal issues:"

(1) Could a new plant, designed and built to current standards, be licensed on the same site today? With the growth of Ocean County, which continues today, it is not certain that a nuclear plant would be permitted there today.

(2) The design of Oyster Creek's reactor has been prohibited for nearly four decades. Does that reactor conform to today's standards? Would Oyster Creek receive a license today with that reactor?

(3) In light of the terrorist attacks of September 11, 2001, would Oyster Creek's storage system, which is located close to Route 9, be acceptable today?

(4) Is the evacuation plan realistic in today's Ocean County? Would the tremendous growth of Ocean County over the past four decades, and the failure of Ocean County's infrastructure to keep pace with this growth, inhibit Oyster Creek's likelihood of receiving an operating license?

(5) Would a license be permitted in light of the public opposition to the plant? To date, 21 municipalities in Ocean County, as well as Congressmen Smith, Saxton and Pallone, New Jersey Department of Environmental Protection Commissioner Bradley, and the Ocean County Board of Chosen Freeholders, have expressed either their concern for a thorough review and/or their opposition to the re-licensing.

(6) In recent weeks, two studies released by the National Academy of Sciences have raised serious concerns about nuclear plant security and the health effects of low-level radiation upon people who reside near nuclear plants. Should these two scientific studies and other relevant scientific data regarding human health and anti-terrorism be taken into account when considering Oyster Creek's license renewal application?

## II. The Proposed Amendments

The petitioners requested that the NRC amend its regulations to provide that it will issue a renewed license only if the plant operator demonstrates that the plant meets all criteria and requirements that would apply if it were proposing the plant de novo for an initial construction permit and operating license. The petitioners therefore requested that the NRC amend § 54.29 to provide that the Commission will issue a renewed license only if it finds that, upon a de novo review, the plant would be entitled to an initial operating license in accordance with all criteria applicable to initial operating licenses, as set out in the Commission's regulations, including 10 CFR parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 54, 55, 73, 100, and the appendices to these regulations. The petitioners also requested that the NRC make corresponding amendments to §§ 54.4, 54.19, 54.21, and 54.23, and rescind § 54.30. The petitioners stated that the criteria to be examined as part of a renewal application should include factors such as demographics, siting, emergency evacuation, and site security. The petitioners believe that in undertaking this analysis the NRC should focus on the critical plant-specific factors and conditions that have the greatest potential to affect public safety.

## III. Public Comments Received on the Petitions

The NRC received 21 comment letters on PRM-54-02. Fifteen letters support the granting of the petition and six support denying the petition. On PRM-54-03, the NRC received four letters. One letter supports granting the petition and three letters support denial.

### Letters in support of granting the petitions

Eleven letters of support came from individuals and five came from public interest groups or individuals affiliated with public interest groups. The public interest groups are Riverkeeper, Nuclear Free Vermont, Critical Mass Energy and Environment Program (CMEP), which is part of Public Citizen, Public Citizen, and the Nuclear Information and Resource

Service. Most of the letters are short statements of support and echo the petitioners concerns about emergency planning, evacuation, population density, and infrastructure. Other letters, mainly from organizations, comment more extensively and raise additional issues for consideration in renewing licenses. These issues include requiring an integrated plant assessment of both moving and non-moving parts; basing the regulations on the best scientific and technical knowledge and data available; the use of seismic hazard analyses; public participation; designs of older plants; site-specific reviews, and waste management.

Several commenters stated that they are concerned that the current relicensing regulations are not in the best interest of the public and its health and safety. They state that nuclear plants should meet the highest standards. They define these standards as those that are based on the most current experience and knowledge.

One commenter focused in detail on the changes he thinks should be made to the NRC's license renewal regulations: requiring a moving parts assessment; addressing storage of spent nuclear fuel, the changes in population density and traffic patterns in the supplemental environmental impact study, and evaluating the feasibility of the current emergency evacuation for communities surrounding operating plants.

Another commenter stated that license extension is not a right. The commenter believes that site-specific analysis is necessary and improved knowledge must be applied. The NRC should not "lower the bar for currently operating plants, and they should be required to meet or exceed the very same standards a new operator would."

#### Letters in support of denying the petitions

Of the nine letters supporting denial, seven letters came from industry organizations and two from individuals. The industry organizations are Entergy, Exelon, the Nuclear Energy Institute (NEI) (who sent 2 letters, 1 for each petition), Southern California Edison, Tennessee Valley Authority, and Strategic Teaming and Resource Sharing, a group of six utilities. Those

letters mainly argue that the proposed amendments are misguided and contrary to sound regulatory and public policy. Specifically, these commenters argue that the petitioners misconstrue the 1991 license renewal rule; the petitioners propose regulating factors that are beyond NRC's jurisdiction and not appropriate for rulemaking; the proposed rulemaking would duplicate the regulation of matters that are subject of ongoing regulatory oversight; and that the petitions lack bases upon which the Commission should conclude that its earlier determinations were incorrect or inappropriate.

NEI, commenting on behalf of the nuclear industry, states that the petitions should be denied because the regulatory framework of the existing NRC license renewal process is appropriately focused and adequately protects public health and safety. NEI also states that the petitions fail to provide a valid basis for expanding license renewal reviews to duplicate the Commission's initial plant licensing review on certain topics.

One letter from an individual opposes Mayor Scarpelli's proposal and specific issues. He states that his concerns with the Mayor's proposal are that they would result in the inevitable closing of nuclear power plants in New Jersey and nationwide, and in the resulting rise in energy costs to consumers. The commenter states that the Mayor has ample opportunity to voice his concerns through the current renewal process. The commenter also states that because Oyster Creek appears to be the mayor's primary focus, amending NRC regulations would be "a horrendously overinclusive remedy to a local problem." Finally, the commenter cites both local and statewide public support for the renewal of Oyster Creek's license.

#### IV. Discussion

The NRC has reviewed the petitions and the public comments and appreciates the concerns raised. However, the NRC is denying both petitions under § 2.803. The reasons for the denials are described in more detail in the discussion that follows. Briefly, the petitions

raise issues that the Commission already considered at length in developing the license renewal rule (December 13, 1991; 56 FR 64943). These issues are managed by the on-going regulatory process or under other regulations; or are issues beyond the Commission's regulatory authority. The petitioners did not present any new information that would contradict positions taken by the Commission when the license renewal rule was established or demonstrate that sufficient reason exists to modify the current regulations.

### Summary of the License Renewal Process

Under the Atomic Energy Act of 1954, as amended (AEA), the NRC issues licenses for commercial power reactors to operate for up to 40 years and allows these licenses to be renewed for another 20 years upon application by the licensee. The 40-year license term was selected on the basis of economic and antitrust considerations, not technical limitations (56 FR 64960-64962; December 13, 1991).

The Commission has explained its regulatory philosophy in license renewal at length in the final rule issued December 13, 1991 (56 FR 64943), as well as revisions to the final rule issued May 8, 1995 (60 FR 22461). That philosophy is that the issues material to the renewal of a nuclear power plant operating license are to be confined to those issues that the Commission determines are uniquely relevant to protecting the public health and safety and preserving common defense and security during the period of extended operation. This basic philosophy led the Commission to the formulation of two principles of license renewal as described in the 1995 document:

1. The current regulatory process is adequate to ensure that the licensing bases of all currently operating plants provide and maintain an acceptable level of safety, except for possibly the detrimental effects of aging on certain structures, systems, and components and possibly a few other issues related to safety only during extended operation. Issues relevant to

current plant operations are addressed by the regulatory process and will be carried forward into the extended period of operation. Examples of current issues include emergency planning and nuclear plant security. These issues are managed by current regulatory processes and will continue to be managed by them during the period of extended operation. Additional reviews for license renewal are not necessary.

2. Each 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.

The Commission has decided to limit the scope of the license renewal process because other issues would, by definition, be relevant to the safety and security of current plant operation. Given the Commission's responsibility to oversee the safety and security of operating reactors, issues that are relevant to both current plant operation and operation during the extended period must be addressed as they arise within the present license term rather than at the time of renewal. In some cases, safety or security might be endangered if resolution of a safety or security matter were postponed until the final renewal decision. Thus, duplicating the Commission's responsibilities in both oversight of current plant operations as well as license renewal would not only be unnecessary, but would waste Commission resources.

#### **NRC Evaluation of Issues Raised in the Petitions and Comments**

The Commission has analyzed and addressed the substance of these issues on numerous occasions in the past. Neither the petitions nor the comments raise new issues, nor provide any tangible reason why the careful formulation of the scope of license renewal should be addressed once again. Other procedural mechanisms are available to the public to raise concerns related to the current operations or the renewal of a license for nuclear power plants. An interested party could, for instance, file a request under § 2.208, requesting that the NRC take action to institute a proceeding, under § 2.202 to modify, suspend or revoke a license, or

for any other action as may be proper. Furthermore, any interested person may report a safety or security concern, or allegation to the NRC at anytime. The Commission's regulations also provide for numerous opportunities for interested parties to become involved in licensing actions and rulemaking proceedings.

The NRC has reviewed each of the petitioners' requests and provides the following analysis:

1. The petitioners request that the NRC amend its regulations 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 was being proposed de novo for initial construction. In particular, § 54.29 should be amended to provide that a renewed license may be issued if the Commission finds that, upon a de novo review, the plant would be entitled to an initial operating license in accordance with all criteria applicable to initial operating licenses, as set out in the Commission's regulations, including 10 CFR parts 2, 19, 20, 21, 26, 30, 40, 50, 51, 54, 55, 73, 100 and the appendices to these regulations.

**NRC Review:** The Commission explicitly considered and rejected the possibility that an application for license renewal would be treated as if it were an initial application for an operating license when it issued the license renewal rule on December 13, 1991; 56 FR 64943. In the statement of considerations (SOC) to that document, the Commission explained:

"It is not necessary for the Commission to review each renewal application against standards and criteria that apply to newer plants or future plants in order to ensure that operation during the period of extended operation is not inimical to the 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. Ongoing regulatory processes provide reasonable assurance that, as new issues and concerns arise, measures needed to ensure that operation is not inimical to the public health and safety and common defense and security are 'backfitted' onto the plants." (December 13, 1991; 56 FR 64945)

The Commission revised the license renewal rule in 1995, in part to eliminate any ambiguity as to the scope of license renewal. The Commission emphasized that it "continues to believe that aging management of certain important systems, structures, and components during this period of extended operation should be the focus of a renewal proceeding and that issues concerning operation during the currently authorized term of operation should be addressed as part of the current license rather than deferred until a renewal review." (May 8, 1995; 60 FR 22481) However, out of concern for the possibility that the rule "could be erroneously interpreted as requiring a general demonstration of compliance with the [Continuing Licensing Basis] as a prerequisite for issuing a renewed license," the Commission amended § 54.29 (Standards for issuance of a renewed license) to clarify the specific findings required for renewing a license, and by adding § 54.30 (Matters not subject to a renewal review), which specified that the licensee's responsibilities for addressing safety matters under its current licensing basis is not within the scope of license renewal.

Seeking to revisit this determination, the petitioners suggest that the Commission reverse its course, and set forth a new standard for issuance of a renewed license that would be essentially the same as what the Commission rejected in formulating the license renewal rule. Though the Commission appreciates the petitioners' concerns regarding the facilities in their communities, the petitioners offer no new information that would support inclusion of those issues in the license renewal process and that was not previously considered.

2. The petitioners request that corresponding amendments be made to 10 CFR 54.4, 54.19, 54.21, and 54.23, and that 10 CFR 54.30 be rescinded.

**NRG Review:** The NRC rejects the request that the corresponding amendments be made because it disagrees with the petitioners' contention that the license renewal rule should be amended.

3. The petitioners request that the criteria to be examined as part of a renewal

application should include factors such as emergency planning, demographics, siting, site security, and spent fuel storage:

NRC Review:

Emergency Planning: The petitioners request that the Commission consider emergency planning as part of the license renewal process. They both expressed deep concerns that, in light of the change in demographics, local infrastructures and governments would be unable to support large-scale evacuations. Both petitioners suggested that, if either facility were proposed for initial licensing today, that the licenses would be rejected for these reasons. Thus, the petitioners conclude that it is unreasonable to relicense facilities that would clearly be ineligible for initial licensing.

The Commission has already considered evacuation in formulating the license renewal rule and determined that emergency preparedness need not be reviewed again for license renewal (December 13, 1991; 56 FR 84966). Current requirements, including periodic update requirements provide reasonable assurance that an adequate level of emergency preparedness exists at any operating reactor. The Commission explained that "[t]hrough its standards and required exercises, the Commission ensures that existing plans are adequate throughout the life of any plant even in the face of changing demographics and other site-related factors. Thus, these drills, performance criteria, and independent evaluations provide a process to ensure continued adequacy of emergency preparedness in light of changes in site characteristics that may occur during the term of the existing operating license, such as transportation systems and demographics." This determination is also incorporated in the Commission's regulations at § 50.47(a), describing emergency planning requirements, in which a new finding on emergency planning considerations is specifically not required for license renewal. The Commission reaffirmed its determination on emergency planning in its May 8, 1995 (60 FR 22468) amendment of the license renewal rule.

The regulations in §§ 50.47, 50.54(q), and 50.54(s) through (u), and appendix E to part 50, establish requirements and performance for emergency preparedness. These requirements apply to all nuclear power plant licensees and require the specified levels of protection from each licensee regardless of plant design, construction, or license date. The requirements of § 50.47 and appendix E to part 50 are independent of the renewal of the operating license, and continue to apply during the license renewal term. The NRC's regulatory oversight program (ROP) monitors the continued adequacy of a licensee's EP program. In addition, licensees must review the facility's EP program periodically, including working with State and local governments, and have biennial exercises with offsite authorities.

In addition, the Commission recently reasserted its position on emergency preparedness in the relicensing of the Millstone Nuclear Power Station. In that case, the Commission stated, "[T]he primary reason we excluded emergency-planning issues from license renewal proceedings was to limit the scope of those proceedings to 'age-related degradation unique to license renewal.' Emergency planning is, by its very nature, neither germane to age-related degradation nor unique to the period covered by the Millstone license renewal application." *Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3)*, CLI-05-24, 62 NRC 551, 560-561 (2005). If the Commission were to consider emergency planning during the license renewal review, it is not evident that the petitioners' assertions as to the licenseability of either site have any factual basis. The petitioners ask rhetorically whether the 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. As examples of these factors, the petitioners cited changes in the demographics since the facilities were initially licensed, and deficiencies in the local infrastructure. Yet these broad, conclusory statements without a factual or technical basis are insufficient to support a petition for rulemaking under the Commission's regulations. A petition for rulemaking, as set forth at § 2.802(c)(3), must contain

"relevant technical, scientific or other data involved which is reasonably available to the petitioner..." Neither petitioner has presented this type of information.

Setting the sufficiency of the petition aside, it is not evident that demographics and siting would necessarily preclude the issuance of an initial operating license at either site. The Commission has addressed these issues, however, in other rulemakings. The final rule on reactor site criteria for nuclear power plants, 10 CFR part 100 (December 11, 1996; 61 FR 65157) addressed examining demographics and siting, both for future reactor facilities and license renewal. Regarding new facilities, the rule states:

**"The Commission is not establishing specific numerical criteria for evaluation of population density in siting future reactor facilities because the acceptability of a specific site from the standpoint of population density must be considered in the overall context of safety and environmental considerations. The Commission's intent is to assure that a site that has significant safety, environmental or economic advantages is not rejected solely because it has a higher population density than other available sites. Population density is but one factor that must be balanced against the other advantages and disadvantages of a particular site in determining the site's acceptability. Thus, it must be recognized that sites with higher population density, so long as they are located away from very densely populated centers, can be approved by the Commission if they present advantages in terms of other considerations applicable to the evaluation of proposed sites." (61 FR 65162)**

Regarding future population growth, the 1998 final rule explains:

**"Population growth in the site vicinity will be periodically factored into the emergency plan for the site, but since higher population density sites are not unacceptable, per se, the Commission does not intend to consider license conditions or restrictions upon an operating reactor solely upon the basis that the population density around it may reach or exceed levels that were not expected at the time of site approval. Finally the Commission wishes to emphasize that population considerations as well as other siting requirements apply only for the initial siting for new plants and will not be used in evaluating applications for the renewal of existing nuclear power plant licenses." (61 FR 65163)**

Security: Like emergency planning issues, security matters are covered by current review and update requirements. The Commission has rules, regulations and orders that are in place concerning physical protection (security) programs, specifically, parts 26 and 73, orders, and an on-going regulatory process that addresses the petitioners' concerns.

The Commission specifically addressed physical security considerations in the license renewal process in its 1991 final rule. There, it stated that:

"Licensees must establish and maintain a system for the physical protection of plants and materials, in accordance with 10 CFR part 73, to protect the plant from acts of radiological sabotage and prevent the theft of special nuclear material."

"Application for a renewed license will not affect the standards for physical protection required by the NRC. The level of protection will be maintained during the renewal term in the same manner as during the original license term, since these requirements remain in effect during the renewal term by the language of § 54.35. The requirements of 10 CFR part 73 will continue to be reviewed and changed to incorporate new information, as necessary. The NRC will continue to ensure compliance of all licensees, whether operating under an original license or a renewed one, through ongoing inspections and reviews. Therefore, the Commission concludes that a review of the adequacy of existing security plans is not necessary as part of the license renewal review process."  
(56 FR 64967)

The Commission has regulations governing security and neither petition provides new information to justify including physical security considerations into the license renewal process.

The NRC has reviewed and updated security requirements and continues to do so. The Commission has recently restated its position on the relevance of security issues in license renewal and explained that "security issues at nuclear power reactors, while vital, are simply not among the age-related questions at stake in a license renewal proceeding." *Dominion Nuclear Connecticut, Inc. (Millstone Nuclear Power Station, Units 2 and 3)*, CLI-04-36, 60 NRC 631, 638 (2004).

After the terrorist attacks of September 11, 2001, U.S. commercial nuclear facilities escalated to the highest level of security. Since then, the NRC has issued more than 35 Advisories, Orders, and Regulatory Issue Summaries to further strengthen security at U.S. power reactors. In April 2003, the NRC required by order that power reactors revise their physical security plans, guard training and qualification plans, and contingency plans. Furthermore, the Commission will soon issue a final rule revising the Design Basis Threat (DBT) regulations in 10 CFR 73.1 (See proposed rule, 70 FR 67380; November 7, 2005), and will soon publish a proposed rule for comment amending most of its security regulations for power reactors. (See Proposed Rulemaking – Power Reactor Security Requirements, SECY-06-0126).

The previously cited Commission decisions and agency activities support denial of this section of the petition because security issues are monitored through an on-going regulatory process.

Storage of SNF. The petitioners also contend that the Commission should consider the impact of the long-term storage of SNF, either in pools or at independent spent fuel storage installations (ISFSIs) during license renewal.

**NRC Review:** In addition to being excluded by definition from the scope of license renewal under part 54, the Commission has also specifically decided to preclude the storage of spent fuel from license renewal in § 51.95(c)(2) of the Commission's regulations, which states that "The supplemental EIS prepared at the license renewal stage need not discuss ... any aspect of the storage of spent fuel for the facility within the scope of the generic determination in § 51.23(a) and in accordance with § 51.23(b)." Section 51.23 contains the Commission's "Waste Confidence Rule," in which the Commission had made a generic finding that "spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised

or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite ISFSIs." The rule therefore does not require analysis of these impacts as part of the environmental report, environmental assessment, or environmental impact statement. The Commission's reasoning for this finding has been documented in great detail and periodically reconsidered since the rule was first issued in 1984. See final rule, Waste Confidence Decision, (49 FR 34658; August 31, 1984); "Waste Confidence Decision Review," (September 18, 1990; 55 FR 38474); "Waste Confidence Decision Review; Status," (December 6, 1999; 64 FR 68005); and "State of Nevada; Denial of Petition for Rulemaking," (PRM-51-08) (August 17, 2005; 70 FR 48329).

Additionally, the NRC notes that the licensing and regulatory oversight of ISFSIs are dealt with under part 72, and that the Commission has specifically determined on several occasions that these issues are therefore outside the scope of license renewal for power reactors. See *Nuclear Management Company, LLC. (Palisades Nuclear Plant)*, CLI-06-17, 63 NRC 727, 733-734 (2006); and *Duke Energy Corp. (Oconee Nuclear Station, Units 1, 2, and 3)*, CLI-99-11, 49 NRC 328, 344 n.4 (1999).

4. Changes to State and Local Law Affecting Continued Operation: Both petitions requested that changes to State and local regulations should be considered during the license renewal process. Mr. Spano stated a concern that "Indian Point must convert from once-through cooling to a closed-cycle design using cooling towers."

NRC Review: Licensees must comply with applicable local and State regulations. However, nuclear power plant safety is the exclusive province of the Federal Government and cannot be regulated by the States. Under the AEA, the NRC has exclusive authority over the health and safety regulations of nuclear power plants and AEA materials. A State law that directly or indirectly sets nuclear power plant safety standards would thus be facially invalid. However, a State law that regulates the generation, sale, or transmission of nuclear energy

produced by a NRC-licensed nuclear power facility would not be pre-empted by the AEA. Thus, to the extent that a nuclear power plant licensee was subject to a State law not pre-empted by the AEA, that licensee would have a continuing obligation to comply with that law. NRC consideration of the applicable State or local laws at the license renewal stage is therefore not necessary or appropriate during license renewal.

Regarding the conversion to closed cycle design, the NRC believes that Mr. Spano is incorrect in two respects. First, the regulation to which he refers is a Federal, not a local or state regulation: Environmental Protection Agency (EPA) regulation on impingement entrainment (40 CFR Part 122; National Pollutant Discharge Elimination System - Final Regulations to Establish Requirements for Cooling Water Intake Structures at Phase II Existing Facilities; 69 FR 41575; July 9, 2004). Second, the regulation has performance standards that can be met in various ways, one of which is closed-cycle cooling. Thus, it would be incorrect to suggest that EPA's regulations require conversion to a closed-cycle design.

5. The petitioners contend that factors such as an increase in public awareness, technology improvements, and changes in plant economic values are inappropriately excluded from the part 54 license renewal process.

NRC Review: Evolving factors such as public awareness, technology improvements, and plant economic values are beyond the purview of the Commission's regulatory authority.

The NRC notes that the regulatory process considers new scientific and technical knowledge since plants were initially licensed and imposes new requirements on licensees as justified. The NRC engages in a large number of regulatory activities that, when considered together, constitute a regulatory process that provides ongoing assurance that the licensing basis of nuclear power plants provides an acceptable level of safety. This process includes research, inspections, audits, investigations, evaluations of operating experience, and regulatory actions to resolve identified issues. These activities include consideration of new

scientific or technical information. The NRC's activities may result in changes to the licensing basis for nuclear power plants through issuance of new or revised regulations, and the issuance of orders or confirmatory action letters. Operating experience, research, or the results of new analyses are also issued by the NRC through documents such as bulletins, generic letters, regulatory information summaries, and information notices. In this way, the NRC's consideration of new information provides ongoing assurance that the licensing basis for the design and operation of all nuclear power plants provide an acceptable level of safety. This process continues for plants that receive a renewed license. In addition, the economic viability of nuclear power is not within the regulatory jurisdiction of the NRC. However, NRC regulations require adequate funds to ensure the decommissioning of commercial facilities (e.g., commercial power reactors and ISFSIs) and for the safe management of SNF. A consideration of costs and benefits of a proposed action and its alternatives are normally part of the NRC's review according to NEPA; however, these factors have been excluded from consideration in the NEPA review for license renewal (see 10 CFR 51.45(c), 51.53(c)(2), and 51.95(c)(2)).

6. PRM-54-03 states that the NRC should revise part 54 to require consideration of a "worst-case scenario" in connection with license renewal, to the same extent that these issues must be considered at the initial construction/licensing stage.

**NRC Review:** All of the requirements regarding design basis accidents analyzed for the original operating license continue to apply for the period of extended operation. There is no relaxation of the requirements applicable for the first 40 years for a licensee applying for license renewal. Analyses that rely on the original licensing term (i.e., 40 years) that meet the criteria contained in § 54.3(a) must be evaluated for license renewal and demonstrated acceptable in accordance with § 54.21(c).

In the environmental context, the NRC's current regulations address accidents for license renewal. Subpart A to appendix B of part 51, Table B-1, "Summary of Findings on

NEPA Issues for License Renewal of Nuclear Power Plants," under "Postulated Accidents," states that the NRC has concluded that the environmental impacts of design basis accidents are of small significance for all plants. For severe accident impacts, Table B-1 states that NRC has determined that "The probability weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to groundwater, and societal and economic impacts from severe accidents are small for all plants." However, according to § 51.53(c)(3)(ii)(L) alternatives to mitigate severe accidents must be considered for all plants that have not considered these alternatives.

## Public Comments

### Integrated Plant Assessment

A commenter states that NRC must include an assessment of moving parts for relicensing. The commenter also states that all license renewal applicants should be required to submit an integrated plant assessment that includes both moving and non-moving parts before being relicensed.

**NRC Review:** The Commission explicitly considered whether to include active structures and components within the scope of a license renewal review when it amended the license renewal rule in 1995. The Commission concluded that structures and components associated only with active functions can be generically excluded from a license renewal aging management review. Functional degradation resulting from the effects of aging on active functions is more readily determinable, and existing programs and requirements are expected to directly detect the effects of aging. Considerable experience has demonstrated the effectiveness of these programs, including the performance-based requirements of the maintenance rule contained in 10 CFR 50.65. For example, many licensee programs that

ensure compliance with technical specifications are based on surveillance activities that monitor performance of structures and components that perform active functions. As a result of the continued applicability of existing programs and regulatory requirements, the Commission determined that active functions of structures and components will be reasonably assured during the period of extended operation.

Performance and condition monitoring for structures and components typically involve functional verification, either directly or indirectly. Direct verification is practical for active functions such as pump flow, valve stroke time, or relay actuation where the parameter of concern (required function), including any design margins, can be directly measured or observed. For passive functions, the relationship between the measurable parameters and the required function is less directly verified. Passive functions, such as pressure boundary and structural integrity are generally verified indirectly, by confirmation of physical dimensions or component physical condition (e.g., piping structural integrity can be predicted based on measured wall thickness and condition of structural supports). It should be noted that although the parts of structures and components that only perform active functions do not require an aging management review, structures and components that perform both passive and active functions do require an aging management review for their intended passive functions only. For example, the casings of safety related pumps and valves perform a passive pressure boundary function and require aging management, but the internals of those pumps and valves, which have an active function, do not.

Therefore, the effects of aging on active structures and components are being managed by existing programs and any aging effects will continue to be managed by these programs for the period of extended operation. The commenter did not provide any information to justify revising the scope of the license renewal rule.

### Use of Current Scientific and Technical Knowledge

One commenter states that regulations must be based on best scientific and technical knowledge and data available, instead of allowing currently operating plants to be grandfathered into compliance based on scientific data from the 1970s that is proven to be outdated.

**NRC Review:** The NRC believes that the regulations are based on the best scientific and technical knowledge and data available. The regulatory process does consider new scientific and technical knowledge and data available since plants were initially licensed, and imposes new requirements on licensees as justified. All of the Commission's regulations undergo a lengthy and detailed rulemaking process required by the Administrative Procedure Act. During that process, the staff conducts a detailed technical review based in part on its years of experience, and input from the scientific community, public comment on the rulemaking, and industry. For further details, see the previous discussion under comment 6, concerning technology improvements.

This commenter also suggests that the license renewal process simply "grandfathers" older plants into compliance with the current regulations. Contrary to the commenter's assertion, the NRC does not "grandfather" plants as part of the license renewal. As explained previously, the review conducted within the scope of renewing an operating license does not relieve a licensee from compliance with its current licensing basis, which mandates compliance with the Commission's current regulations. If changes in technology or scientific knowledge occur resulting in new NRC requirements, each licensee must evaluate the new requirements and comply based on the design and licensing basis of their plant.

### Seismic Hazard Analyses

One commenter states that updated seismic hazards analyses are not required of licensees, despite the issuance of new regulations that acknowledge the change in scientific

knowledge on the differing effects of earthquakes on plant structures. The commenter further states that new seismic regulations (December 11, 1996; 61 FR 65157) only apply to new nuclear power plants.

NRC Review: The December 1996 regulation (part 100) provides basic siting criteria for decisions about future sites and future nuclear power plants. The SOCs of the 1996 final rule stated that to replace the existing regulation with an entirely new regulation would not be acceptable because the provisions of the existing regulations form part of the licensing bases for many of the operating nuclear power plants and others that are in various stages of obtaining operating licenses. Therefore, the Commission concluded that these provisions should remain in effect for currently operating facilities. To ensure the continued safety of currently operating nuclear power plants, the NRC required industry to re-examine their seismic designs as part of the Individual Plant Examination of External Events (IPEEE) program. The results of the IPEEE studies are summarized in NUREG-1742, "Perspectives Gained from the Individual Plant Examination of External Events (IPEEE) Program." Based on the evaluations of the IPEEE program, the NRC staff determined that seismic designs of operating nuclear power plants still provide an adequate level of protection. Since the IPEEE program, the NRC staff has continued to assess the most recent models for estimating seismic ground motion from earthquakes as well as recent models for earthquake sources in seismic regions such as New Madrid, MO, and Charleston, SC. To evaluate the impact of the most recent seismic studies, cited previously, on currently operating nuclear power plants, the NRC has initiated a generic issue resolution process (Generic Issue 199, "Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States," ML051600272).

#### Public Participation

A commenter voiced the concern that the current treatment of license renewal "unfairly excluded and denies the public and its experts from critical analysis of the risks and benefits of

20 additional years of operational wear and tear on safety-related equipment and from critical analysis of the risks... as well as extending and enlarging the adverse environmental impacts from nuclear waste generation... and the vulnerability of onsite nuclear waste storage systems to domestic security threats."

**NRC Review:** The NRC rulemaking process appropriately includes the public. The public has many opportunities to comment, such as public meetings and hearings under part 54. For special cases concerning security and safeguards (such as rulemaking, orders, and generic communications), procedures are implemented to appropriately ensure the safeguarding of nuclear material and information. In these cases, only persons with a need to know and with the proper security clearance are authorized access to subject proceedings.

The public also had ample opportunity to comment under the various part 54 rulemakings, which evaluated prolonged waste storage.

Public participation is an important part of the license renewal process. Members of the public have several opportunities to question how aging will be managed during the period of extended operation. Information provided by the licensee is made available to the public in various ways. The license renewal application and subsequent correspondence regarding the application are available to the public from the NRC's PDR or from ADAMS, which can be accessed through the NRC's web site (<http://www.nrc.gov>). Shortly after the NRC receives a renewal application, a public meeting is held near the nuclear power plant to give the public information about the license renewal process and provide opportunities for public involvement. Additional public meetings are held by the NRC during the review of the renewal application. As part of the environmental review of each license renewal application a separate public meeting is held near the nuclear power plant seeking renewal to identify environmental issues specific to the plant for the license renewal action. The result is an NRC recommendation on whether the environmental impacts are so great that they preclude license renewal. This

recommendation is presented in a draft plant-specific supplement to the GEIS which is published for comment and discussed at another public meeting. After consideration of comments on the draft, NRC prepares and publishes a final plant-specific supplement to the GEIS. NRC evaluations, findings, and recommendations are published when completed. All public meetings are posted on NRC's web site. Key meetings are announced in press releases and in the *Federal Register*.

Concerns may be litigated in an adjudicatory hearing if any party that would be adversely affected requests a hearing as is indicated in the notice of opportunity for hearing for each individual license renewal application. The opportunity for hearing is also announced in a press release which is initially posted on the NRC's home page on the Web. In establishing the current hearing process under part 2, the Commission adopted many changes and undertook additional activities intended to enhance public participation. For example, the final rule extends from 30 to 60 days the time between issuing a *Federal Register* notice for a reactor licensing proceeding and the time for submitting a request for hearing and a petition to intervene. The Commission adopted a mandatory disclosure provision in part 2 that provides for early and comprehensive disclosure of information by all parties, thus avoiding the substantial resources and delay that often is associated with discovery. The Commission also created a prominently displayed button on its web site titled "Hearing Opportunities," where the public can find notices of intent to file applications, notices of docketing of applications, and notices of opportunity to request a hearing and petition to intervene in major licensing and regulatory actions.

#### Designs of Older Plants

One commenter on PRM-54-03 was concerned about the designs of older plants, asking whether GE Mark I and II could be approved today and given license extensions.

NRC Response: The NRC emphasizes that it would be incorrect to conclude that any

currently operating facility regulated by the NRC, including OCNGS, is less safe than a newly constructed plant. The NRC's continuous regulatory oversight process often requires licensees to correct design deficiencies that could impact continued safe operation. Since OCNGS began operation in December 1969, the licensee has replaced and overhauled many pieces of equipment. The licensee has also installed new, modern systems to replace or supplement original systems that are obsolete or no longer considered adequate. The NRC requires plant operators to continuously test and monitor the condition of safety equipment and to maintain equipment in top condition.

If a licensee applies for license renewal, the NRC reviews both the relevant safety and environmental issues associated with the application. Specifically, the licensee must provide the NRC with an evaluation of the technical aspects of plant aging. The licensee must also describe the aging management programs and activities that will be relied on to manage aging. In addition, to support plant operation for an additional 20 years, the licensee must prepare an evaluation of the potential impact on the environment. The NRC reviews the application and makes a determination concerning the protection of public health and safety and the protection of the environment. The NRC documents its reviews in a safety evaluation report and supplemental environmental impact statement, and performs verification inspections at the licensee's facilities. If NRC approves a renewed license, the licensee must continue to comply with all existing regulations and commitments associated with the current operating license as well as those additional activities required as a result of license renewal. Licensee activities continue to be subject to NRC oversight in the period of extended operation.

#### Site-Specific Reviews

One commenter states that site-specific environmental analysis is necessary.

**NRC Review:** The NRC performs plant-specific reviews of the environmental impacts of license renewal in accordance with the National Environmental Policy Act (NEPA) and the

requirements of part 51. Certain issues are evaluated generically for all plants, rather than separately in each plant's renewal application. The generic evaluation, NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (GEIS), assesses the scope and impact of environmental effects that would be associated with license renewal at any nuclear power plant site such as endangered species, impacts of cooling water systems on fish and shellfish, and ground water quality. A plant-specific supplement to the generic environmental impact statement is required for each application for license renewal.

The GEIS was developed to establish an effective licensing process. It contains the results of a systematic evaluation of the environmental consequences of renewing an operating license and operating a nuclear power facility for an additional 20 years. Those environmental issues that could be resolved generically were analyzed in detail and were resolved in the GEIS. Those issues that are unique because of a site-specific attribute, a particular site setting or unique facility interface with the environment, or variability from site to site, are deferred and are resolved at the time that an applicant seeks license renewal. In the license renewal process, these issues are addressed by the site-specific supplement to the generic environmental impact statement (SEIS).

The GEIS is used to avoid duplication and allow the staff to focus specifically on those issues that are important for a particular plant (i.e., issues that are not generic). This is an appropriate and effective use of the concept of tiering that was issued by the President's Council on Environmental Quality (CEQ) in its 1978 regulations that implemented the requirements of NEPA. Tiering is the process of addressing a general program (such as a nuclear power plant license renewal) in a generic (or programmatic) environmental impact statement (EIS), and then analyzing a detailed element of the program (such as a site-specific action related to the general program) as a supplement to the generic EIS. The CEQ has stated that its intent in formalizing the tiering concept was to encourage agencies "to eliminate

repetitive discussions and to focus on the actual issues ripe for decisions at each level of environmental review."

In addition, the environmental review of each license renewal application affords several opportunities for public input as described previously.

#### Nuclear Waste Management

One commenter asserted that the license renewal process disallows public adjudicatory involvement in the extension of nuclear waste generation at reactor sites seeking license renewal without a scientifically approved and demonstrated nuclear waste management program because of reliance on the Waste Confidence Decision of 1990. The commenter stated: "[t]he license extension process needs to be broadened in its scope and not hide behind an increasing dubious Nuclear Waste Confidence Decision by providing for the public intervention process to independently analyze and challenge inadequate site-specific onsite "spent" fuel storage systems including storage ponds and dry cask storage systems."

Another commenter added his concerns about requiring the most up-to-date science to spent fuel pools and dry cask storage and questions the updating of regulations regarding seismic criteria for ISFSIs.

Another commenter cited an April 2005 report to Congress by the National Academy of Sciences entitled "Safety and Security of Commercial Spent Nuclear Fuel Storage." The commenter stated that the NRC should amend the regulations on the basis of that report to require that security of spent fuel pools and dry cask storage be comprehensively assessed during the relicensing process.

NRC Review: As explained in the denial of PRM-51-08 (August 17, 2005; 70 FR 48329), the Commission stated in its 1999 Waste Confidence Decision Status Report that it would consider undertaking a comprehensive reevaluation of the Waste Confidence findings if either of two criteria were met: (1) When the impending repository development and regulatory

activities run their course; or (2) If significant and pertinent unexpected events occur, raising substantial doubt about the continuing validity of the Waste Confidence findings (December 6, 1991; 64 FR 68007). Because activities involving the high-level waste repository have not run their course, a petitioner would have to demonstrate that "significant and pertinent unexpected events" have occurred that have raised "substantial doubt about the continuing validity of the Waste Confidence findings" for the Commission to reevaluate its conclusions. Neither PRM-54-02 or PRM-54-03 has provided any demonstration warranting reopening of this decision. Finally, delays of the waste depository at Yucca Mountain are not relevant to these petitions because waste is governed by separate NRC regulations and outside the scope of part 54, and the Waste Confidence Decision determined that spent fuel can be safely stored onsite for 100 years. The petitioners have not shown that waste would be better regulated under part 54.

For spent fuel issues, see previous discussion.

With respect to the comment regarding the National Academy of Sciences Report, the NRC notes that this is a classified report on spent fuel transportation security that was delivered to the House and Senate Committees on Appropriations in July 2004, and that an unclassified summary was published in March 2005. The NRC sent a report to Congress on March 14, 2005, describing the specific actions the NRC took to respond to the Academy's recommendations. The Academy's study is one of many instruments that supplements NRC's understanding of the safety of the interim storage of spent fuel.

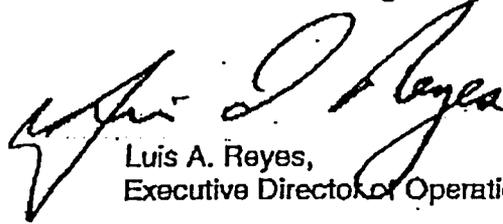
#### *Reasons for Denial*

The NRC is denying the petitions for rulemaking (PRM-54-02 and PRM-54-03) because they raise issues that the Commission already considered at length in developing the license renewal rule (December 13, 1991; 56 FR 64943), that are managed by the ongoing regulatory process or under other regulations, or that are beyond the Commission's regulatory authority.

The petitioners did not present any new information that would contradict positions taken by the Commission when the regulation was established or demonstrate that sufficient reason exists to modify the current regulations.

Dated at Rockville, Maryland, this 2 day of DEC, 2006.

For the Nuclear Regulatory Commission.



Luis A. Reyes,  
Executive Director of Operations.

**AFFIDAVIT OF SERVICE  
BY CERTIFIED MAIL- RETURN RECEIPT REQUESTED**

STATE OF NEW YORK            )  
  ) ss.:  
COUNTY OF WESTCHESTER    )

JOSEPHINE BELSITO being duly sworn, deposes and says:

I am not a party to this action; I am over 18 years of age; I am employed in White Plains, New York.

On January 29, 2007 I served one copy of the within PETITION FOR REVIEW ( Re: Andrew J. Spano v. United States Nuclear Regulatory Commission and the United States of America ) on the following:

United States Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Luis A. Reyes, Executive Director of Operations  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Chairman Dale E. Klein  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

General Counsel Karen Cyr, Esq.  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

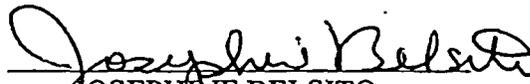
Solicitor John Cordes, Jr., Esq.  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

United States Attorney for the Southern District of New York  
Attention: Civil Process Clerk  
One Saint Andrews Plaza  
New York, New York 10007-1701

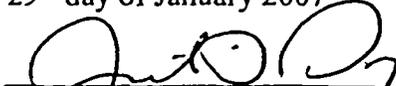
Attorney General of the United States  
United States Department of Justice  
950 Pennsylvania Avenue, NW  
Washington, D.C. 20530-0001

Mayor Joseph Scarpelli  
Brick Township  
Municipal Building  
401 Chambersbridge Road  
Brick, New Jersey 08723

at the address designated for that purpose by depositing a copy of same enclosed in a postpaid, properly addressed wrapper, certified mail, return receipt requested, in an official depository under the exclusive care and custody of the United States Postal Service within the State of New York.

  
\_\_\_\_\_  
JOSEPHINE BELSITO

Sworn to before me this  
29<sup>th</sup> day of January 2007

  
\_\_\_\_\_  
NOTARY PUBLIC

JUSTIN D. PRUYNE  
Notary Public, State Of New York  
No. 02PR6070937  
Qualified In Westchester County  
Commission Expires 03/11/2010