

**IN THE UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT**

No. 07-2271

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Petitioner,

v.

**UNITED STATES NUCLEAR REGULATORY COMMISSION, UNITED
STATES OF AMERICA & AMERGEN ENERGY COMPANY, L.L.C.,**

Respondents.

**PETITION FOR REVIEW OF AN ORDER OF THE UNITED STATES
NUCLEAR REGULATORY COMMISSION**

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

**ELLEN C. GINSBERG
MICHAEL A. BAUSER
ANNE W. COTTINGHAM
NUCLEAR ENERGY INSTITUTE, INC.
1776 I Street, N.W., Suite 400
Washington, D.C. 20006-3708
(202) 739-8144**

*Attorneys for Amicus
Nuclear Energy Institute, Inc.*

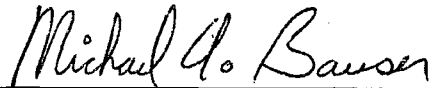
January 29, 2008

CORPORATE DISCLOSURE STATEMENT

Pursuant to Rule 26.1 and Rule 29(c) of the Federal Rules of Appellate Procedure and Third Circuit Local Appellate Rule 26.1.0, amicus curiae Nuclear Energy Institute, Inc. ("NEI") makes the following disclosure in case No. 07-2271:

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

Respectfully submitted,



Michael A. Bauser
Nuclear Energy Institute, Inc.
1776 I Street, N.W., Suite 400
Washington, D.C. 20006-3708
(202) 739-8144

*Attorney for Amicus Nuclear Energy
Institute, Inc.*

Dated: January 29, 2008

TABLE OF CONTENTS

	<u>Page</u>
CORPORATE DISCLOSURE STATEMENT	i
TABLE OF AUTHORITIES	iv
INTEREST OF THE AMICUS CURIAE	1
JURISDICTIONAL STATEMENT	2
STATEMENT OF THE ISSUES	2
STATEMENT OF THE CASE AND STATEMENT OF FACTS	2
SUMMARY OF THE ARGUMENT	3
ARGUMENT	6
I. REVERSING THE NRC’S DECISION COULD UNNECESSARILY IMPEDE AN IMPORTANT NRC REGULATORY PROCESS AND UTILITY PLANNING AT A CRITICAL TIME WHEN NUCLEAR PLANT LICENSE RENEWAL IS NEEDED.....	6
A. If Granted, the Relief Petitioner Requests Could Have Far-Reaching Negative Implications for the NRC License Renewal Process	6
B. Uncertainty and Delay in NRC Licensing Proceedings Could Impair Electric Supply at a Time When the Nation Needs Additional Nuclear and Non-Nuclear Energy Resources	12

II.	THE NRC PROPERLY EXERCISED ITS DISCRETION TO ESTABLISH THE SCOPE OF ITS TECHNICALLY RIGOROUS LICENSE RENEWAL PROCESS AND THE PETITIONER HAS FAILED TO PRESENT NEW INFORMATION TO DISTURB THE AGENCY'S INFORMED POLICY JUDGMENTS	15
A.	The NRC Properly Exercised Its Broad Statutory Authority In Establishing the Scope of License Renewal Reviews through Reasoned Rulemaking	16
B.	The NRC License Renewal Process is Thorough and Rigorous.....	21
C.	NRC NEPA Regulations Adequately Address Environmental Impacts Proximately Caused by License Renewal.....	23
III.	REQUIRING AN ADDITIONAL LICENSE RENEWAL NEPA REVIEW OF THE IMPACTS OF A TERRORIST AIR ATTACK WOULD ENHANCE NEITHER THE NRC'S COMPREHENSIVE REGULATION OF FACILITY SECURITY NOR ITS CONSIDERATION OF ENVIRONMENTAL CONCERNS	27
A.	Pursuant to the Atomic Energy Act, the NRC Administers A Stringent Regulatory Program Governing the Steps that NRC Reactor Licensees Must Take to Secure their Plants	28
B.	Since September 11, 2001, the NRC and the Nuclear Industry Have Redoubled Efforts to Secure NRC Facilities against Terrorist Attack	30
	CONCLUSION	35

TABLE OF AUTHORITIES

FEDERAL CASES

	<u>Page</u>
<i>AmerGen Energy Co., LLC</i> (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 N.R.C. 124 (2007).....	passim
<i>AmerGen Energy Co.</i> (Oyster Creek Nuclear Generating Station), LBP-06-07, 63 N.R.C. 188 (2006).....	25
<i>Carolina Power & Light Co.</i> (Shearon Harris Nuclear Power Plant, Unit 1), LBP-07-11, 66 N.R.C. 41, 2007 WL 4693653 (N.R.C. Aug. 3, 2007).....	9
<i>Duke Energy Corp.</i> (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 N.R.C. 1 2002 WL 1772735 (2002).....	25
<i>Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.</i> (Pilgrim Nuclear Power Station), LBP-06-23, 64 N.R.C. 257, 2006 WL 4801142 (N.R.C. Oct. 16, 2006).....	10
<i>Environmental Law & Policy Ctr. v. NRC</i> , 470 F.3d 676 (7th Cir. 2006).....	13
<i>Florida Power & Light Co.</i> (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 N.R.C. 3, 2001 WL 871673 (2001)	16-17, 19, 21, 23
<i>Nuclear Mgmt. Co., LLC</i> (Palisades Nuclear Plant), CLI-07-09, 65 N.R.C. 139, 2007 WL 595085, (N.R.C. Feb. 26, 2007).....	10

<i>Pacific Gas & Elec. Co.</i> (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-08-01,—NRC—, 2008 WL 152441 (N.R.C. Jan. 15, 2008).....	8
<i>Pacific Gas & Elec. Co.</i> (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation), CLI-07-11, 65 NRC 148 2007 WL 595087 (Feb. 26, 2007)	8
<i>Private Fuel Storage, LLC</i> (Independent Spent Fuel Storage Installation), CLI-02-25, 56 N.R.C. 340, 2002 WL 3183340 (2002).....	33, 34
<i>Public Citizen v. NRC</i> , Nos. 07-71868 and 07-72555 (9th Cir. filed 2007).....	31
<i>Riverkeeper, Inc. v. Collins</i> , 359 F.3d 156 (2d Cir. 2004).....	30, 31, 33, 34
<i>Rockland County v. NRC</i> , 709 F.2d 766 (2d Cir. 1983).....	16
<i>San Luis Obispo Mothers for Peace v. NRC</i> , 449 F.3d 1016 (9 th Cir. 2006), <i>cert. denied sub nom.</i> <i>Pacific Gas & Electric Co. v. San Luis Obispo Mothers for Peace</i> , ___ U.S. ___, 127 S.Ct. 1124 (Jan. 16, 2007).....	passim
<i>Siegel v. AEC</i> , 400 F.2d 778 (D.C. Cir. 1968).....	16
<i>Southern Nuclear Operating Co.</i> (Early Site Permit for Vogtle ESP Site), LBP-07-03, 65 N.R.C. 237, 2007 WL 2195473 (N.R.C. Mar. 12, 2007).....	10

FEDERAL STATUTES AND REGULATIONS

Atomic Energy Act of 1954, as amended,	
42 U.S.C. § 2201 <i>et seq.</i>	16
42 U.S.C. § 2012.....	28
42 U.S.C. § 2167.....	28
42 U.S.C. § 2201.....	28
National Environmental Policy Act of 1969,	
42 U.S.C. § 4321 <i>et seq.</i>	3
10 C.F.R Part 51	
Part 51, Subpart A, Appendix B,	23
Part 51, Subpart A, Appendix B, Table B-1.....	24
§ 51.53.....	23
§ 51.53(c)(3)(ii)(L).....	25
§ 51.95(c).....	23
10 C.F.R. Part 54	
§ 54.3	19-20
§ 54.4(a)(1)-(3)	22
§ 54.21(a)	22
§ 54.21(a)(1)(i)-(ii)	22
§ 54.21(a)(3)	22
§ 54.21(c)	23
§54.23	23
§54.31(a)(1)	22
10 C.F.R. Part 73	
§ 73.1(a)(1)(i)(A)	29
§73.1(a)(1)(i)(B)	29
§73.1(a)(1)(iii)	29
§73.1(a)(2)(i)(C)-(E)	29

FEDERAL REGISTER NOTICES

53 Fed. Reg. 32,919 (Aug. 29, 1988)	11, 17
54 Fed. Reg. 41,981 (Oct. 13, 1989)	17-18
55 Fed. Reg. 29,043 (July 17, 1990)	17, 18
56 Fed. Reg. 64,943 (Dec. 13, 1991)	11, 19, 20
59 Fed. Reg. 46,574 (Sept. 9, 1994)	18
60 Fed. Reg. 22,461 (May 8, 1995)	19
61 Fed. Reg. 28,467 (June 5, 1996)	23
<i>Order Modifying Licenses</i> (interim compensatory measures), 67 Fed. Reg. 9792 (Mar. 4, 2002)	31
<i>Order Modifying Licenses</i> , 67 Fed. Reg. 65,152 (Oct. 23, 2002)	31
<i>Order Modifying Licenses</i> (access authorization), 68 Fed. Reg. 1643 (Jan. 13, 2003)	31
<i>Order Modifying Licenses</i> (security personnel training and qualifications), 68 Fed. Reg. 24,514 (May 7, 2003)	31
<i>Order Modifying License</i> (revised DBT), 68 Fed. Reg. 24,517 (May 7, 2003)	31
69 Fed. Reg. 4,439 (Jan. 30, 2004)	26
71 Fed. Reg. 62,664 (Oct. 26, 2006).....	31
71 Fed. Reg. 74,848 (Dec. 13, 2006)	19
72 Fed. Reg. 12,705 (Mar. 19, 2007).....	31, 32, 33

OTHER AUTHORITIES

- Ass'n. of the Bar of the City of New York,
Committee on Nuclear Technology and the Law,
The Renewal of Nuclear Power Plant Operating Licenses
—*Executive Summary*, 46 *The Record* 899 (1991).....16
- Intergovernmental Panel on Climate Change,
*Fourth Assessment Report of Climate Change:
Summary for Policymakers* (Nov. 2007 draft),
available at <http://www.ipcc.ch>.....15
- National Energy Policy Development Group,
*Reliable, Affordable, and Environmentally
Sound Energy for America's Future: Report of the
National Energy Policy Development Group* (May 2001).....14
- “New York State Notice of Intention to Participate
and Petition to Intervene” in the Indian Point
License Renewal Proceeding (Nov. 30, 2007),
available at NRC ADAMS Accession No. [ML073400187](#).....10
- North America Electric Reliability Corporation,
*2007 Long-Term Reliability Assessment:
The Reliability of Bulk Power Systems in North America*
(Oct. 2007).....14
- Nuclear Energy Institute, “Status and Outlook for Nuclear Energy in
the United States,”(Oct. 2007), *available at*
[http://www.nei.org/resourcesandstats/document
library/reliableandaffordable energy/reports/status/reportoutlook](http://www.nei.org/resourcesandstats/document
library/reliableandaffordable%20energy/reports/status/reportoutlook).....13
- “Riverkeeper, Inc.’s Request for Hearing and
Petition to Intervene in the License Renewal Proceeding for
the Indian Point Nuclear Power Plant” (Nov. 30, 2007),
available at NRC ADAMS Accession No. [ML073410093](#).....10

Statement of Mary J. Hutzler, Energy Info. Admin.,
U.S. Dep't of Energy, Hearing on Nuclear Power before
the Subcomm. on Energy and Air Quality of the House Comm.
on Energy and Commerce (Mar. 27, 2001).....26

U.S. NRC Information Digest 2007-2008.....12-13

U.S. NRC, "Standard Review Plan for Review of
License Renewal Applications," NUREG-1800 (Rev. 1, Sept. 2005).....22, 23

U.S. NRC, "Generic Environmental Impact Statement for License
Renewal of Nuclear Plants," Final Report, Vols 1 & 2, NUREG-1437
(May 1996); available at <http://www.nrc.gov/reading-rm/adams.html>,
ADAMS accession #s ML040690705 and ML04069073823, 24

U.S. NRC, NUREG-1427, Supp. 28, "Generic Environmental Impact
for License Renewal Regarding Oyster Creek Nuclear Generating
Station, Vols. 1 &2" (Jan. 2007), available at [http://www.nrc.gov/
reading-rm/doc-collections/nuregs/staff/sr1437/
supplement28/index/html](http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/supplement28/index/html)24

U.S. NRC, "Foundation for the Adequacy of the Licensing Bases"
NUREG-1412 (July 1990).....18

U.S. NRC, "Regulatory Options for Nuclear Plant
License Renewal," NUREG-1317 (Aug. 1988).....17

U.S. NRC website, NRC Inspection Procedure 71002
(Feb. 18, 2005), [http://www.nrc.gov/reading-rm/doc-
collections/insp-manual/inspection-procedure/ip71002.pdf](http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/ip71002.pdf).....27

U.S. NRC website, "Status of License Renewal Applications and
Industry Activities," [http://www.nrc.gov/reactors/operating/
licensing/renewal/applications.html](http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html).....6

U.S. NRC Website, <http://www.nrc.gov/reactors/operating/>

licensing/renewal/process.html#review-time.....26

U.S. NRC website,

<http://www.nrc.gov/what-we-do/safeguards/faq-force-on-force.html>,

and <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/force-on-force.html>.....30

INTEREST OF THE AMICUS CURIAE

Pursuant to Fed. R. App. P. 29(c), amicus curiae Nuclear Energy Institute (“NEI”) states as follows. NEI is a trade association that represents the commercial nuclear energy industry in regulatory and other matters. NEI’s members include every entity licensed by the U.S. Nuclear Regulatory Commission (“NRC”) to generate electricity at a commercial nuclear power plant or to store used commercial nuclear fuel in the United States. Members also include nuclear plant designers, architect-engineer firms, nuclear fuel fabricators, suppliers of nuclear components and services, universities and other organizations involved in the nuclear energy industry.

The instant appeal raises issues having the potential to significantly affect the utilization of nuclear energy in the United States. NEI and its members have an interest in ensuring that both the National Environmental Policy Act (“NEPA”) and NRC regulations are interpreted and implemented in a correct and sensible manner that protects the public and the environment without pointless delay and expense. Additionally, NEI and its members have an interest in ensuring the continuing availability of nuclear energy in the United States. The viability of the NRC’s license renewal process directly affects the ability of NEI’s members to continue the generation of electricity and plan for the future. That regulatory

process should not be modified or made more burdensome for applicants and the NRC without good reason.

Pursuant to Fed. R. App. P. 29(a), the source of authority to file this brief is the Court's granting of NEI's simultaneously filed "Motion of the Nuclear Energy Institute for Leave to File a Brief Amicus Curiae in Support of the Respondents and Affirmance." Additionally, all parties have consented to the filing of NEI's amicus brief.

JURISDICTIONAL STATEMENT

Matters pertinent to jurisdiction are addressed in the "Jurisdictional Statement" portion of the Brief of the Private Respondent AmerGen Energy Company ("Respondent AmerGen").

STATEMENT OF THE ISSUES

The issues presented for review in this case are set forth in the "Statement of the Issues" section of the Brief of Respondent AmerGen.

STATEMENT OF THE CASE AND STATEMENT OF FACTS

The facts pertinent to this case are set forth in the "Statement of the Case" and the "Statement of Facts" portions of the Brief of Respondent AmerGen.

SUMMARY OF THE ARGUMENT

NEI agrees with the position of both the Private Respondent AmerGen and the Federal Respondents that the NRC Atomic Safety and Licensing Board (“Licensing Board”) and the U.S. Nuclear Regulatory Commission (“NRC” or “Commission”) properly rejected the Petitioner’s proposed Contention 1 in the Oyster Creek nuclear power plant license renewal proceeding on substantive grounds. We support the Commission’s determination and the Respondents’ well-reasoned arguments that under applicable United States Supreme Court precedent, the National Environmental Policy Act of 1969 (“NEPA”), 42 U.S.C. § 4321 *et seq.*, does not require the NRC to analyze the environmental impacts of a hypothetical terrorist aircraft attack on the Oyster Creek nuclear plant as part of the license renewal proceeding for that facility, because the proposed Federal action (license renewal) would not be the proximate cause of those impacts. Further, NEI agrees that *San Luis Obispo Mothers for Peace v. NRC*¹ was wrongly decided and should not be followed. We also endorse the Respondents’ additional legal and policy arguments that support affirmance, and do not discuss those arguments further here.

¹ *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016 (9th Cir. 2006), *cert. denied sub nom. Pacific Gas & Electric Co. v. San Luis Obispo Mothers for Peace*, ___ U.S. ___, 127 S.Ct. 1124 (Jan. 16, 2007).

From the perspective of the nuclear industry, additional considerations also support the denial of New Jersey's Petition for Review. While granting the relief Petitioner seeks will add nothing positive to the NRC's regulatory processes, it will add delay and expense that could unnecessarily disrupt and impede not only the Oyster Creek license renewal proceeding but also other current and future license renewal proceedings for commercial nuclear power plants.

The NRC license renewal process is important to the U.S. nuclear industry. Unnecessarily injecting regulatory uncertainty into this process could disrupt utility planning for future electric generation, at a time when continued operation of the nuclear fleet (which license renewal facilitates) is needed to ensure a reliable energy supply. Granting the relief requested could burden the efforts of the industry and the Federal government to fill the widening gap between the demand for power and domestic energy resources. Given the significance of nuclear power to the Nation's long-term energy security, and the number of license renewal applications now pending at the NRC or expected to be filed in the next several years, the Commission's decision below should be affirmed.

NEI also urges this Court to affirm the Commission decision below because that decision was fully consistent with the NRC's license renewal rules and is supported by the technical rigor of the renewal process. In its insistence that the NRC should be forced to re-interpret and, in our view, contort the statutory and

regulatory framework supporting license renewal to effect the result that it seeks, Petitioner ignores these considerations. When considering Petitioner's demands, moreover, it is important to remember that the NRC established its license renewal rules through extensive, transparent rulemakings, as a valid exercise of its broad statutory authority. The resulting rules reflect reasoned determinations and policy judgments concerning the proper scope of the NRC's safety and environmental license renewal reviews, particularly given that agency's ongoing regulatory oversight of nuclear plants. Petitioner has failed to present any information undermining those judgments.

Finally, NEI requests this Court to consider that the NRC already defines stringent security requirements for nuclear facilities through non-NEPA statutory requirements, regulations, orders and inspections. The NRC vigorously and continuously enforces its security requirements at the nuclear plants under its jurisdiction, whether or not those facilities opt to seek license renewal. Thus, granting the relief Petitioner seeks as part of the license renewal process would not enhance the NRC's comprehensive regulation of nuclear plant security. Because the NRC thoroughly considers during its licensing and renewal reviews those bona fide environmental impacts that might proximately be caused by such actions, granting Petitioner's demands also would not enhance its NEPA-based reviews.

ARGUMENT

I. REVERSING THE NRC'S DECISION COULD UNNECESSARILY IMPEDE AN IMPORTANT NRC REGULATORY PROCESS AND UTILITY PLANNING AT A CRITICAL TIME WHEN NUCLEAR PLANT LICENSE RENEWAL IS NEEDED

A. If Granted, the Relief Petitioner Requests Could Have Far-Reaching Negative Implications for the NRC License Renewal Process

As the Respondents' briefs convincingly demonstrate, the relief Petitioner seeks is unjustified. In addition to the reasons Respondents cite, NEI urges this Court to affirm the Commission decision below because an unwarranted expansion of the license renewal environmental review process such as Petitioner proposes could well trigger widespread licensing delay and regulatory uncertainty in NRC licensing proceedings.

License renewal is a well-established NRC licensing process. The NRC has now issued renewed operating licenses for 48 of the 104 currently operating nuclear plants in the United States.² Further, the NRC is currently reviewing eleven additional license renewal applications, including that for Oyster Creek. Looking to the future, letters of intent from NRC licensees to date indicate that the Commission also may receive up to 24 more license renewal applications in the next several years. *Id.*

² See U.S. NRC, Status of License Renewal Applications and Industry Activities, <http://www.nrc.gov/reactors/operating/licensing/renewal/applications.html>.

The Petitioner's demand that NRC broaden the license renewal process to include an additional, site-specific NEPA analysis of potential terrorist attack impacts would unavoidably increase the time, expense and effort involved in both preparing an application for a renewed operating license and in reviewing such applications. Because "NEPA demands no terrorism inquiry,"³ the Commission has rejected this demand as a legal matter. As a practical matter, the consequence of reversing the Commission's decision would almost certainly be a delay of indeterminate length in the Oyster Creek license renewal proceeding pending an additional, plant-specific evaluation of the potential environmental impacts of an airborne terrorist attack.

Notably, in the NRC licensing proceeding in which the Ninth Circuit's ruling in *San Luis Obispo Mothers for Peace v. NRC* has required a new NEPA analysis of the impacts of hypothetical terrorist attacks, the resulting remand, appeals, preparation of additional analyses and opportunity for hearing has literally added years beyond the original schedule.⁴ Delays of this magnitude (effectively,

³ *AmerGen Energy Co., LLC* (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 N.R.C. 124, 126 (2007). (Petitioner's Appendix 3).

⁴ The still-pending licensing proceeding for an Independent Spent Fuel Storage Installation ("ISFSI") at Pacific Gas & Electric's ("PG&E") Diablo Canyon Power Plant underscores the substantial delay that could result from a reversal of the NRC's decision in this case. In December 2001, PG&E applied to construct and operate the Diablo Canyon ISFSI. After an administrative hearing in which it

regulatory gridlock) also could occur in other NRC proceedings, including license renewal cases, if the NRC is forced to speculate about the potential consequences of successful terrorist attacks.

Moreover, the delay that would be occasioned in the Oyster Creek license renewal proceeding by a reversal of the Commission decision below would be exacerbated by the fact that the unfocused remedy Petitioner proposes cannot readily be accomplished. As the Private Respondent observed, Petitioner would have this Court remand the case to the NRC for an effectively “standardless proceeding.” Brief for Respondent AmerGen at 43. Petitioner did not propose any method by which the NRC might meaningfully assess the risk of an air attack on

rejected contentions involving NEPA and terrorism, the NRC issued a license to PG&E in March 2004. Following an appeal, in June 2006, the Ninth Circuit reversed the NRC and remanded the case to the agency for further proceedings. *San Luis Obispo Mothers for Peace v. NRC*, 449 F.3d 1016, 1035 (9th Cir. 2006), *cert. denied sub nom. Pacific Gas & Electric Co. v. San Luis Obispo Mothers for Peace*, ___ U.S. ___, 127 S.Ct. 1124 (Jan. 16, 2007). In February 2007, the Commission directed the NRC Staff to prepare a supplemental Environmental Assessment (“EA”) to address both the likelihood and the consequences of a terrorist attack on the ISFSI and set out a schedule for an administrative hearing process. *Pacific Gas & Elec. Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation)*, CLI-07-11, 65 N.R.C. 148, 149 (2007). In January 2008, the NRC granted a request to hold further administrative proceedings on the NRC Staff’s treatment of terrorism risks in the Supplemental EA. *Pacific Gas & Elec. Co. (Diablo Canyon Power Plant Independent Spent Fuel Storage Installation)*, CLI-08-01, ___ NRC ___, 2008 WL 152441. The NRC’s hearing process is now ongoing — *more than six years after the application was submitted, nearly four years since the license was issued to PG&E, and two years after the Ninth Circuit’s remand*. This has created considerable uncertainty with respect to an ISFSI that is necessary to keep the Diablo Canyon units operational.

Oyster Creek, or rebut the NRC's longstanding determination that such risks cannot be meaningfully considered under NEPA.⁵

Nor is it certain that the regulatory and adjudicatory implications of a reversal in this case would be limited to the NRC Oyster Creek proceeding. If this Court finds that NEPA requires the NRC to perform an additional site-specific analysis as part of its Oyster Creek license renewal review, that ruling might, in turn, expand the scope of review of other ongoing license renewal proceedings – as well as future license renewal applications. While the extent of such a “ripple effect” is not known, the potential for disruption, open-ended licensing delays and higher costs in NRC license renewal proceedings is clear.

Even now, in the wake of the Ninth Circuit's ruling in *San Luis Obispo Mothers for Peace*, the Commission has been inundated with proposed contentions seeking to litigate the environmental impacts of postulated terrorist attacks on nuclear facilities, both in license renewal and other types of NRC proceedings. Consistent with its ruling in the Oyster Creek renewal proceeding, the Commission has denied the admission of those contentions.⁶ Petitioners, however, remain

⁵ Brief for Federal Respondents at 59-63; Brief for Respondent AmerGen at 46, citing *Limerick Ecology Action v. NRC*, 869 F.2d 719, 744 (3rd Cir. 1989).

⁶ See *Carolina Power & Light Co.* (Shearon Harris Nuclear Power Plant, Unit 1), LBP-07-11, 66 N.R.C. 41, 82-89, 2007 WL 4693653, at *29-34 (N.R.C. Aug. 3, 2007) (rejecting proposed contention in license renewal case that NRC must address the environmental impacts of a successful attack by the deliberate and

undeterred. For example, in the Indian Point Energy Center license renewal proceeding, the State of New York and others proposed contentions alleging that the applicant must consider the environmental impacts of terrorist attacks on the reactors and/or spent fuel pools.⁷ Thus, any ruling by this Court compelling the NRC to do so in this proceeding has the potential to significantly (and unnecessarily) enlarge the scope and duration of future NRC adjudications.

The prospect of such delay and regulatory uncertainty in obtaining a renewed operating license would be an obvious disincentive to licensees in

malicious crash of a fuel-laden and/or explosive-laden aircraft and the severe accident consequences of the aircraft's impact and penetration on the facility); *Southern Nuclear Operating Co.* (Early Site Permit for Vogtle ESP Site), LBP-07-03, 65 N.R.C. 237, 268-69, 2007 WL 2195473, at *25 (N.R.C. Mar. 12, 2007) (rejecting proposed contention in early site permit proceeding that applicant and NRC must address the environmental impacts of intentional attacks on proposed nuclear power plants); *Nuclear Mgmt. Co., LLC* (Palisades Nuclear Plant), CLI-07-09, 65 N.R.C. 139, 141-42, 2007 WL 595085, at *1-2 (N.R.C. Feb. 26, 2007) (rejecting request that the NRC redraft its supplemental EIS for the Palisades plant license renewal and allow late-filed contentions on the environmental impacts of terrorist attacks); *Entergy Nuclear Generation Co. and Entergy Nuclear Operations, Inc.* (Pilgrim Nuclear Power Station), LBP-06-23, 64 N.R.C. 257, 299-300, 2006 WL 4801142, at *29-30 (N.R.C. Oct. 16, 2006) (rejecting proposed contention in license renewal proceeding that NRC must consider potential for terrorist attacks on spent fuel pool).

⁷ See "New York State Notice of Intention to Participate and Petition to Intervene" (Nov. 30, 2007) at 234-45, available at NRC Agency-wide Document Access and Management System ("ADAMS") Accession No. [ML073400187](#); "Riverkeeper, Inc.'s Request for Hearing and Petition to Intervene in the License Renewal Proceeding for the Indian Point Nuclear Power Plant" (Nov. 30, 2007), at 63-68, ADAMS Accession No. [ML073410093](#).

deciding whether to pursue license renewal for an existing nuclear facility.⁸ This is particularly the case if the industry perceives that a previously well-defined and well-understood NRC licensing process will now be expanded to an uncertain degree, as opponents seek to use the process as an open-ended referendum on the NEPA terrorism issue.

These potentially serious policy implications for the license renewal process were not lost on the Commission as it considered whether to affirm the NRC Licensing Board's rejection of the Petitioner's contention. In his concurrence to the Commission's decision affirming the denial of that contention, former Commissioner Jeffrey Merrifield emphasized:

Examining the alleged effects of terrorism in a NEPA document sets the process into a potentially limitless quest to predict how the irrational behavior of terrorism may impact a nuclear facility and then to connect this prediction to the environment surrounding the facility.⁹

⁸ In this regard, the Commission developed the regulatory framework for license renewal to "meet the need of utilities to be informed of license renewal requirements sufficiently early so that utilities can either prepare for license renewal or pursue alternative sources of generating capacity." 53 Fed. Reg. 32,919. Similarly, because it may take twelve years to plan, site, engineer, procure, and construct a replacement facility, the NRC allows license renewal applications to be filed up to 20 years in advance of the expiration of initial licenses. 56 Fed. Reg. 64,943, 64,963 (Dec. 13, 1991).

⁹ *AmerGen Energy Co.*, CLI-07-8, 65 N.R.C. at 137 (PA18).

Commissioner Merrifield emphatically rejected the suggestion that the Commission should apply the “erroneous decision” of the Ninth Circuit in *San Luis Obispo Mothers for Peace* broadly in conducting NRC licensing reviews:

This would quickly lead not to regulatory certainty, but to regulatory strangulation with an ever increasing regulatory burden not based on ensuring adequate protection of the public health and safety, but rather, based on political expediency.¹⁰

In sum, by seeking to erect a gratuitous procedural hurdle to the license renewal process, the Petitioner would inject unnecessary regulatory uncertainty into the NRC’s license renewal process without improving it and (as the Commission recognized) without enhancing safety.

B. Uncertainty and Delay in NRC Licensing Proceedings Could Impair Electric Supply at a Time When the Nation Needs Additional Nuclear and Non-Nuclear Energy Resources

Making the regulatory environment for obtaining a renewed license less certain could complicate NRC reactor licensees’ strategic planning for future electric generation, as they struggle to estimate NRC licensing timelines. At some point, nuclear utilities’ ability to ensure a reliable electrical supply by continued nuclear generation¹¹ could be adversely affected. Companies that would otherwise

¹⁰ *AmerGen Energy Co.*, CLI-07-8, 65 N.R.C. at 137 (PA19).

¹¹ “Extending reactor operating licenses beyond their current 40-year terms will provide a viable approach for electric utilities to ensure the adequacy of future electricity-generating capacity that offers significant economic benefits when

be willing to commit the time, effort and substantial capital investment needed to obtain a renewed license (thereby keeping their nuclear plants operating for an additional 20 years to meet the Nation's energy needs) might well be discouraged. Such licensing hurdles would place pointless burdens on the license renewal process at a time when there is a significant need for energy resources in general and nuclear power in particular in the United States.

Commercial nuclear power plants are substantial assets that are extremely important in providing base load generation¹² of electricity and in maintaining the reliability of the electric power supply in the United States. Currently there are 104 operating units at more than 60 nuclear plants in the country. These plants generate approximately 20% of the Nation's electricity. Along with coal and natural gas, nuclear energy provides an integral part of the Nation's power supply, providing cost stability and output reliability.¹³

compared to the construction of new reactors." *U.S. NRC Information Digest 2007-2008*, p. 46.

¹² "Base load" plants are those designed to produce electricity continuously at or near full capacity, with high availability. *Environmental Law & Policy Ctr. v. NRC*, 470 F.3d 676, 679 (7th Cir. 2006).

¹³ NEI, *Status and Outlook for Nuclear Energy in the United States* 3-4 (2007), <http://www.nei.org/resourcesandstats/documentlibrary/reliableandaffordableenergy/reports/status/reportoutlook>.

Without a substantial boost in domestic supplies of energy, U.S. energy consumption will increasingly outpace production.¹⁴ Over the next 10 years, the utility industry expects peak demand to increase by over 17%, while “committed capacity resources” are expected to increase by only 8.4%.¹⁵ The challenge to increase domestic energy production is compounded by the problems associated with fossil-fuel energy sources. Reliance on imported oil threatens our national security, and tapping domestic fossil-fuel reserves will increase the release of air pollutants such as nitrogen oxides, sulfur dioxide, and mercury, as well as greenhouse gases.¹⁶ Nuclear energy can reduce dependence on foreign oil without emission of greenhouse gases and other pollutants from fossil fuels. *Id.* at xii, 1-5 to 1-6.

¹⁴ See National Energy Policy Development Group, *Reliable, Affordable, and Environmentally Sound Energy for America's Future: Report of the National Energy Policy Development Group*, viii-ix (May 2001) (“National Energy Policy”).

¹⁵ North American Electric Reliability Corporation (NERC), *2007 Long-Term Reliability Assessment: The Reliability of Bulk Power Systems in North America* 10 (Oct. 2007). “Committed capacity resources” include generating capacity that exists, is under construction, or is planned, and is expected to be available, deliverable and committed to serve demand. *Id.*

¹⁶ *National Energy Policy Report*, xiii, 1-6.

Thus, nuclear power is a crucial component of any long-term strategy to meet the Nation's energy needs in ways that are reliable, affordable, and environmentally sound. The Intergovernmental Panel on Climate Change recently listed nuclear energy as a "key" technology for mitigating greenhouse gas emissions.¹⁷ To continue to meet the Nation's current and future need for nuclear power, the NRC's license renewal process should continue under the safe, efficient regulatory framework that the Commission now employs.

II. THE NRC PROPERLY EXERCISED ITS DISCRETION TO ESTABLISH THE SCOPE OF ITS TECHNICALLY RIGOROUS LICENSE RENEWAL PROCESS AND THE PETITIONER HAS FAILED TO PRESENT NEW INFORMATION TO DISTURB THE AGENCY'S INFORMED POLICY JUDGMENTS

Petitioner's insistence that the NRC be directed to upend the statutory and regulatory framework that supports the agency's license renewal process to achieve the result Petitioner seeks improperly ignores the soundness of that regulatory process, as well as the rigor of the renewal process for those applicants that pursue it. Both of these considerations further support the Respondents' arguments that the Commission decision below should be affirmed.

¹⁷ Intergovernmental Panel on Climate Change, *Fourth Assessment Report of Climate Change: Summary for Policymakers* (Nov. 2007 draft), available at <http://www.ipcc.ch>.

A. The NRC Properly Exercised Its Broad Statutory Authority in Establishing the Scope of License Renewal Reviews through Reasoned Rulemaking

The Atomic Energy Act of 1954 (“AEA”), as amended, 42 U.S.C. § 2011 *et seq.*, establishes a “comprehensive regulatory framework for the ongoing review of nuclear power plants located in the United States,”¹⁸ and affords the Nuclear Regulatory Commission considerable latitude, within that framework, to determine how to achieve its statutory mandate to protect the public health and safety.¹⁹ This is particularly true with respect to license renewal, where both the statute and legislative history are silent concerning how license renewal is to be accomplished and what standards apply.²⁰

The NRC’s license renewal rules represent a careful, reasoned, and permissible exercise of this broad statutory authority. The Commission itself has emphasized that its current license renewal regulations “derive from years of

¹⁸ *Rockland County v. NRC*, 709 F.2d 766, 769 (2d Cir. 1983).

¹⁹ *See Siegel v. AEC*, 400 F.2d 778, 783 (D.C. Cir. 1968) (“Congress . . . enact[ed] a regulatory scheme which is virtually unique in the degree to which broad responsibility is reposed in the administering agency, free of close prescription in its charter as to how it shall proceed in achieving the statutory objectives.”). The Commission may, for example, establish generalized presumptions and decide issues generically by rule.

²⁰ Ass’n. of the Bar of the City of New York, Committee on Nuclear Technology and the Law, “The Renewal of Nuclear Power Plant Operating Licenses—Executive Summary,” 46 *The Record* 899 (1991).

extensive technical study, review, interagency input, and public comment.”²¹ The Commission established its license renewal regulations after extensive deliberations and lengthy, comprehensive rulemakings that provided extensive opportunity for public involvement.

The NRC’s technical research on plant aging began earlier in the 1980’s. *See* 55 Fed. Reg. 29,043, 29,044 (July 17, 1990). During that time period, the NRC also solicited public comments on basic policy issues, including the proper scope of renewal applications and whether applicants should be required to show conformance to regulations in effect on the date of the extension application. The NRC outlined regulatory options for nuclear plant license renewal,²² and sought public comment on that issue in an advance notice of proposed rulemaking. It then analyzed the resulting public comments, developed a preliminary rulemaking philosophy and statement of regulatory scope, conducted a public workshop to receive input on policy and technical issues (*see* 54 Fed. Reg. 41,981 (Oct. 13,

²¹ *Florida Power & Light Co.* (Turkey Point Nuclear Generating Plant, Units 3 and 4), CLI-01-17, 54 N.R.C. 3, 7; 2001 WL 871673, at *3.

²² *See*, for example, U.S. NRC, “Regulatory Options for Nuclear Plant License Renewal,” NUREG-1317 at 2-4 (Aug. 1988); *see* 53 Fed. Reg. 32,919 (Aug. 29, 1988). This report focused on the threshold question of what constitutes an adequate licensing basis for license renewal and whether renewal applicants should be required to demonstrate, *de novo*, compliance with all regulatory requirements applicable to startup of a new plant.

1989)), and published a proposed license renewal rule. This proposed rule articulated the fundamental principles on which the current license renewal process is based and the Commission's determination that license renewal should focus on aging management issues. 55 Fed. Reg. 29,043. Of particular interest, the proposed rule explained how the NRC's regulatory requirements and programs maintain adequate security and, therefore, why the NRC did not propose to re-review such operational programs during license renewal. *Id.* at 29,053-54. The proposed rule was supported by a number of NRC reports.²³

In 1991, the NRC promulgated a new 10 C.F.R. Part 54, in which it justified the rationale for the rule's focus on aging management (including, for example, how the NRC regulatory process maintains the adequacy of security at each plant). 56 Fed. Reg. 64,943, 64,966-67. The NRC then developed license renewal regulatory guidance and a standard review plan, interacted with potential industry applicants, identified implementation issues and initiated additional rulemaking proceedings to resolve them. *See* 59 Fed. Reg. 46,574 (Sept. 9, 1994). This effort culminated in 1995 amendments to the license renewal regulations that reaffirmed the regulatory philosophy and approach underlying the 1991 rule and clarified the

²³ See, for example, NUREG-1412, "Foundation for the Adequacy of the Licensing Bases" (July 1990), which examined the adequacy of nuclear plants' current licensing basis "for the full range of specific areas of major safety issues." NUREG-1412 at 1-1. *See* 55 Fed. Reg. at 29,048, 29,055.

two principles of license renewal. *See* 60 Fed. Reg. 22,461, 22,463-66 (May 8, 1995).

The license renewal rules are based on the NRC's determination that existing NRC regulatory processes are adequate to ensure that the licensing bases of currently operating plants provide and maintain an adequate level of safety. 60 Fed. Reg. at 22,464, 22,481-82; *see also* 71 Fed. Reg. 74,848, 74,851 (Dec. 13, 2006). The regulations further reflect the NRC's considered policy judgments that (1) issues relevant to both current operation and extended operation during the renewal period should be addressed when they arise, not postponed until a license renewal decision; and that (2) duplicating the Commission's ongoing regulatory review in a license renewal proceeding would waste NRC resources, which are better focused on aging management concerns.²⁴

These agency determinations are well founded. In promulgating its license renewal rules, the Commission explained how its ongoing regulatory processes reasonably assure that each plant's current licensing basis ("CLB")²⁵ maintains an adequate level of safety:

²⁴ *See* 56 Fed. Reg. 64,943, 64,946; 60 Fed. Reg. 22,461, 22,481; *Turkey Point*, CLI-01-17, 54 N.R.C. at 7, 2001 WL 871673, at *5-6.

²⁵ The CLB is "the set of NRC requirements applicable to a specific plant and a licensee's written commitments for ensuring compliance with and operation within

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

56 Fed. Reg. at 64,945. Further, the Commission explained:

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

Id. at 64,947. The NRC also described the inspection program conducted to ensure each licensee remains in compliance with its current licensing basis. *Id.* at 64,951.

Given the NRC’s extensive ongoing regulation of nuclear reactors and its informed judgment that resolution of safety concerns should not be deferred, it was well within the Commission’s statutory discretion and well within the realm of

applicable NRC requirements and the plant-specific design basis (including modifications and additions to such commitments over the life of the license) that are docketed and are in effect.” 10 C.F.R. § 54.3; *see also* 56 Fed. Reg. at 64,949. The CLB encompasses all of the NRC requirements that a plant must meet to continue operating.

reasoned decision-making for it to determine that redundant licensing reviews of matters (such as plant security) that are addressed on an ongoing basis under NRC regulations were not necessary as part of license renewal. Such issues are addressed under the current license, instead of postponing the matter until the license renewal period.²⁶ As the Commission has recognized, terrorism contentions such as those Petitioner raises are intrinsically related to nuclear plant security and therefore are unrelated to license renewal, with its focus on aging management.²⁷ Brief of Respondent AmerGen at 25.

B. The NRC License Renewal Process is Thorough and Rigorous

Although the scope of NRC review for renewal of the license of a plant that is already sited, built and has many years of demonstrated safe operation is understandably different from initial plant licensing, the license renewal process that the NRC has established under its broad statutory authority is nonetheless thorough, rigorous and appropriately focused. In a license renewal application, the applicant must include an extensive Integrated Plant Assessment demonstrating that the aging of certain systems, structures and components (“SSCs”) will be managed so as to reasonably assure that they will perform their intended functions

²⁶ In doing so, the NRC avoided wasting agency resources and instead allowed its Staff to focus “on the most significant safety concerns at issue during the renewal term.” *Turkey Point*, CLI-01-17, 54 N.R.C. at 7, 2001 WL 871673, at *3.

²⁷ *AmerGen Energy Co*, CLI-07-8, 65 N.R.C. at 129 (PA6).

during the period of extended operation. 10 C.F.R. § 54.21(a).²⁸ These SSCs are analyzed to identify those structures and components that are passive and long-lived. *Id.*, § 54.21(a)(1)(i)-(ii).²⁹ For each such structure and component, the applicant's assessment must demonstrate that aging is being adequately managed (*id.*, § 54.21(a)(3)), which requires identifying the materials in the components, the environments to which they are exposed and the aging effects that result, and providing an aging management program that meets NRC acceptance criteria.³⁰ The application must also evaluate all time-limited aging analyses on which initial licensing was based, to demonstrate that such analyses remain valid for or have

²⁸ This assessment identifies SSCs that (1) are relied upon to prevent or mitigate events or accidents; (2) could prevent safety-related SSCs from performing their intended functions; or (3) are relied upon to address specific regulations. 10 C.F.R. §§ 54.4(a)(1)-(3), 54.31(a)(1).

²⁹ These structures and components include, for example, the reactor vessel, the reactor coolant system pressure boundary, steam generators, the pressurizer, piping, pump casings, valve bodies, the core shroud, component supports, pressure retaining boundaries, heat exchangers, ventilation ducts, the containment, the containment liner, electrical and mechanical penetrations, equipment hatches, seismic Category I structures, electrical cables and connections, cable trays, and electrical cabinets, excluding, but not limited to, pumps (except casing), valves (except body), motors, diesel generators, air compressors, snubbers, the control rod drive, ventilation dampers, pressure transmitters, pressure indicators, water level indicators, switchgears, cooling fans, transistors, batteries, breakers, relays, switches, power inverters, circuit boards, battery chargers, and power supplies. 10 C.F.R. § 54.21(a)(1)(i).

³⁰ See U.S. NRC, "Standard Review Plan for Review of License Renewal Applications," NUREG-1800 at 3.0-1 (Rev. 1, Sept. 2005).

been projected to the end of the period of extended operation, or will otherwise be adequately managed. 10 C.F.R. § 54.21(c).³¹

C. NRC NEPA Regulations Adequately Address Environmental Impacts Proximately Caused by License Renewal

On the environmental side, a license renewal applicant must submit an environmental report (“ER”) (10 C.F.R. §§ 51.53(c), 54.23) that assists the NRC staff in preparing an environmental impact statement (“EIS”) (*see* 10 C.F.R. § 51.95(c)).³² As the Respondents note, assuming *arguendo* that NEPA may be said to require NRC to analyze the potential effects of a hypothetical terrorist attack on a nuclear power plant for license renewal, the Commission reasonably concluded that its has satisfied this requirement through preparation of a license renewal

³¹ For example, these analyses must address reactor vessel neutron embrittlement, concrete containment tendon prestress, metal fatigue, environmental qualification of electrical equipment, metal corrosion allowance, flaw growth analyses, local metal containment corrosion analyses, and high-energy line-break postulation based on fatigue cumulative usage factor. NUREG-1800 at 4.1-5.

³² As Respondents’ briefs explain, the NRC’s license renewal environmental review tiers off of a Generic Environmental Impact Statement for License Renewal of Nuclear Plants (“GEIS”), NUREG-1437 (1996), the findings of which are codified in Appendix B to 10 C.F.R. Part 51. Those issues that could be resolved generically for all plants are designated as Category 1 issues and are not evaluated further in a license renewal proceeding (absent waiver or suspension of the rule based on new and significant information). *See* 61 Fed. Reg. 28,467, 28,468, 28,470, 28,474 (June 5, 1996). The remaining (Category 2) issues that must be addressed in an applicant’s license renewal ER are defined in 10 C.F.R. § 51.53(c). *See Turkey Point*, CLI-01-17, 54 N.R.C. at 11-12, 2001 WL 871673, at *7-8.

GEIS and a site-specific supplement to that GEIS for the Oyster Creek facility.³³

This further undercuts the asserted need for the relief Petitioner seeks.

The GEIS concludes that in the context of license renewal, the consequences of sabotage, a terrorist act, would be comparable to those of a “severe accident,”³⁴ which is analyzed both generically in the GEIS and on a site-specific basis in GEIS Supplement 28 for Oyster Creek. The GEIS analysis of severe accident consequences reflects the NRC’s conclusion that those consequences bound the potential consequences that might result from the core damage and radiological release from a beyond-design-basis event, whether the initiating cause was an

³³ See NUREG-1427, Supp. 28, Generic Environmental Impact for License Renewal Regarding Oyster Creek Nuclear Generating Station, Vols. 1 & 2” (Jan. 2007), available at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/supplement28/index/html>.

³⁴ The GEIS considered both design basis accidents and severe accidents (those that are more serious because they could result in substantial damage to the reactor core) during the period of license renewal. NRC evaluated the impacts of severe accidents initiated by external phenomena (e.g., tornadoes, floods, earthquakes and fires) and by sabotage (a terrorist act). GEIS, vol. 1 at 5-17 – 5-18. The GEIS concludes that the threat of sabotage events cannot be accurately quantified, that acts of sabotage “are not reasonably expected,” and that if such events were to occur, NRC would expect “resultant core damage and radiological releases would be no worse than those expected from internally initiated events.” *Id.*, at 5-18 (RA27). The GEIS also made a specific finding about the risk of, and impacts from, terrorist acts, concluding that the risk from sabotage is “small” and that the risks from other external events are adequately addressed by a generic consideration of internally initiated severe accidents. *Id.* Part 51 Subpart A, Appendix B, Table B-1 codifies this finding. See Brief of Federal Respondents at 8-9, 50-53, 56; Brief of Respondent AmerGen at 9-11.

internal event or an external terrorist attack. Thus, NRC environmental license renewal regulations do not require a separate, site-specific NEPA analysis of the potential impacts of terrorist events.

Further, the licensee's ER and the NRC's plant-specific supplemental EIS include a severe accident mitigation alternatives ("SAMA") analysis; *see* 10 C.F.R. § 51.53(c)(3)(ii)(L).³⁵ *See* Brief of Respondent AmerGen at 10-11. This is a cost-benefit assessment "to ensure that any plant changes – in hardware, procedures, or training – that have the potential for significantly improving severe accident safety performance are identified and assessed."³⁶ Significantly, the Petitioner did not allege deficiencies in any of these environmental analyses.

³⁵ The Licensing Board rejected Petitioner's contention that AmerGen's SAMA analysis should address the impacts of a terrorist air attack on Oyster Creek on grounds that NRC had already performed an analysis of terrorist attacks in connection with license renewal, and found "that the core damage and radiological release from such acts would be no worse than the damage and release to be expected from internally initiated events." *AmerGen Energy Co., LLC*, LBP-06-07, 63 N.R.C. 188, 201 n. 8 (2006) (PA60).

³⁶ *See Duke Energy Corp.* (McGuire Nuclear Station, Units 1 and 2; Catawba Nuclear Station, Units 1 and 2), CLI-02-17, 56 N.R.C. 1, 5, 2002 WL 1772735, at *2 (SAMA evaluation uses site-specific probabilistic risk analyses to assess risk in terms of averted public health consequences, on-site cleanup costs, property damage, occupational radiation exposure, and replacement power costs. *Id.* at 7, 8 n.14.).

In sum, a license renewal application requires NRC reactor licensees to conduct an extensive and sophisticated technical evaluation on the relevant safety and environmental issues. Preparing a license renewal application is a significant undertaking. Oyster Creek's license renewal application, for example, is approximately 2,500 pages long.³⁷ Renewal applications typically require months to prepare and "[t]he cost to the owner of pursuing a license renewal has been estimated at between \$10 million and \$20 million per reactor, and requires detailed descriptions of expected aging effects and how they will be addressed to maintain safe operation."³⁸

The NRC Staff's review of each license renewal application is equally rigorous, typically requiring from 22 to 30 months, depending on whether a hearing is requested³⁹ and involving approximately 19,000 person-hours. 69 Fed. Reg. 4,439, 4,445 (Jan. 30, 2004). As part of this review, the NRC conducts audits and inspections to verify the applicant's license renewal program, verify that the

³⁷ The Oyster Creek license renewal application can be accessed on line at: <http://www.nrc.gov/reactors/operating/licensing/renewal/applications/html>.

³⁸ Statement of Mary J. Hutzler, Energy Info. Admin., U.S. Dep't of Energy, Hearing on Nuclear Power before the Subcomm. on Energy and Air Quality of the House Comm. on Energy and Commerce (Mar. 27, 2001).

³⁹ See <http://www.nrc.gov/reactors/operating/licensing/renewal/process.html#review-time>.

material condition of SSCs will be adequately managed, and verify that required information is retrievable and auditable.⁴⁰ These inspections include walk-downs of SSCs to verify that any observable aging effects have been identified and that aging management programs will provide sufficient opportunity to detect, monitor, trend, and correct age-related degradation through performance and/or condition monitoring, technical specification surveillances, and other aging management activities. *Id.* at 3.

III. REQUIRING AN ADDITIONAL LICENSE RENEWAL NEPA REVIEW OF THE IMPACTS OF A TERRORIST AIR ATTACK WOULD ENHANCE NEITHER THE NRC'S COMPREHENSIVE REGULATION OF FACILITY SECURITY NOR ITS CONSIDERATION OF ENVIRONMENTAL CONCERNS

The Petitioner gives short shrift to the NRC's current security regulations other than to state that the agency's obligation to comply with NEPA "is not excused by other actions it has taken to address security at a nuclear facility." Brief of Petitioner at 45. The Commission's own sound interpretation of NEPA properly drives its "longstanding view that NEPA demands no terrorism inquiry"⁴¹ and does not require the agency to consider the environmental consequences of a hypothetical terrorist attack on NRC-licensed facilities. While the NRC's broad

⁴⁰ NRC Inspection Procedure 71002 (Feb. 18, 2005) is available at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/ip71002.pdf>.

⁴¹ *AmerGen Energy Co.*, CLI-07-8, 65 N.R.C. at 126 (PA3).

ongoing efforts to ensure nuclear plant security and enhance protection of nuclear facilities against the risk of terrorism do not “excuse” compliance with NEPA, those efforts merit recognition and provide additional context for the Commission’s decision below. In the area of nuclear plant security, the NRC’s regulatory processes work to continuously maintain an acceptable level of safety.

A. Pursuant to the Atomic Energy Act, the NRC Administers a Stringent Regulatory Program Governing the Steps that NRC Reactor Licensees Must Take to Secure their Plants

It is not necessary to use NEPA as a legal vehicle for requiring the Commission to consider the effects of a terrorist attack on a nuclear power plant because NRC is already “heavily focused” on preventing such attacks. Federal Respondents’ Brief at 21. The NRC provides for reactor security through a comprehensive statutory and regulatory framework. Not surprisingly, that legal framework does not include NEPA because NEPA is neither a threat assessment nor an anti-terrorism statute. In contrast, the provisions of the Atomic Energy Act require the NRC to consider in its licensing decisions both public health and safety and the physical security of its licensed facilities.⁴²

⁴² See, e.g., 42 U.S.C. § 2201 (NRC obligation to regulate the possession and use of licensed materials to promote the common defense and security), 42 U.S.C. § 2012 (NRC obligation to “assure the common defense and security”); 42 USC § 2167 (NRC obligation to prohibit the unauthorized disclosure of safeguards information, and provide safeguards against threats of theft, diversion, and sabotage of licensed facilities and materials).

To comply with the AEA's requirements in this area, the NRC has created a sophisticated, continually evolving regulatory framework to ensure the physical security of nuclear facilities. *See* 10 C.F.R. Part 73, "Physical Protection of Plants and Materials," which spans 75 pages in the Code of Federal Regulations. These NRC security regulations require reactor licensees (among others) to establish and maintain a comprehensive physical protection system against sabotage.

The agency's fundamental approach is to identify the "design basis threat" ("DBT"), which describes general adversary characteristics, and then to require licensees to defend against and repel these specified threats with high assurance. The Commission's sophisticated threat assessment assumes the existence of a terrorist force that is dedicated, well-armed, well-trained, capable of launching a "determined violent external assault, attack by stealth, or deceptive actions," and that may have active insider assistance from a "knowledgeable individual" at the plant.⁴³ To protect nuclear facilities against such attacks, licensees must establish and maintain an onsite physical protection system and security organization, whose required features are specified in meticulous detail in NRC rules. Additionally, the NRC conducts on-site force-on-force exercises designed to test the effectiveness of those measures. An NRC force-on-force inspection includes both a "table-top"

⁴³ *See* 10 C.F.R. §§ 73.1(a)(1)(i)(A), 73.1(a)(1)(iii), 73.1(a)(1)(i)(B), 73.1(a)(2)(i)(C)-(E).

drill and a realistically simulated, commando-style live attack on the licensee's facility by mock adversaries to probe for security deficiencies.⁴⁴

B. Since September 11, 2001, the NRC and the Nuclear Industry Have Redoubled Efforts to Secure NRC Facilities against Terrorist Attack

Far from indicating any laxity in the NRC's oversight of plant security, the Commission's timely and robust response to the events of September 11, 2001, illustrates how the NRC's regulatory process maintains an appropriate level of security even in the face of new threats. Since 9/11, NRC has thoroughly reviewed its security regulations in concert with officials from the Department of Homeland Security ("DHS"), the Federal Bureau of Investigation, and the Departments of Energy and Transportation.⁴⁵ The NRC also established a new Office of Nuclear Security and Incident Response to work with law enforcement agencies and DHS to ensure immediate operational security and develop long-term security policy.

Between February 25, 2002 and April 29, 2003, the NRC issued several orders directing all operating commercial nuclear power plants to implement more stringent anti-terror measures (beyond those required by regulation) to address the

⁴⁴ See the NRC website: <http://www.nrc.gov/what-we-do/safeguards/faq-force-on-force.html>, and <http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/force-on-force.html>.

⁴⁵ *Riverkeeper, Inc. v. Collins*, 359 F.3d at 160-161, 168-169.

heightened threat environment.⁴⁶ While the details of these orders are not all public, the new measures generally required “enhancements such as increased patrols, augmented security forces and capabilities, additional security posts, additional physical barriers, vehicle checks at greater standoff distances, enhanced coordination with law enforcement and military authorities, augmented security and emergency response training, equipment, and communication, and more restrictive site access controls for personnel.”⁴⁷

In addition to these activities, the NRC conducted a rulemaking to strengthen its Design Basis Threat regulations, which require protection against sabotage of reactors and theft or diversion of nuclear material.⁴⁸ Based on the NRC’s experience and insights during implementation of its post 9/11 orders, this

⁴⁶ See *Order Modifying Licenses* (interim compensatory measures), 67 Fed. Reg. 9792 (Mar. 4, 2002); *Order Modifying Licenses*, 67 Fed. Reg. 65,152 (Oct. 23, 2002); *Order Modifying Licenses* (access authorization), 68 Fed. Reg. 1643 (Jan. 13, 2003); *Order Modifying Licenses* (security personnel training and qualifications), 68 Fed. Reg. 24,514 (May 7, 2003); *Order Modifying Licenses*, 68 Fed. Reg. 24,517 (revised DBT) (May 7, 2003). The specific requirements of these orders are considered Safeguards Information protected against disclosure. See 71 Fed. Reg. 62,664, 62,665 (Oct. 26, 2006).

⁴⁷ 71 Fed. Reg. at 62,665; see also *Riverkeeper*, 359 F.3d at 161.

⁴⁸ See NRC Final Rule, Design Basis Threat, 72 Fed. Reg. 12,705 (Mar. 19, 2007), which is the subject of petitions for review. *Public Citizen v. NRC*, Nos. 07-71868 and 07-72555 (9th Cir. filed 2007).

final rule codifies and makes generically applicable security requirements similar to those previously imposed by the Commission.

Of particular interest, the Commission has long recognized the threat of air-based attacks against nuclear facilities. *See* 72 Fed. Reg. 12,705, 12,710 (Mar. 19, 2007). As noted in the preamble to the 2007 NRC DBT rule, classified studies using state-of-the-art structural and fire analyses indicate that, as a practical matter, a deliberate airborne attack is unlikely to result in a significant offsite release from a nuclear plant. *Id.* at 12,712. In addition to its own studies, the Commission also considered the work of other Federal agencies since 9/11 in dealing with the air threat (*id.* at 12,710-11), as well as other relevant factors, in formulating the amended DBT rule:

Ultimately, the Commission . . . has determined that active protection against the airborne threat requires military weapons and ordnance that rightfully are the responsibilities of the Department of Defense (DOD), such as ground-based air defense missiles, and thus, the airborne threat is one that is beyond what a private security force can reasonably be expected to defend against. This does not mean that the Commission is discounting the airborne threat; merely that the responsibility for actively protecting against the threat lies with other organizations of the Federal government, as it does for any U.S. commercial infrastructures.

...

In addition, the NRC believes that application of ground-based air defense weapons would present significant command and control challenges, particularly relating to the time required to identify and confirm the presence of a hostile aircraft and for a commercial entity to get permission to engage. The potential for collateral damage to the surrounding community also

would have to be considered. Deployment of protective measures such as no-fly zones, combat air patrols, and ground-based air defenses are undertaken by many other Federal organizations working on preventing and protecting critical infrastructure from terrorist attacks . . .

72 Fed. Reg.. at 12,710. The NRC ultimately concluded that adequate protection did not require inclusion of an airborne threat in the DBT, nor that licensees implement specific additional physical security measures. *Id.* at 12,711.

For their part, NRC licensees have made extraordinary investments to fulfill their own obligations under the AEA to ensure that nuclear facilities are protected against terrorist attacks.⁴⁹ Since 9/11, NEI's industry members have spent approximately \$1.5 billion to implement the NRC's security orders and respond to the revised design basis threat. That money has gone, for example, to hire and train more security personnel at power plants and fuel storage installations, and to add security patrols, security posts, and physical and vehicle barriers. NEI members also have added measures to guard adjacent waterways and additional land areas. *Private Fuel Storage*, 56 N.R.C. at 344. They have evaluated potential facility vulnerabilities, developed plans for responding to events that that could

⁴⁹ See *Riverkeeper*, 359 F.3d at 168-169; *Private Fuel Storage* (Independent Spent Fuel Storage Installation), CLI-02-25, 56 N.R.C. 340, 344, 2002 WL 3183340, at *3. (PA257).

damage their plants,⁵⁰ improved their coordination with law enforcement and military authorities, and imposed additional site access restrictions.⁵¹

The Commission has determined that compliance with its security regulations, augmented by post 9/11 enhancements, provides “the best vehicle for protecting the public.”⁵² As a Federal court has recognized:

[N]uclear power plants are among the most hardened and secure industrial facilities in our nation. The many layers of protection offered by robust plant design features, sophisticated surveillance equipment, physical security protective features, professional security forces, access authorization requirements, and NRC regulatory oversight provide an effective deterrence against potential terrorist activities that could target equipment vital to nuclear safety.⁵³

In light of the NRC’s extensive existing security oversight, requiring the NRC and NRC licensees to prepare the additional site-specific NEPA evaluations Petitioner proposes would divert agency resources to prepare costly, time-consuming analyses that would not improve security, would not improve consideration of environmental impacts, and would not produce useful new information.

⁵⁰ See *Riverkeeper*, 359 F.3d at 161.

⁵¹ See *Private Fuel Storage*, 56 N.R.C. at 344, 2002 WL 3183340, at *3. (PA257).

⁵² See *AmerGen Energy Co.*, CLI-07-8, 65 N.R.C. at 130 n. 28 (PA8).

⁵³ See *Riverkeeper, Inc. v. Collins*, 359 F.3d 156, 160 (2d Cir. 2004) (quoting *Entergy Nuclear Operations, Inc.* (Indian Point, Units 1, 2, & 3), DD-02-06, 56 N.R.C. 296, 300 (2002)).

CONCLUSION

For the foregoing reasons and those presented in the Brief for the Federal Respondents and the Brief for Private Respondent AmerGen, the petition for review should be denied.

Respectfully submitted,



Ellen C. Ginsberg, Esq.
Michael A. Bauser, Esq.
Anne W. Cottingham, Esq.
Nuclear Energy Institute, Inc.
1776 I Street, N.W., Suite 400
Washington, D.C. 20006-3708

*Attorneys for Amicus
Nuclear Energy Institute, Inc.*

Dated: January 29, 2008

**CERTIFICATION OF COMPLIANCE WITH TYPE-VOLUME
LIMITATION, TYPEFACE REQUIREMENTS, TYPE STYLE
REQUIREMENTS, CONSISTENCY AND VIRUS CHECK**

1. The foregoing Brief of Amicus Curiae Nuclear Energy Institute, Inc. (“Brief”) complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) because this brief contains 6,608 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii). In preparing this certification, I relied on the word processing system used to prepare the foregoing Brief: Microsoft Office Word 2003.

2. The foregoing Brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because it has been prepared in a proportionally spaced typeface using Microsoft Word 2003 in 14 point Times New Roman font.

3. The .pdf file submitted electronically to the Court and parties contains text identical to that included in the hard copies of the Brief Amicus Curiae of the Nuclear Energy Institute, Inc. in Support of Respondents and Affirmance.

4. The .pdf file of the foregoing Brief Amicus Curiae of the Nuclear Energy Institute, Inc. in Support of Respondents and Affirmance submitted

electronically to the Court and parties was scanned for viruses with the Symantec Antivirus Program 10.1.5.5000, Version 11/4/2007, Rev. 9, and found to be virus-free.

Respectfully submitted,

A handwritten signature in cursive script that reads "Michael A. Bauser". The signature is written in black ink and is positioned above a horizontal line.

Michael A. Bauser, Esq.
Nuclear Energy Institute, Inc.
1776 I Street, N.W., Suite 400
Washington, D.C. 20006-3708
(202) 739-8144
D.C. Bar 215996

Dated: January 29, 2008

**IN THE UNITED STATES COURT OF APPEALS
FOR THE THIRD CIRCUIT**

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION,)	
)	
Petitioner,)	
)	No. 07-2271
v.)	
)	
U.S. NUCLEAR REGULATORY COMMISSION, et al.,)	
)	
Respondents.)	

CERTIFICATE OF SERVICE

I hereby declare under penalty of perjury that on January 29, 2008, I served the “Brief Amicus Curiae of the Nuclear Energy Institute, Inc. in Support of Respondents and Affirmance” in Case No. 07-2271, by placing the original and ten copies in an overnight delivery service, postage prepaid, addressed to this Court, along with email service of an electronic copy in PDF format. I also served two copies of the Brief Amicus Curiae on each of the individuals listed below by both overnight delivery service, posted prepaid, and email service of an electronic copy in PDF format.

I hereby certify that the electronic copy of the Brief Amicus Curiae served on this Court was scanned for viruses using the Symantec Antivirus Program

10.1.5.5000, Version 11/4/2007, Rev. 9, and was found to be virus-free. I also certify that the text of the electronic copy of the Brief and the paper copies of the Brief served are identical.

Respectfully submitted,



Michael A. Bauser (DC Bar # 215996)
Counsel of Record
Nuclear Energy Institute, Inc.
1776 I Street, N.W., Suite 400
Washington, D.C. 20006-3708
(202) 739-8144

January 29, 2008

Charles E. Mullins
Senior Attorney
Office of the General Counsel
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852-2738
(301) 415-1618
cem@nrc.gov

John A. Covino
Eileen P. Kelly
Deputy Attorneys General
N.J. Office of the Attorney General
Law Division; Hughes Justice
Complex
25 Market Street
P.O. Box 093
Trenton, NJ 08625
(609) 633-0651
john.covino@dol.lps.state.nj.us
eileen.kelly@dol.lps.state.nj.us

Tamara N. Roundtree
U.S. Department of Justice
Attorney, Appellate Section
Environment & Natural Resources
Division
601 D Street, NW, Room 2121
Washington, D.C. 20004
(202) 514-1174
tamara.roundtree@usdoj.gov

Brad Fagg
Morgan, Lewis & Bockius, LLP
1111 Pennsylvania Avenue
Washington, D.C. 20004
(202) 739-5191
bfagg@morganlewis.com