

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

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|-----------------------------------|---|-------------------------|
| In the Matter of:                 | ) | March 28, 2006          |
|                                   | ) |                         |
| AMERGEN ENERGY COMPANY, LLC       | ) | Docket No. 50-219-L.R.  |
|                                   | ) |                         |
| (License Renewal for Oyster Creek | ) | ASLB No. 06-844-01-L.R. |
| Nuclear Generating Station)       | ) |                         |
|                                   | ) |                         |

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BRIEF ON BEHALF OF PETITIONER  
NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
ON APPEAL FROM ORDER LBP-06-07 OF THE ATOMIC SAFETY AND LICENSING  
BOARD DENYING REQUEST FOR HEARING AND PETITION TO INTERVENE

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INTRODUCTION

This matter concerns the application of American Energy Company, LLC ("AmerGen") to renew its license to operate the Oyster Creek Nuclear Generating Station ("Oyster Creek"), which is located in Lacey Township, New Jersey. AmerGen seeks to renew the operating license for 20 years beyond its expiration date of April 9, 2009. Oyster Creek has been in operation since 1969 and is the oldest commercial nuclear power plant in the United States.

Pursuant to 10 C.F.R. 2.311(b), Petitioner New Jersey Department of Environmental Protection ("NJDEP") appeals from Decision and Order No. LBP-06-07 of the Atomic Safety and Licensing Board ("Board") to the extent that such decision and order denied NJDEP's request for hearing and petition to intervene in the Oyster Creek relicensing proceedings. The Board correctly ruled that NJDEP has established standing in this matter on behalf of the

State of New Jersey. As will be discussed herein, the Board erred in ruling that none of the contentions NJDEP proposed are "admissible" in the relicensing proceeding so as to entitle NJDEP to participate as a party in those proceedings. This Commission should reverse that part of the Board's Order and grant NJDEP's request for hearing on the three contentions and allow it to intervene.

#### STATEMENT OF THE CASE

AmerGen currently operates Oyster Creek pursuant to Operating License No. DPR-16. AmerGen filed its application for a 20-year renewal of that license on July 22, 2005. 70 F.R. 44940; see also letter from C. N. Swenson to the Commission (Agencywide Documents and Access Management System ("ADAMS") Accession No. ML 052080172).<sup>1</sup> On September 15, 2005, the Commission published a notice of acceptance of the Oyster Creek application for docketing and a notice for opportunity for hearing thereon. 70 F.R. 54585.

By letter from former NJDEP Commissioner Bradley M. Campbell, dated November 14, 2005, NJDEP filed a request for hearing and petition for leave to intervene in the Oyster Creek proceedings (NJDEP Petition, ML 053360595). Former Commissioner Campbell's letter stated that: "Public assurance that Oyster Creek's continued operation does not represent an unnecessary risk

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<sup>1</sup>For brevity, NJDEP will refer only to the "ML" number in remaining citations.

to the citizens of New Jersey is essential. Oyster Creek, being the oldest operating nuclear power plant, would be the first practical test of nuclear operations beyond a 40-year license." Id. at 2.

NJDEP's petition raised three primary contentions. The first pertains to the prospect of severe accidents, including terrorist attack by air. AmerGen is required to submit a Severe Accident Mitigation Alternatives ("SAMA") analysis as part of its application for relicensure. 10 C.F.R. 51.53 (c) (3) (ii) (L). Following the tragic events of September 11, 2001, the Commission undertook a re-evaluation of programs and procedures to determine potential Design Basis Threats ("DBT"), the adversary force composition and characteristics against which nuclear power facility owners must design their physical protection systems and response strategies. See 10 C.F.R. 73.1. As AmerGen admits, its SAMA submissions do not include a DBT analysis specific to Oyster Creek concerning the potential threat to the facility, and the vulnerability of the spent fuel pool, from terrorist attack (AmerGen Answer to NJDEP Petition, ML 053490340, at 12). Oyster Creek presents a prime target for terrorist attack because it is the most centrally located nuclear facility on the Atlantic seaboard comprised of the comparatively unreliable and vulnerable Mark I design. A DBT analysis concerning a terrorist air attack, specific to Oyster Creek, should be included in the SAMA. Further,

interim compensatory measures which this Commission imposed on all nuclear power plants to increase their capability of response to major accidents should not be relied upon for the extended term of Oyster Creek's proposed relicensure (NJDEP Petition, ML 053360595, at 4-6; see 70 F.R. 67380 as to the interim requirements).

NJDEP's second primary contention was that AmerGen is applying an incorrect cumulative usage factor ("CUF") for evaluations of metal fatigue for the reactor coolant pressure boundary and associated components, thereby significantly reducing the margin of safety for metal fatigue. Id. at 7. The CUF in effect when Oyster Creek began operations in 1969 was 0.8. In its renewal application, however, AmerGen makes extensive use of a different CUF, 1.0. Applying the CUF of 1.0 instead of 0.8 results in a 25 per cent increase in allowable fatigue life. AmerGen has indicated in its renewal application "that it will revise its CLB [current licensing basis] to reflect a CUF of 1.0...." (Board Decision, ML 060580677, at 17). Yet AmerGen's declaration of intent to change its CUF to 1.0 is not enough. AmerGen must also receive authorization for that change from the Office of Nuclear Reactor Regulation after a public process. 10 C.F.R. 50.55(a)(3). Until that process is completed, AmerGen's CUF must remain at 0.8. Id.; NJDEP Supplemental Brief on Cumulative Usage Factor, ML 060390285, at 5.

NJDEP's third primary contention concerned the degree of AmerGen's compliance with 10 C.F.R. 50.63, which requires the facility to have sufficient backup electrical power for a specified station blackout ("SBO") duration if there is a loss of all alternating current power. AmerGen's source of electrical power to the SBO system is the Forked River Combustion Turbines ("FRCTs") power plant, which is owned, operated and maintained by FirstEnergy ("F.E.") and made available to AmerGen through an Interconnection Agreement ("I.A.") (AmerGen License Renewal Application, ML 0502080185, at 2.5-38). NJDEP's position is that the I.A. does not assure that F.E., a competitor of AmerGen, will take responsibility for compliance with the aging management plan for the FRCTs throughout the 20-year period of relicensure, including the furnishing of backup power in emergencies (NJDEP Petition, ML 053360595, at 9).

A consortium of groups, led by the Nuclear Information and Resource Service ("NIRS"), also filed a request for hearing and petition for leave to intervene on November 14, 2005. NIRS contended that AmerGen's renewal application does not adequately assure the continued integrity of the drywell liner during the 20-year period of relicensing AmerGen seeks (NIRS Petition, ML 053360562, at 3).

On December 2, 2005, the Secretary of the Commission referred this matter to the Chief Administrative Judge (ML

053360547) and on December 9, 2005, a Board panel was established (ML 053470370). AmerGen and the Commission Staff each filed Answers to the petitions of NJDEP and NIRS.<sup>2</sup> On January 30, 2006, at the direction of the Board, NJDEP, AmerGen and the Commission Staff submitted supplemental briefs on NJDEP's contention concerning AmerGen's CUF (Board Order, ML 060230297).

On February 27, 2006, the Board issued its decision denying NJDEP's request for hearing and petition to intervene. It granted NIRS's request and petition but limited the scope of NIRS's contention. One judge of the Board dissented from the decision as to NIRS' contention (Board Decision, ML 060580677).

NJDEP appeals the Board's denial of its request and petition. AmerGen and Commission Staff appeal the Board's granting of NIRS' request and petition, as limited.

#### STATEMENT OF THE ISSUES

The Board erred in denying NJDEP's request for hearing and petition for leave to intervene. The Board first erred in not considering as admissible the contentions NJDEP raised as to deficiencies in AmerGen's SAMA submissions ("NJDEP's SAMA Contention"). Those deficiencies include the lack of a DBT analysis specific to Oyster Creek concerning the potential threat

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<sup>2</sup>AmerGen's Answer to both petitions is found at ML 053490340; Commission Staff's Answer to NJDEP's Petition is found at ML 053550093 and its Answer to NIRS's Petition is found at ML 053490082.

to the facility, and the vulnerability of the spent fuel pool, from terrorist attack. While the Board applied previous decisions of this Commission that the likelihood of a terrorist attack on a nuclear power plant is only speculative, and therefore beyond the scope of relicensing proceedings, those decisions are at odds with the Commission's own ongoing actions to prevent such attacks (See Board Decision, ML 060580677, at 11, note 8). There would be no need for the Commission to require extensive steps to guard against terrorist attack if the chances of an attack were only speculative.

Issues concerning the effects of terrorist attacks on nuclear power plants should especially be addressed in relicensing proceedings at Oyster Creek for two reasons. The first reason is because its unique characteristics, such as design and location, pose legitimate concerns as to terrorism which other, newer nuclear power plants may not. The second reason is because Oyster Creek's relicensing proceeding has begun while it still awaits parts of the three-phase assessment of plant safety and security measures the Commission ordered after the events of 9/11.

The Board also erred in denying NJDEP's contention that AmerGen is applying an incorrect CUF for its evaluations of metal fatigue of the reactor coolant pressure boundary and associated components. AmerGen's declaration of intent to change its CUF to a less stringent one is insufficient to effectuate such change, which requires a public process. Lastly, the Board erred in

denying NJDEP's contention that AmerGen has sufficiently demonstrated that implementation of the aging management plan for the FRCTs has been assured for the 20-year period of relicensure.

The Commission should reverse the Board and allow NJDEP to participate as a party in this proceeding so that its contentions, which seek to protect the health and safety of the residents of New Jersey, may be heard.

#### DISCUSSION

A. *The Board Erred in Ruling NJDEP's SAMA Contention, Which Noted a Lack of Analysis by AmerGen of Oyster Creek's Vulnerability to Terrorist Air Attack, as Not Admissible.*

(1) The Effects of Terrorist Air Attack Are Reasonably Foreseeable and Must Be Considered in Relicensing Proceedings.

As part of its application for relicensing, AmerGen was required to submit an analysis of Severe Accident Mitigation Alternatives ("SAMA"). 10 C.F.R. 51.53 (c) (3) (ii) (L). Yet AmerGen's SAMA analysis failed to consider Oyster Creek's vulnerability to aircraft attacks, including the vulnerability of the spent fuel pool. Indeed, AmerGen acknowledges that fact (AmerGen Answer to NJDEP Petition, ML 053490340, at 12). The first contention in NJDEP's petition is that such failures render AmerGen's SAMA deficient. The Board's ruling that NJDEP's contention is not admissible in this proceeding should be reversed.

Oyster Creek's initial 40-year license will expire, absent renewal, in 2009. AmerGen has sought a renewal of the 40-year Oyster Creek license for 20 years. "Two sets of regulatory

requirements govern the agency's review of license renewal applications." IMO Florida Power & Light Co. (Turkey Point Nuclear Plant) 54 N.R.C. 3, 5 (2001) (referred to herein as "Turkey Point"). One review is a technical review of safety requirements, conducted pursuant to 10 C.F.R. 54 and therefore known as a "Part 54" analysis. It centers on "the detrimental effects of aging" on components of the facility. Turkey Point, supra, 54 N.R.C. at 7. "Accordingly, Part 54 requires renewal applicants to demonstrate how their programs will be effective in managing the effects of aging during the proposed period of extended operation." Id. at 8.

The other type of review is an environmental review, conducted pursuant to 10 C.F.R. 51 and therefore known as a "Part 51" analysis. Turkey Point, supra, at 5. This analysis focuses on the potential environmental impacts anticipated to occur over the 20 years of proposed license renewal. Id. at 16. The "SAMA" analysis is required as an element of the Part 51 analysis. Id. at 22; see also 10 C.F.R. 51, Subpart A, Appendix B. AmerGen acknowledges that it must perform the SAMA analysis of Oyster Creek, since the Commission had not considered SAMAs as part of the proceeding for original licensure (AmerGen Answer to NJDEP Petition, ML053490340, at 12).

The Part 51 environmental analysis is subject to the National Environmental Policy Act of 1969 ("NEPA"), 42 U.S.C. 4321 to 4361, See, Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719,

728 (3<sup>rd</sup> Cir. 1989). Under NEPA, agencies must prepare a “‘detailed statement,’ known as an environmental impact statement [or “EIS”], for every major federal action ‘significantly affecting the quality of the human environment.’” Limerick, supra, 869 F.2d at 725, quoting 42 U.S.C. 4332 (2) (C). The “twin aims” of NEPA are to require the agency “‘to consider every significant aspect of the environmental impact of a proposed action’” and to “inform the public that it has indeed considered environmental concerns in its decisionmaking process.” Baltimore Gas & Electric Co. v. NRDC, 462 U.S. 87, 97 (1983), quoting Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 553 (1978).

Agencies must take a “hard look” at environmental consequences before taking a major action. Baltimore Gas, supra. Regulations of the Council on Environmental Quality, which provide guidance to federal agencies on NEPA compliance, require that the EIS must discuss indirect, as well as direct, effects of the proposed action. IMO Private Fuel Storage, LLC, 56 N.R.C. 340, 353 (2002). Indirect effects include those which are “*reasonably foreseeable*.” Id., quoting 40 C.F.R. 1508.8(b) (italics in Private Fuel Storage). A reasonably foreseeable impact is “the usual trigger-point for NEPA reviews.” Id. at 363.

It is against that background of NEPA that the Board’s decision must be analyzed. The Board rejected NJDEP’s contention as to deficiencies in AmerGen’s SAMA based upon this Commission’s

decisions that NEPA does not require consideration of the effects of terrorist attacks (Board Decision, ML 060580677, at 10). The leading decision on the point is Private Fuel Storage, *supra*, in which a major element of the decision was this Commission's conclusion that the likelihood of a terrorist attack on a nuclear power plant is "speculative" and only a "theoretical possibility." *Id.* at 356 and 363. See also, IMO Duke Cogema Stone & Webster, 56 N.R.C. 335, 341 (2002); IMO Duke Energy Corp., 56 N.R.C. 358, 366 (2002); and IMO Dominion Nuclear Connecticut, Inc., 56 N.R.C. 367, 373-374 (2002) (companion cases issued on the same day as Private Fuel Storage).

It is difficult, however, to reconcile, on the one hand, this Commission's rulings that the chance of a terrorist attack on a nuclear power plant is merely "speculative" or a "theoretical possibility" with, on the other hand, its post-9/11 actions concerning terrorism. The Commission has imposed extensive requirements on all plants for the very purpose of preventing terrorist attacks. The Private Fuel Storage decision stressed the Commission's "determination, in the wake of the horrific September 11<sup>th</sup> terrorist attacks, to strengthen security at facilities we regulate." *Id.* at 341. The Commission's post-9/11 "comprehensive review" of security at nuclear facilities reexamined and improved "guard force size, physical barriers, access control, detection systems, alarm stations, response strategies, security exercises,

clearance requirements and background investigations for key employees, and fitness-for-duty requirements." Id.

AmerGen "has implemented these directives" at Oyster Creek (AmerGen Answer to NJDEP Petition, ML 053490340, at 13, note 7). Indeed, it states that, in 2004, "the station completed a \$20 million security upgrade, including increasing the guard force, expanding weaponry, enhancing guard training and enhancing surveillance equipment." (AmerGen Oyster Creek Website, at 2).

NJDEP appreciates the Commission's extensive steps to enhance security at Oyster Creek and the other nuclear power plants across the nation. NJDEP's point is that this Commission has been ordering those steps to be taken while continuing to maintain, at least for purposes of limiting the scope of relicensing proceedings, that the likelihood of terrorist attack on such plants is as "speculative" and "theoretical" as it was before 9/11. Indeed, in Private Fuel Storage, the Commission relied on two pre-9/11 federal appellate decisions (the only ones on point) to uphold its finding as to the speculative nature of terrorist attack. Id. at 357.<sup>3</sup>

There would hardly be a need for this Commission to order vast degrees of upgraded security around nuclear power plants if the threat of terrorist attack upon them were only speculative. In

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<sup>3</sup>The cases are Limerick, supra, and City of New York v. U.S. Dept. of Transportation, 715 F.2d 732, 750 (2d Cir. 1982), cert. den., 465 U.S. 1055 (1984).

the post-9/11 world, the likelihood of terrorist attacks cannot be dismissed as mere speculation. It must be considered reasonably foreseeable. As such, it is an impact of which NEPA requires consideration in relicensing proceedings. 40 C.F.R. 1508.8(b).

The Board erred in finding to the contrary. The Board emphasized "that the Commission scrupulously examines terrorist-related security issues outside the NEPA context." (Board Decision, ML 060580677, at 11, note 8). Yet that fact proves NJDEP's point. It is illogical for the Commission to consider the threat of terrorist attacks extremely serious outside the NEPA context but only speculative and theoretical within it.

This Commission's actions to increase safety following the accident at Three Mile Island provide an analogous example in support of NJDEP's point. In that context, the Limerick court observed that "an across-the-board conclusion that the risks of severe accidents are remote and speculative, even if it had been made, would fly in the face of the expenditure of tens of millions of dollars by PECO at Limerick and as required at other plants by the NRC to increase safety in the event of a severe accident. As the NRC itself has indicated with regard to emergency planning, these 'regulations are premised on the assumption that a serious accident might occur.'" Id., 869 F.2d at 740, quoting IMO Philadelphia Electric Co. (Limerick Generating Station), 22 N.R.C. 681, 713 (1985).

After the accident at Three Mile Island, this Commission acknowledged that it could no longer consider serious accidents at nuclear power plants remote and speculative. Limerick, supra, 869 F.2d at 739, note 24. Similarly, after the tragic events of 9/11, the Commission should acknowledge that it can no longer consider terrorist attacks on such plants remote and speculative. Its own extensive actions in seeking to prevent such attacks belie its position on that point. "The NEPA process is governed by a 'rule of reason.'" Private Fuel Storage, supra, 56 N.R.C. at 351, quoting IMO Duke Energy Corp. (McGuire and Catawba Nuclear Stations), 55 N.R.C. 278, 295, note 41 (2002). Application of reason dictates that terrorist attack on a nuclear power plant is reasonably foreseeable and must be considered within relicensing proceedings.

(2) Protection of Sensitive Information Does Not Bar NEPA Review.

The Private Fuel Storage decision also excludes terrorist attack from the scope of relicensing proceedings by its concern that the public NEPA process might result in the harmful release of sensitive information. Id., 56 N.R.C. at 370. Certainly that concern can be adequately addressed through the use of redacted documents and closed hearings if necessary. As Private Fuel Storage acknowledges (id. at 374), the United States Supreme Court indicated that, if national security concerns had permitted the Navy to reveal its intention to store nuclear weapons in a given location, NEPA would have required the Navy to prepare an

EIS, even if it could not be disclosed to the public. Weinberger v. Catholic Action of Hawaii, 454 U.S. 139, 146 (1981). Confidentiality of sensitive information should not exclude legitimate issues from NEPA review. \_\_\_\_\_

In Private Fuel Storage, the Commission attempted to distinguish Weinberger, a case which did not involve issues of terrorism. It asserted that "a formal NEPA review, secret or otherwise, would not add meaningfully to our understanding of the terrorism issue" in the context of its ongoing security studies, requirements and directives. 56 N.R.C. at 374. That reasoning is flawed. First, it conclusively determines, in advance, that a NEPA review will raise no new information on terrorism. Yet NEPA review in the context of relicensure seeks to focus on plant-specific issues which this Commission may not have previously considered. Second, since, as has been shown herein, the likelihood of terrorist attack is reasonably foreseeable, a NEPA review is required. To the extent that the Board relied on Private Fuel Storage on that point, the Board was clearly in error. This Commission should reverse the Board's rulings on NJDEP's SAMA contentions concerning the potential threat to Oyster Creek, and the vulnerability of the spent fuel pool, from terrorist attack.

(3) New Jersey's contention regarding SAMA should have been granted because individual characteristics of Oyster Creek show that it is uniquely vulnerable to terrorist attack and long awaited rulemaking does not provide adequate protection for public health and safety.

The foregoing arguments show that the Board should have granted NJDEP's contentions as to SAMA. Even if this Commission does not accept that terrorist-related SAMA should be required in all relicensure proceedings, it should grant NJDEP's SAMA contentions based on the exceptional set of circumstances Oyster Creek presents. The unique design, location and threat of attack to this facility constitute extraordinary circumstances which demand site-specific SAMA review to adequately protect the public health and safety. These issues are well within the Commission's long-standing objective that licensing hearings should "produce an informed adjudicatory record that supports agency decision making on matters related to the NRC's responsibilities for protecting public health and safety, the common defense and security, and the environment." NRC Policy Statement, 63 F.R. 41872, 41873 (1998).

The Board relied upon the general rule that plant-specific issues relating to a plant's "current licensing basis" are *ordinarily* beyond the scope of a license renewal review. (Board Decision, ML 060580677, at 7). However, considering the unprecedented terrorist acts of 9/11, the unique design, location and specific threat of attack to Oyster Creek combine to create extraordinary circumstances which justify site-specific SAMA review. The Commission has the discretion to consider serious safety, environmental or common defense and security matters in extraordinary circumstances. 10 C.F.R. 2.760. And see NRC Policy

Statement, 63 F.R. 41872, 41873; and IMO Duke Cogema Stone & Webster (Savannah River Mixed Oxide Fuel Fabrication Facility), 55 N.R.C. 245 (2002) (NRC consideration of exceptional circumstances on interlocutory review). Moreover, the Commission may view NJDEP's SAMA contentions in a light that is most favorable to the petitioner. Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), 34 N.R.C. 149, 155 (1991).

The following unique aspects of Oyster Creek distinguish this relicensing from all others:

(a) Design. The reactor at Oyster Creek is a boiling water reactor (BWR-2) with a Mark I type containment (AmerGen License Renewal Application, ML 052080185, at 1-7). Oyster Creek is distinguished by its obsolete Mark 1 containment design, which has been criticized since 1972. Questions regarding the general operational safety of the Mark I design and the increased vulnerability of Oyster Creek's elevated and poorly-protected spent fuel pool justify site-specific SAMA review.

Concerns that the Mark I containment design will respond inadequately to deal with a large loss-of-coolant accident were first raised in a September 20, 1972 memorandum by Dr. S. H. Hanauer on behalf of the Atomic Energy Commission. IMO Boston Edison Co. (Pilgrim Nuclear Generating Station), Docket No. 50-293, 1987 NRC LEXIS 37 (1987). The Mark I system for cooling the reactor relies upon five mechanical recirculation loops, which have

a higher risk of loss-of-coolant accident than later designs which are cooled by two improved recirculation loops. The improved loops reduce the amount of coolant which can be lost as the result of a leak and are powered by passive jet pumps which are not subject to mechanical failure. NUREG-0661, "Mark I Containment Long-Term Program Safety Evaluation Report" (July 1980), includes plant-specific analysis as a required part of Mark I acceptance criteria. Thus, plant-specific analysis of NJDEP's SAMA Contention is warranted.

Beyond the questionable safety of the Mark I containment design, another specific design feature which justifies plant-specific SAMA review of Oyster Creek is its elevated spent fuel pool. The National Academy of Sciences reported to Congress last year that "successful terrorist attacks on spent fuel pools, though difficult, are possible." "Safety and Security of Commercial Spent Nuclear Fuel Storage: Public Report," National Academy of Sciences, at 3. This report found that "[i]f an attack leads to a propagating zirconium cladding fire, it could result in the release of large amounts of radioactive material." Id. The long-term contamination consequences of such a fire could be "worse than those from the Chernobyl accident." Id. at 45.

The National Academy report describes the elevated design of Mark I spent fuel pools as being "well above ground level" and notes that most have "thin steel superstructures." Id. at 42. The

National Academy's report goes on to find that elevated fuel pools are more vulnerable to attack than spent fuel pools which are constructed close to grade. "The vulnerability of a spent fuel pool to terrorist attack depends in part on its location with respect to ground level as well as its construction. Pools are potentially susceptible to attacks from above or from the sides depending on their elevation with respect to grade and the presence of surrounding shielding structures." Id. at 43.

Unlike the Hope Creek plant, which has the added protection of a containment dome surrounding the entire reactor building structure, the spent fuel cooling pool at Oyster Creek consists solely of a stainless steel liner supported by a concrete structure. (AmerGen License Renewal Application, ML 052080185, at 2.3-202). Oyster Creek's cooling pool is open at the top and separated from the environment by only the steel girders and aluminum roof of the reactor building structure.

(b) Location. Oyster Creek's location distinguishes it from all other Mark I facilities. It is located about 50 miles east of Philadelphia, PA and 60 miles south of Newark, NJ. Id., at 1-7. The worst case scenario for evacuation of Oyster Creek's 10 mile Emergency Planning Zone is the evacuation of 244,000 residents and summer transients within 8.4 hours. "Evacuation Time Estimates, Oyster Creek Generating Station," prepared by Earth Tech Engineering and Technology, February 2003. Oyster Creek is the

most centrally located seaboard nuclear facility in the densely-populated corridor from Washington to Boston, which makes it a prime target.

Oyster Creek was the first operational commercial nuclear generating station and is currently the oldest operating nuclear generating station in the U.S. (AmerGen License Renewal Application, ML 052080185, at 1-7). As a result, renewal of its operating license presents the first practical test of actual nuclear operations beyond a 40-year license. The Oyster Creek experience will serve as the benchmark for safety standards for extended operations which have thus far been entirely theoretical. Because safety standards for extended operations have not yet been proven accurate by actual extended operations, Oyster Creek's relicensing requires the closest site-specific scrutiny possible. NJDEP's SAMA Contention regarding the first nuclear generating station which may actually operate beyond 40 years is critical to fulfilling the Commission's responsibilities for protecting public health and safety, the common defense and security, and the environment.

(c) Specific Threat of Attack. The possibility of a terrorist attack on Oyster Creek goes well beyond mere speculation. The 9/11 Commission has documented the fact that nuclear facilities had been among the original targets of the al Qaeda terrorists. "Indeed, KSM [Khalid Sheikh Mohammed] describes a grandiose original plan:

a total of ten aircraft to be hijacked, nine of which would crash into targets on both coasts—they included those eventually hit on September 11 plus CIA and FBI headquarters, nuclear power plants, and the tallest buildings in California and the state of Washington.” (9/11 Commission Report, at 154).

The Commission has acknowledged that the probability of terrorist attacks on nuclear facilities since 9/11 justifies extensive preventive actions. Rejecting New Jersey’s SAMA Contentions is inconsistent with the Commission’s initiatives to comprehensively increase security at nuclear sites. The real and immediate threat of terrorist attack on nuclear facilities is especially applicable to Oyster Creek. The Coast Guard has found a “specific and continuing threat” to Oyster Creek and, based thereon, has implemented a permanent safety zone surrounding the facility. “Due to the continued warnings from national security and intelligence officials that future terrorist attacks are possible, such as those launched against New York and Washington, DC on September 11, 2001, heightened security measures are necessary for the area surrounding the Oyster Creek Generation Station.” 69 F.R. 5284.

Thus, plant-specific SAMA review with regard to Oyster Creek should not be denied on the basis that the risk of attack is speculative. This Commission has determined that the increased risks post 9/11 justify comprehensively increased security at

nuclear sites, and there is a "continuing and definite threat" specifically targeting Oyster Creek. These facts, together with Oyster Creek's other unique characteristics, combine to create the extraordinary circumstance of a specific, nonspeculative threat of attack to Oyster Creek under which the Commission should consider NJDEP's SAMA Contention.

4. The Commission Should Not Rely upon the Uncertain Outcome of Design Basis Threat Rulemaking to Reduce the Imminent Risk of Irreparable Harm Presented by the Threat of Terrorist Attack.

The Board rejected NJDEP's contention that the revised Design Basis Threat ("DBT"), including the threat of terrorist attack, should be considered in this proceeding because generic rulemaking as to security requirements for the revised DBT was initiated in November 2005 (Board Decision, ML 060580677, at 14). The Board noted that NJDEP "presented no reason for departing from [the] precept" that the Board should "ordinarily refrain" from admitting a contention that is the subject of rulemaking. Id. However, this aspect of the decision should be reversed because the uncertain outcome and timing of rulemaking does not adequately address the imminent risk of irreparable harm posed to Oyster Creek by the threat of terrorist attack by aircraft.

There is no way to predict the length of time before the DBT rulemaking process will be complete. A spokesman for NRC's Region I said, "[I]t takes years for the rulemaking process to be carried out...." Nucleonics Week, July 14, 2005. He noted that

NRC review of rulemaking generally takes two and a half years, but could take much longer, and in at least one case, nine years. Id. The increased risk of threat to Oyster Creek and the surrounding area during the indeterminate period of DBT rulemaking causes irreparable harm to the State of New Jersey and its residents. See, Citizens for Better Environment v. Costle, 515 F. Supp. 264, 274 (D. Ill. 1981) (finding delayed administrative actions caused irreparable harm to plaintiffs). Should a terrorist attack by aircraft upon Oyster Creek occur during the DBT rulemaking period, there will no way to measure or compensate for the unnecessary harm to the public health and safety which could have been avoided by consideration of revised DBT during this licensing proceeding.

The Commission has the power and discretion to consider revised DBT issues in the present proceeding. See, 10 C.F.R. 2.206. Indeed, the Atomic Energy Act (AEA) mandates the provision of adequate protection to the health and safety of the public. 42 U.S.C. 2001. The AEA further authorizes the Commission to regulate in various formats as it may deem necessary or desirable to protect health or to minimize danger to life or property. 42 U.S.C. 2201.

Considering the unique circumstances of Oyster Creek, the Commission should exercise its discretion to consider proactively revised DBT within relicensing. This proceeding provides a prompt, appropriate opportunity to address revised DBT at Oyster Creek and, thus, to minimize danger to the health and safety of the people of

New Jersey during the necessarily uncertain duration of the rulemaking period. The Commission should seize this opportunity to help insure enhanced safety at Oyster Creek.

B. The Board Erred in Ruling that NJDEP's Contention Concerning AmerGen's Use of a Cumulative Usage Factor In Advance of Commission Approval as Not Admissible.

NJDEP's second contention raised concerns over AmerGen's use in its relicensing application of a CUF of 1.0, as opposed to its current, more stringent CUF of 0.8, to evaluate metal fatigue for the reactor coolant pressure boundary and associated components (NJDEP Petition, ML 053360595, at 6). NJDEP asserts that the Board erred in finding that contention not admissible (Board Decision, ML 060580677, at 15).

NJDEP initially addresses the Board's suggestion that NJDEP had abandoned this argument by acknowledging that AmerGen may change its CUF (Board Decision, ML 060580677, at 17; see NJDEP Supplemental Brief, ML 060390285, at 4). NJDEP did not abandon the argument. It has never denied that 10 C.F.R. 50.55a allows for AmerGen to change its CUF. This change, however, is not automatic, and AmerGen has not completed the process required for it.

Since Oyster Creek was built before 1984, the originally-applicable CUF of 0.8 must be used. 10 C.F.R. 50.55a(c) (4). The Director of the Office of Nuclear Reactor Regulation may authorize a change in the CUF only upon a demonstration by the applicant that "(i) The proposed alternatives would provide an acceptable level of

quality and safety, or (ii) Compliance with the specific requirements of this section would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety." 10 C.F.R. 50.55a(a)(3)(i) and (ii).

Although AmerGen has used the more lenient CUF of 1.0 in its application for relicensure, it has not yet filed an application seeking to alter its current CUF of 0.8. Nor has it presented any evidence to indicate that the requirements for using an alternative CUF will be met. Further, AmerGen cannot rely on 10 C.F.R. 50.59, which applies to ASME Section III, which did not exist when Oyster Creek was built. The Board's dismissal of NJDEP's contention is clearly premature.

The Board concluded that AmerGen took action required for a change of CUF "when, in December 2005, it docketed with the NRC Staff its commitment to...update the [CLB] to reflect that a [CUF] of 1.0 will be used in fatigue analysis for reactor coolant pressure boundary components." (Board Decision, ML 060580677, at 18). Such action, however, is insufficient to effectuate the change. See 10 C.F.R. 50.55a(a)(3). The Board declined what it considered "New Jersey's invitation to impute to AmerGen an intention to act in derogation of its formal commitment to NRC Staff." (Board Decision, ML 060580677, at 18, note 14). NJDEP has never asked the Board to impute that AmerGen will abandon its commitment to seek a change in the CUF. For purposes of argument,

NJDEP will assume that AmerGen will make that application. But even that assumption does not change the fact that AmerGen simply cannot presume, at present, how that future application will be decided by the Director. See 10 C.F.R. 50.55a(a) (3).

The current record reveals that changing the CUF to 1.0 will result in a 25 percent increase in allowable fatigue life at Oyster Creek, thereby significantly reducing the margin of safety for metal fatigue. (NJDEP Petition, ML 053360595, at 7). Without more, it remains unclear whether this decrease continues to achieve "an acceptable level of quality and safety." 10 C.F.R. 50.55a(a) (3) (i). Under these circumstances, and until such time as AmerGen's application has been filed and approved by the Director, the CUF should remain at 0.8 in the application for relicensure. The Board erred in denying NJDEP's contention.

C. The Board Erred in Ruling Inadmissible NJDEP's Contention As Regards the Failure of AmerGen to Demonstrate that There is an Agreement for the Owner-Operator of the FRCTs to Employ the Aging Management Plan.

The Board ruled that NJDEP's broader contention, including this point, was not admissible based upon a perceived lack of supporting information and references to specific documents and a lack of a genuine dispute on a material issue (Board Decision, ML 060580677). NJDEP appeals the dismissal of its contention on the point that AmerGen failed to demonstrate that it

has provided for compliance with the aging management plan for the FRCTs.

AmerGen must have an alternate source of A/C power in the event of a station blackout. 10 C.F.R. 50.63. As a safety-related feature, the FRCTs are subject to the requirements of 10 C.F.R. 54.4 (a) (3). The license renewal application must include an aging management plan for the turbines, 10 C.F.R. 54.21(a)1,3 and the applicant must "demonstrate" that the plan will be implemented. 10 C.F.R. 54.21(c) (1) (iii).

Commission Staff's position is that the aging management plan may be carried out through a contract with another party, that the Commission has previously approved an existing Interconnection Agreement ("I.A.") with FirstEnergy ("F.E.") (see Staff Response at ML 993280408) and that AmerGen has submitted an aging management plan that includes the FRCTs (ML 052910091, October 2005, and ML053200475, November 2005). However, this does not mitigate the absence of an updated I.A. which assigns to F. E. the responsibility for employing the proposed aging management plan. When an applicant for renewal does not own or operate the alternate power source, an aging management plan is meaningless unless there is also an agreement with the owner/operator to employ it. Without it, the applicant cannot demonstrate that the FRCTs will be adequately managed, as required by 10 C.F.R. 54.21(c). The I.A., executed in 1999, did not address the proposed aging management

plan. It is being renegotiated, but, at present (to NJDEP's knowledge), no provision addressing responsibility for implementation of the aging management plan exists.

The Board said that it will not assume that AmerGen will fail to comply with its lawful obligations (Board Decision, ML 060580677 at 23, note 18). If this logic were extended, there would be no need to inspect or review anything for a license renewal, because both assume that it is possible that the applicant may not meet the requirements for relicensing. Asking for a demonstration that AmerGen has secured F.E.'s commitment to implement the aging maintenance plan is mandatory. The question is not whether AmerGen will live up to its responsibilities, it is whether F.E. will commit to the I.A. revisions so that it is possible for AmerGen to meet its regulatory responsibilities. A genuine dispute on a material issue exists.

The Board concluded that NJDEP "failed to provide supporting information and references to specific documents." (Board Decision, ML 060580677, at 23). As noted in NJDEP's petition, the I.A. "could not" be cited (NJDEP Petition, ML053360595, at 11). This was, and is, due to the lack of a new agreement. That document is non-existent. Also, copies of the current agreement have not been made available because it is considered by AmerGen to be a confidential, proprietary document.

When a petitioner needs a document which the Commission

has deemed confidential, then, as a matter of fairness, Commission Staff should make that clear in its response document to the Board. Instead, Commission Staff argued that NJDEP "merely speculates and does not provide ... evidence or information to support its claims about the FRCTs." (Staff Answer, ML 053550093, at 20). Without access to the document, NJDEP had no means of providing it.

If the Board had known that the document was unavailable, it would have had options. It could have waived, as impossible, the requirement Commission Staff sought to impose against NJDEP, it could have reviewed the document itself in camera or it could have issued a protective order. See, ITT Electro Optical Products Division v. Electronic Technology Corp., 161 F.R.D. 228 (D. Mass. 1995) (where the court balanced the need for the adversary to know a trade secret versus the injury that would arise from disclosure of the secret). As the Court noted in ITT Optical, supra, there is no absolute privilege for trade secrets and similar confidential information, citing Federal Open Market Committee v. Merrill, 443 U.S. 340, 362 (1979). Therefore, NJDEP should not have been penalized for failing to cite non-existent and unavailable documents. The Commission should consider this contention in spite of the lack of specific references. This is especially true since NJDEP could not and cannot use discovery to obtain the document because one must first be a party to ask for discovery. 10 C.F.R.

2.704(a), 2.705(a). Here that requirement creates a "Catch 22" situation.

In summary, the Commission should allow NJDEP's FRCTs contention because AmerGen's failure to have an agreement with F.E. with a commitment to the aging management plan means that AmerGen has not demonstrated compliance with all relicensing requirements, a material issue. NJDEP should not be responsible for failure to cite unwritten and unavailable documents and should not be barred from consideration of its contention thereby.

CONCLUSION

\_\_\_\_\_For the foregoing reasons, Petitioner New Jersey Department of Environmental Protection submits that the Commission should reverse Order No. LBP-06-07 of the Atomic Safety and Licensing Board to the extent that such decision and order denies NJDEP's request for hearing and petition to intervene in this proceeding and should grant said request and petition.

Respectfully submitted,

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March 28, 2006

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