November 1, 2002

Mr. Norm Cohen, Coordinator
The UNPLUG Salem Campaign
Coalition for Peace and Justice
321 Barr Avenue
Linwood, NJ 08221

Dear Mr. Cohen:

This letter responds to the petition you filed on behalf of the UNPLUG Salem Campaign pursuant to Section 2.206 of Title 10 of the *Code of Federal Regulations* (10 CFR 2.206) on September 17, 2001, as supplemented on January 9 and 10, 2002. In your petition, you requested that the U.S. Nuclear Regulatory Commission (NRC) take the following actions:

- Order either the closure of, or an immediate security upgrade at, the Salem Nuclear Generating Station, Unit Nos. 1 and 2 (Salem), Hope Creek Generating Station (Hope Creek), and Oyster Creek Nuclear Generating Station (Oyster Creek).

- Order the plants' defenses to be upgraded to withstand a jet crash similar to that which occurred at the World Trade Center (WTC) on September 11, 2001.

- Require all spent fuel pools to be brought into the containment buildings, or a new containment building, able to withstand a jet crash, should be built for them.

- Cancel all plans for a dry cask storage at any of New Jersey's plants until a jet-bomber-proofed containment is built for them.

- Triple the number of Operational Safeguards Response Evaluation (OSRE) security inspections.

- Cancel proposals to allow nuclear plants to conduct their own security inspections.

As a basis for your request, you cited the terrorist attacks on September 11, 2001, stating that New Jersey's four nuclear power plants are vulnerable to terrorist threats, including a suicide airplane attack similar to the attack on the WTC.

In a telephone call on December 7, 2001, the NRC staff informed you that the Commission had decided to treat your September 17, 2001, letter as a petition pursuant to 10 CFR 2.206. In addition, the NRC staff informed you that because the September 17, 2001, letter raised sensitive security issues, the Commission was deferring application of certain public aspects of the process described in Management Directive 8.11, "Review Process for 10 CFR 2.206 Petitions," pending further developments related to the NRC's security review. Accordingly, the NRC staff did not offer you the opportunity to provide, in a public forum, additional information to support the September 17, 2001, letter before the NRC's Office of Nuclear Reactor Regulation Petition Review Board. Rather, the staff requested that you forward any additional information related to the petition directly to the assigned petition manager.

By an acknowledgment letter dated December 20, 2001, the NRC staff formally notified you that the letter dated September 17, 2001, met the criteria for review under 10 CFR 2.206, and that the NRC staff would act on the request within a reasonable time. The acknowledgment letter further stated that the Commission had, in effect, partially granted your request for immediate actions in that the NRC took action immediately after September 11, 2001, to enhance security at all nuclear facilities, including the four nuclear power plants located in New Jersey. The NRC staff also informed you in the acknowledgment letter that the issues raised in the petition were being referred to NRR for appropriate action.

You responded to the acknowledgment letter by electronic mail on January 9 and 10, 2002, and provided additional information that the staff considered in its evaluation of the petition. When we received your original letter and additional information, the NRC was determining the criteria for releasing security-related information in light of the events of September 11, 2001. As such, this correspondence was initially withheld from the public document room due to the potential for sensitive, security-related information to be contained in these documents. With the exception of the report titled “Vulnerabilities of New Jersey’s Nuclear Plants to Radiological Sabotage,” your incoming letter and subsequent correspondence are now publicly-available.

The staff sent a copy of the proposed Director’s Decision to you, PSEG Nuclear LLC (PSEG) and Exelon Generation Company LLC (Exelon) for comment on May 16, 2002. You responded with comments on August 4, 2002. The Union of Concerned Scientists also provided input on your behalf by letter dated August 7, 2002. PSEG, the licensee for Salem and Hope Creek, responded to our May 16, 2002, letter on June 21, 2002, and Exelon, the licensee for Oyster Creek, informed the petition manager by telephone that it did not have any comments. The comments and the staff’s response to them are included in the Director’s Decision.

The events of September 11, 2001, affected virtually every citizen and economic sector within our society, including the nuclear power industry. You raised a number of important issues associated with protecting our nation’s nuclear power plants from acts of terrorism. Over the past year, the NRC responded by issuing threat advisories and ordering security improvements at every nuclear power plant, as well as at other licensed facilities. These actions, taken to further enhance security programs that were already in place on September 11, 2001, are described in more detail in the Director’s Decision. While the Commission considers these actions to be appropriate, the NRC staff continues to take further steps to improve security at all licensed facilities. For example:

- The staff has reduced the backlog and is expediting the processing of nuclear power plant worker background checks. This has been achieved by improving communications between licensees, the Federal Bureau of Investigation, and the NRC.

- The NRC’s Incident Response Program has been enhanced to address the current threat environment, with additional improvements being considered.

- The staff is evaluating the vulnerabilities and potential effects as a result of: (1) a large commercial aircraft impacting a nuclear facility, (2) internal and external fires, (3) the

use of radiological sources as radiological dispersal devices (commonly referred to as "dirty bombs"), and (4) cyber threats.

- Planning is underway for additional research on terrorist attack scenarios and protective strategies, small arms conflict situations, spent fuel pool testing, and insider threats. The results of this research will be applied, as appropriate, to strengthening the requirements for licensees.

- Research is being considered to enhance licensees' ability to identify suspicious individuals.

The Commission has, in effect, partially granted certain elements of your request for increased security at Salem, Hope Creek, and Oyster Creek to the extent that many of your requests are included within the scope of Orders issued to all nuclear power plants on February 25, 2002, or are a part of the NRC staff's comprehensive review to evaluate the agency's security and safeguards programs. The remainder of your requests are denied for the reasons provided in the enclosed Director's Decision.

A copy of the Director's Decision (DD-02-03) will be filed with the Secretary of the Commission for the Commission to review in accordance with 10 CFR 2.206(c). As provided for by this regulation, the decision will constitute the final action of the Commission 25 days after the date of the decision unless the Commission, on its own motion, institutes a review of the decision within that time. The documents cited in the enclosed decision are available in ADAMS or for inspection at the Commission's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, and from the ADAMS Public Library component on the NRC Web site, http://www.nrc.gov/reading-rm.html (the Public Electronic Reading Room).

I have also enclosed a copy of the notice of "Issuance of Director's Decision Under 10 CFR 2.206" that has been filed with the Office of the Federal Register for publication. Please feel free to contact Mr. Robert Fretz at 301-415-1324 (rxf@nrc.gov) to discuss any questions related to this petition. I thank you for your time and interest in nuclear power plant security.

Sincerely,

/RA/

Jon R. Johnson, Deputy Director
Office of Nuclear Reactor Regulation

Docket Nos. 50-219, 50-272, 50-311,
and 50-354

Enclosures: 1. Director's Decision (DD-02-03)
2. Comments on Proposed Director's Decision

3. Staff's Response to Petitioner's Comments
4. *Federal Register* Notice

Salem Nuclear Generating Station and Hope Creek Generating Station

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ENCLOSURE 1

DIRECTOR'S DECISION DD-02-03

DD-02-03

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
Samuel J. Collins, Director

In the Matter of	)	
	)	
PSEG NUCLEAR LLC	)	Docket Nos. 50-272, 50-311,
	)	50-354, and 50-219
(Salem Nuclear Generating Station,	)	
Unit Nos. 1 and 2, and Hope Creek	)	License Nos. DPR-70, DPR-75,
Generating Station)	)	NPF-57, and DPR-16
	)	
AMERGEN ENERGY COMPANY, LLC	)	
	)	
(Oyster Creek Nuclear Generating Station)	)	(10 CFR 2.206)
	)	

DIRECTOR'S DECISION UNDER 10 CFR 2.206

I. Introduction

By letter dated September 17, 2001, Mr. Norm Cohen, on behalf of the UNPLUG Salem Campaign (Petitioner), requested that the U.S. Nuclear Regulatory Commission (Commission or NRC) take the following actions:

- Order either the closure of, or an immediate security upgrade at, the Salem Nuclear Generating Station, Unit Nos. 1 and 2 (Salem), Hope Creek Generating Station (Hope Creek), and Oyster Creek Nuclear Generating Station (Oyster Creek).
- Order the plants' defenses to be upgraded to withstand a jet crash similar to that which occurred at the World Trade Center (WTC) on September 11, 2001.
- Require all spent fuel pools to be brought into the containment buildings, or a new containment building, able to withstand a jet crash, should be built for them.
- Cancel all plans for a dry cask storage at any of New Jersey's plants until a jet-bomber-proofed containment is built for them.

- Triple the number of Operational Safeguards Response Evaluation (OSRE) security inspections.
- Cancel proposals to allow nuclear plants to conduct their own security inspections.

As a basis for the request described above, the Petitioner cited the terrorist attacks on September 11, 2001, stating that New Jersey's four nuclear power plants are vulnerable to terrorist threats, including a suicide airplane attack similar to the attack on the WTC.

On December 7, 2001, the NRC staff informed the Petitioner in a telephone call that the Commission had decided to treat the letter dated September 17, 2001, as a petition pursuant to Section 2.206 of Title 10 of the *Code of Federal Regulations* (10 CFR 2.206). In addition, the NRC staff informed the Petitioner that because the September 17, 2001, letter raised sensitive security issues, the Commission was deferring application of certain public aspects of the process described in Management Directive (MD) 8.11, "Review Process for 10 CFR 2.206 Petitions," pending further developments related to the NRC's security review. Accordingly, the NRC staff did not offer the Petitioner the opportunity to provide, in a public forum, additional information to support the September 17, 2001, letter before the NRC's Office of Nuclear Reactor Regulation Petition Review Board. Rather, the NRC staff requested that the Petitioner forward any additional information related to the petition to the assigned petition manager.

By an acknowledgment letter dated December 20, 2001, the NRC staff formally notified the Petitioner that the letter dated September 17, 2001, met the criteria for review under 10 CFR 2.206, and that the NRC staff would act on the request within a reasonable time. The acknowledgment letter further stated that the Commission had, in effect, partially granted the Petitioner's request for immediate actions in that the NRC took action immediately after September 11, 2001, to enhance security at all nuclear facilities, including the four nuclear

power plants located in New Jersey. The NRC staff also informed the Petitioner in the acknowledgment letter that the issues raised in the petition were being referred to NRR for appropriate action.

The Petitioner responded to the acknowledgment letter by electronic mail on January 9 and 10, 2002, and provided additional information that the staff considered in its evaluation of the petition.

In a January 9, 2002, letter forwarded by electronic mail described as "Supplemental Additions to the 2.206 Petition," the Petitioner identified additional individuals and organizations who wished to sign the petition, including: Bill Smirnow, representing Nuclear Free New York, Huntington, NY; Len and Rena Amada, Parkway Whiting, NJ; Jennifer Ann Vickers, Point Pleasant Beach, NJ; Mike and Janet Turco, Absecon, NJ; William deCamp Jr., Mantoloking, NJ; Karin Westdyk, representing MothersAlert.org, Hewitt, NJ; Mary Jo Christian (no address provided); John Guyon, representing NJ PIRG, Trenton, NJ; Laura Cayford, Asbury Park, NJ; Alan Muller, representing Green Delaware, Port Penn, DE; and Michael Mariotte, Director, Nuclear Information and Resource Service (NIRS). The Petitioner also further clarified his original request to close all nuclear power plants in New Jersey, as follows:

- The NRC should halt and reverse all permits associated with Oyster Creek that have allowed the construction of dry cask storage of nuclear waste. No dry cask storage should be allowed to be built without the NRC first holding an adjudicatory public hearing, and without all of our security requests being met. Dry cask storage, which will be placed within 400 feet of U.S. Route 9, is an obvious terrorist target. Because Oyster Creek failed an OSRE test, and because of the nearness of the waste storage to a busy highway, all dry cask storage plans should be halted.

- Oyster Creek and Salem must demonstrate that they have viable security plans to protect the water intake systems from terrorist attack, and Salem must demonstrate a viable plan in the event of a commando attack from the Delaware Bay.
- Oyster Creek must demonstrate that its containment will withstand an Oklahoma City-type truck bomb.
- Salem must demonstrate that it has a viable plan to protect the nuclear plant in the event of a terrorist attack that cuts off electric power to the plant, in conjunction with an attack on the diesel generators.
- The NRC must require PSEG Nuclear LLC (PSEG) to replace all questionable electrical raceway fire barriers and combustible fire seals at Salem. In addition, the NRC must require that the licensee replace all wiring that violates NRC rules for cable separation. The NRC must reverse any recent changes in these rules.
- The NRC shall direct the New Jersey Department of Emergency Management and the State Police to allow citizen stakeholder groups such as UNPLUG Salem and Jersey Shore Nuclear Watch to observe and comment upon emergency planning and evacuation drills. The NRC must direct the above to include nuclear terrorism as a subject of evacuation drills and emergency planning.
- The NRC shall agree to reopen the entire NRC website to stakeholder groups like UNPLUG Salem and Jersey Shore Nuclear Watch, with acceptable means of security involved.

In separate electronic mail transmissions dated January 9 and 10, 2002, UNPLUG Salem forwarded three reports prepared by the Union of Concerned Scientists (UCS) after September 11, 2001, titled “Nuclear Reactor Security,” “Spent Fuel Security,” and “Vulnerabilities of New Jersey’s Nuclear Power Plants to Radiological Sabotage.” The UCS

"Nuclear Reactor Security" report raised concerns and offered recommendations regarding the NRC's OSRE program. Among the short-term solutions, this report recommended that potassium iodide be readily available to persons living in the vicinity of all nuclear reactors. The UCS "Spent Fuel Security" report raised issues associated with protecting fuel assemblies that are stored in a plant's spent fuel pool or dry cask storage facilities. The UCS report on "Vulnerabilities of New Jersey's Nuclear Power Plants to Radiological Sabotage" claimed that the spent fuel pools at Oyster Creek and Hope Creek have certain associated vulnerabilities, and there is the potential for sabotage by fire at Oyster Creek, Salem, and Hope Creek.

In two other electronic mail transmissions, both dated January 9, 2002, the Petitioner forwarded copies of information associated with Salem and Oyster Creek. One of these transmissions forwarded a copy of NRC Inspection Report 0500219/2001-011, which discusses the results of the Oyster Creek OSRE that was completed on May 10, 2001. The Petitioner stated that the report shows that the Oyster Creek security response team was unable to prevent the simulated intruders from destroying all of the equipment that is necessary to cool the reactor core.

The Petitioner also provided comments on selected excerpts taken from an NRC report entitled "Safety Evaluation Report Related to Operation of Salem Nuclear Generating Station," dated October 1974. In particular, the electronic mail transmission questioned the ability of the Salem plant to withstand the impact of an aircraft.

Following its initial review of the Petition, the NRC staff sent a copy of the proposed Director's Decision to the Petitioner, PSEG, and Exelon Generation Company LLC (Exelon) for comment on May 16, 2002. The Petitioner responded with comments on August 4, 2002. The UCS also provided input on the Petitioner's behalf in a letter dated August 7, 2002 . PSEG, the licensee for Salem and Hope Creek, responded by letter dated June 21, 2002, and Exelon,

the licensee for Oyster Creek, informed the petition manager by telephone that it did not have any comments. The comments and the staff's response to them are available in ADAMS or for inspection at the Commission's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, and from the ADAMS Public Library component on the NRC Web site, http://www.nrc.gov/reading-rm.html (the Public Electronic Reading Room). The applicable ADAMS Accession Nos. are ML022480149, ML022480163, ML022480173 and ML022470402.

II. Discussion

Physical Protection of Nuclear Power Plants

The Petitioner raised a number of issues associated with protecting our nation's nuclear power plants from terrorism. However, long before the tragic events of September 11, 2001, the Commission had recognized the need for strict safeguards and security measures at these facilities. When Congress first authorized the civilian use of atomic power through the Atomic Energy Act of 1954 (the Act), it recognized that public health and safety must be protected. The Act, as amended, gives the NRC the responsibility and authority to determine the requirements, including rules governing security, that are necessary to ensure that public health and safety are protected when commercial nuclear power plant licenses are issued.

The regulations for protecting all nuclear power plants, including those located in New Jersey, are provided in 10 CFR Part 73, "Physical Protection of Plants and Materials." These rules represent an important cornerstone of the NRC's regulatory oversight responsibilities. In particular, the regulations include detailed, specific requirements designed to protect nuclear power plants against acts of radiological sabotage, prevent the theft of special nuclear material, and protect safeguards and classified information against unauthorized release.

In order to provide high assurance that the operation of a nuclear power plant does not constitute an unreasonable risk to public health and safety, licensees are required to implement the NRC's safeguards and security regulations described in 10 CFR 73.55, "Requirements for Physical Protection of Licensed Activities in Nuclear Power Reactors Against Radiological Sabotage." Specifically, licensees are to design a physical protection system to provide the following means of protection against the design-basis threat (DBT) of radiological sabotage:

- maintain a well-equipped and highly trained physical security organization
- install physical barriers to protect vital equipment
- implement access requirements to control all points of personnel and vehicle access into a protected area. These requirements include the identification and search of individuals and vehicles for firearms, explosives, and incendiary devices
- provide access authorization programs and procedures (e.g., routine worker screening, badging, etc.)
- install detection, surveillance, and alarm systems with the capability to detect unauthorized penetrations into protected areas
- ensure that all guards and armed response individuals have the ability to communicate with a continuously manned alarm station
- establish effective testing and maintenance programs to verify that all physical barriers, detection, and alarm systems are capable of meeting NRC requirements
- provide a safeguards contingency plan to respond to threats, thefts, and radiological sabotage related to the nuclear facility

<u>Security Organization</u>

All operating nuclear power plant licensees are required to establish and maintain a site security organization. Such site security organizations include the designated managers, guard force, and personnel for checking worker backgrounds and issuing badges, as well as detailed access control and response procedures. To become a member of the security organization at a nuclear power plant, an individual must meet several stringent requirements, including satisfactorily performing qualification and requalification training. Specifically, 10 CFR 73.55(b)(4) expressly states that "licensee[s] may not permit an individual to act as a guard, watchman, armed response person, or other member of the security organization unless the individual has been trained, equipped, and qualified to perform each assigned security job duty" in accordance with NRC-established criteria for security personnel. Furthermore, each licensee shall establish, maintain, and follow an NRC-approved training and qualifications plan outlining the processes by which guards, watchmen, armed response persons, and other members of the security organization will be selected, trained, equipped, tested, and qualified to ensure that these individuals meet NRC requirements. These qualifications include specific requirements to demonstrate competence in the use of assigned weapons. In addition, guards, watchmen, armed response persons, and other members of the security organization are subject to the NRC's medical examination, physical fitness, and fitness-for-duty requirements. These security organizational requirements exist in order to implement the defense-in-depth philosophy for safeguarding vital plant areas, and are designed to help provide an effective deterrence against potential terrorist activities directed at nuclear power plants.

Access Authorization and Control

In order to ensure that only authorized individuals are able to enter vital and other protected areas of a nuclear plant, licensees are required to implement and maintain access

authorization and control programs. The objective of these programs is to provide high assurance that individuals who are allowed unescorted access to a nuclear power plant are trustworthy and reliable, and do not constitute an unreasonable risk to public health and safety including the potential to commit radiological sabotage. In order to achieve this objective, NRC regulations require licensees to: (1) perform background checks on workers who are granted unescorted access to the plant; (2) implement a picture badge identification system to identify those persons who are authorized to enter specific plant areas; (3) search personnel, packages, and vehicles entering the protected area; (4) search for firearms and explosives; (5) monitor entry into identified areas of the plant; and (6) maintain a detection and alarm system.

Worker background checks include an investigation to verify an individual's true identity and to develop information concerning the individual's employment, education, and credit history; military service; and character and reputation, including a psychological assessment, to evaluate trustworthiness and reliability. The checks also include a criminal history check conducted via fingerprint cards submitted to the Federal Bureau of Investigation (FBI). These requirements are designed to prevent unauthorized access of persons, vehicles, and materials into protected areas, and to ensure that only persons who are deemed trustworthy are authorized to have unescorted access to vital plant equipment.

Protection of Vital Equipment

Paragraph (a)(1) of 10 CFR 73.1 defines the design-basis threat from which vital areas must be protected. The regulation requires licensees to assume that potential terrorists have the following characteristics:

- are dedicated and well-trained (including military training and skills)

- have inside assistance, which may include a knowledgeable individual who attempts to participate in a passive role (e.g., provide information), an active role (e.g., facilitate entrance and exit, disable alarms and communications, participate in violent attack), or both
- possess suitable weapons, up to and including hand-held automatic weapons, equipped with silencers and having effective long-range accuracy
- possess hand-carried equipment, including incapacitating agents and explosives for use as tools of entry or for otherwise destroying reactor, facility, transporter, or container integrity, or features of the safeguards system
- have a four-wheel drive land vehicle available for transporting personnel and their hand-carried equipment to the proximity of vital areas

NRC regulations in 10 CFR 73.1(a)(1)(iii) also require licensees to protect against a four-wheel drive land vehicle bomb. In order to safeguard a nuclear plant against this threat, 10 CFR 73.55 requires all licensees to: (1) establish vehicle control measures, including vehicle barriers, to protect against the use of a land vehicle as a means of transportation to gain unauthorized proximity to vital areas; (2) compare the vehicle control measures established in accordance with 10 CFR 73.55(c)(7) for protection against a land vehicle bomb; or (3) develop a process to use alternative measures for protection against a land vehicle bomb (i.e., for those licensees with a particularly difficult site configuration). The alternative measures must provide substantial protection against a land vehicle bomb and must be supported by a licensee analysis.

In brief, Congress understood the inherent need for strict security measures at commercial nuclear power plants, and NRC regulations have ensured that these 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, a professional security force, and regulatory oversight are an effective deterrence against a spectrum of potential terrorist activities that could target equipment that is vital to nuclear safety.

NRC Response to the September 11, 2001, Terrorist Attacks

When the events of September 11, 2001, unfolded, U.S. nuclear power plants already possessed a strong capability to prevent and respond to many types of terrorist acts that could be directed at them. Consequently, the NRC determined that certain actions, such as ordering the immediate closure of nuclear power plants, including Salem, Hope Creek, and Oyster Creek, were not necessary to provide adequate protection of public health and safety. However, the NRC did take other immediate actions and advised all nuclear power plants to go to the highest level of security. The NRC also issued more than 30 threat advisories to address specific concerns or vulnerabilities in the aftermath of September 11, 2001. In addition, NRC security specialists performed numerous onsite physical security vulnerability assessments at licensed facilities to evaluate the effectiveness of the enhanced security measures that were put into place. These assessments demonstrated that the industry responded promptly and appropriately to the NRC threat advisories. To this day, all nuclear power plant facilities remain at a heightened security level.

The events of September 11, 2001, were unprecedented, and since that time, the NRC has taken appropriate steps to protect public health and safety. For example, the NRC quickly recognized the need to reexamine basic assumptions underlying the current civilian nuclear facility security and safeguards programs. Chairman Richard A. Meserve, with the full support of the rest of the Commission, directed the staff to undertake a comprehensive review of the NRC's security and safeguards programs. This is an ongoing review and as results become available, they will be evaluated and, if appropriate, incorporated into NRC's regulatory

processes. The comprehensive review takes advantage of insights gained by the NRC in consultation with the Office of Homeland Security, FBI, Department of Transportation (DOT), Department of Energy (DOE), and others. This cooperation further allows the NRC to keep abreast of the current threat environment, and communicate its actions to other Federal agencies to ensure an appropriate response to security concerns throughout the nation's entire critical energy infrastructure.

In light of the current threat environment, the Commission concluded that specific security measures, including those outlined in threat advisories and voluntarily implemented by nuclear power plant licensees, should be embodied in an Order consistent with the NRC's established regulatory framework. On February 25, 2002, the NRC issued Orders to all operating power reactor licensees to require that certain interim compensatory measures (ICMs) for security be taken beyond that called for by current regulations. These new requirements will remain in effect pending notification from the Commission that a significant change in the threat environment has occurred, or until the Commission determines that other changes are needed following the comprehensive review of current safeguards and security programs. The Orders were effective immediately upon issuance. For the most part, the Orders formalized a series of steps that nuclear power plant licensees had been advised to take by the NRC in the aftermath of the terrorist attacks on September 11, 2001; however, the Commission included certain additional security enhancements in the Orders. Details of certain new security requirements cannot be made public, but some of the specific measures implemented by the licensees in response to the advisories and ICMs included increased patrols, augmented security forces and capabilities, additional security posts, installation of additional physical barriers, vehicle checks at greater stand-off distances, enhanced coordination with law enforcement and military authorities, and more restrictive site access

controls for all personnel. The Orders also required that licensees provide a schedule for their implementation of the ICMs, and that all ICMs be implemented by August 31, 2002. Based on the NRC staff's review of the responses to the reporting requirements of the Order, the staff concludes that licensees have taken adequate measures to comply with the requirements of the Order by the required date of August 31, 2002. The staff is verifying that licensees are in compliance with the ICMs by conducting independent inspections at licensee sites.

The NRC staff has similarly issued Orders to all Independent Spent Fuel Storage Installation (ISFSI) licensees on October 16, 2002, to require implementation of ICMs designed to enhance security at these facilities.

The NRC continues to reexamine its activities to determine any significant safeguards vulnerabilities. If a vulnerability is identified, the NRC staff will revise physical protection, material control, and other requirements, as appropriate. Also, the NRC will continue to assist the Office of Homeland Security and other Federal agencies to evaluate threats beyond the feasible response capabilities of NRC licensees in order to consider the need to augment the site security organization with public assets, such as local law enforcement personnel.

Evaluation of Petitioner's Concerns

The Petitioner presented certain general and specific concerns about the vulnerability of nuclear power plants to terrorism. In addition, the Petitioner provided suggestions to improve security readiness oversight, and identified issues related to emergency planning and the availability of information to the public. The following is the NRC staff's evaluation of the Petitioner's concerns.

A. Vulnerabilities to Specific Threats

The Petitioner raised several concerns regarding the following possible threats to nuclear power plants:

- Oklahoma City-type truck bomb
- waterborne terrorist attacks
- airborne attacks
- sabotage by fire
- spent fuel security
- sabotage that results in a complete loss of AC power

1. Explosive Devices Transported by Vehicles (Truck Bomb)

Petitioner's Concerns

In the supplemental information provided on January 9, 2002, the Petitioner stated that Oyster Creek must be able to demonstrate that its containment could withstand an Oklahoma City-type truck bomb.

NRC Response

As previously stated, 10 CFR 73.55 requires licensees to, among other things, establish vehicle control measures to protect vital equipment from damage due to a land vehicle bomb. NRC regulations require all vital areas to be located within a protected area such that access to vital equipment requires passage through at least two physical barriers. Because the explosive effects of a land vehicle bomb diminish with distance, protected area barriers are located at a distance to provide an appropriate buffer between vital area barriers and a potential land vehicle bomb. The distance between a vital area and the potential explosive blast at the protected area barrier is referred to as the "standoff distance."

Notwithstanding the measures that were in place on September 11, 2001, to protect plants from the DBT vehicle bomb in effect at that time, the NRC issued Orders to all nuclear power plant licensees on February 25, 2002, to address the changing threat environment. The Orders formalized steps that licensees had voluntarily taken in response to NRC threat

advisories, and included additional measures to further protect nuclear power plants. These measures included a review of the adequacy of existing vehicle barrier systems and increasing standoff distances to ensure sufficient protection from a land vehicle bomb based on the current threat environment. The size of the bomb used to calculate standoff distances is determined by various Federal agencies involved in threat assessment, and the NRC cannot publicly disclose specific information or other similar details included in the Orders issued on February 25, 2002.

Therefore, to the extent that the licensee has taken measures in response to the Orders issued on February 25, 2002, the NRC has, in effect, granted the Petitioner's request that Oyster Creek be able to withstand the effects of an explosive device transported by a vehicle.

2. Waterborne Attack

Petitioner's Concerns

In the supplemental information provided on January 9, 2002, the Petitioner stated that Oyster Creek must demonstrate that it has viable security plans to protect the water intake systems from terrorist attack. In addition, the Petitioner stated that Salem must be able to demonstrate that it has a viable plan to protect its water intake system from a terrorist or commando attack from the Delaware Bay.

NRC Response

Water intake structures are generally located inside the protected area, which is the case for Oyster Creek and Salem. As previously stated, 10 CFR 73.55 requires that licensees must prevent the unauthorized access of persons, vehicles, and materials into protected and vital areas by using detection and barrier systems, and security personnel must be able to respond to unauthorized penetrations of the protected area. In addition, 10 CFR 50.63, "Loss

of All Alternating Current Power," requires that licensees have procedures in place to maintain adequate cooling for a period of time if alternating current (ac) power is lost. In the short term, these procedures would ensure adequate core cooling. Therefore, on September 11, 2001, nuclear plants already had measures in place to address a potential waterborne attack. However, in order to address the current threat environment, the NRC issued Orders to all nuclear power plant licensees on February 25, 2002. The Orders included additional measures to evaluate potential vulnerabilities to a loss of the intake structure, and to implement additional protective measures, as appropriate. Details of the additional actions taken by the licensees is considered Safeguards Information and cannot be made available to the public.

Therefore, to the extent that the licensees have taken measures to meet current regulatory requirements and have implemented additional steps in response to the Orders issued on February 25, 2002, the NRC has, in effect, granted the Petitioner's request that Salem and Oyster Creek have a plan to protect their respective water intake systems from a terrorist or commando attack.

3. Airborne Attack

Petitioner's Concerns

The Petitioner requested that the NRC order plant defenses to be upgraded to withstand a jet crash similar to that which occurred at the WTC on September 11, 2001. The Petitioner also raised concerns that a large aircraft filled with jet fuel could strike a nuclear power plant and start a fire in more than a single room or area, thus rendering certain safe shutdown equipment inoperable. The Petitioner concluded that the Oyster Creek, Hope Creek, and Salem nuclear power plants are vulnerable to radiological sabotage from the air.

NRC Response

In the aftermath of September 11, 2001, the Federal government took a number of steps to improve aviation security and minimize the threat of terrorists using airplanes to damage facilities critical to our nation's infrastructure. The Commission views that the efforts associated with protecting our nation from terrorist attacks by air should be directed toward enhancing security at airports and on airplanes. Thus, the Commission endorses the prompt response by the Congress to strengthen aviation security under the Aviation and Transportation Security Act of 2001, because this legislation provides for improved protection against air attacks on all industrial facilities, both nuclear and non-nuclear. The NRC further supports the steps taken by the Federal Aviation Administration (FAA) to improve aircraft security, including enhanced passenger and baggage screening, strengthening of cockpit doors, and the Air Marshal program. The U.S. intelligence community and various Federal law enforcement agencies have also increased efforts to identify potential terrorists and prevent potential attacks before they occur. For example, the FAA and DOD have acted more than once to protect airspace above nuclear power plants from what were thought to be credible threats against certain specific sites. These potential threats were later judged to be non-credible.

The FAA and DOD also concluded that a Notice To Airmen (NOTAM) was an appropriate means to help protect the air space above sensitive sites. Accordingly, the FAA issued a NOTAM strongly urging pilots to:

> "not circle or loiter over the following sites: Nuclear/Electrical power plants, power distribution stations, dams, reservoirs, refineries, or military installations, unless otherwise authorized by air traffic control or as required to land or depart at towered/non-towered airports."

This notice is still in effect. Should additional restrictions be deemed appropriate as a result of changing or more specific threats, our communication with the other Federal agencies will allow a prompt and coordinated response.

Since September 11, 2001, there have been no specific credible threats against any NRC-licensed facility. However, in view of the intelligence information at hand, enhancements to site security, and steps taken to improve aviation security, the NRC has concluded that it is appropriate to allow nuclear power plants to continue to operate without modifying the facilities to withstand an aircraft attack. Therefore, the NRC is denying the Petitioner's request that the NRC immediately order plant defenses to be upgraded to withstand a jet crash.

In denying the Petitioner's request, the NRC staff acknowledges that nuclear plants were not specifically designed to withstand a deliberate aircraft crash. Prior to September 11, 2001, the U.S. intelligence community and the NRC did not consider a deliberate aircraft attack against a nuclear power plant to be a credible threat.

Nevertheless, the staff recognizes that design and construction considerations could contribute to a nuclear power plant's survivability in the event of an aircraft impact. The NRC requires that these facilities be designed with a defense-in-depth philosophy to withstand events such as tornadoes (and missiles generated by tornadoes), hurricanes, fires, floods, and earthquakes. This has resulted in nuclear power plant designs that afford a measure of protection against deliberate aircraft impacts because the defense-in-depth philosophy requires plants to have hardened containments, and redundant and separated systems in order to ensure safety. Ultimately, the capability of a plant to successfully cope with an aircraft crash will depend upon a number of factors, including the plant's specific design features, the design and flight characteristics of the aircraft, the point of impact, the ability of the licensees' staff to utilize remaining backup systems, and the response of onsite and offsite resources.

In its Orders issued to all operating nuclear power plants on February 25, 2002, the Commission also directed licensees to develop specific guidance and strategies to respond to an event resulting in damage to large areas of the plant due to explosions or fire. These strategies are intended to assist in identifying and utilizing any remaining equipment and capabilities to maintain or restore reactor core, containment and spent fuel cooling, including both onsite and offsite resources.

The staff further notes that the NRC, in conjunction with DOE laboratories, is continuing a major research and engineering effort to evaluate the vulnerabilities and potential effects of a large commercial aircraft impacting a nuclear power plant. This effort also includes consideration of possible additional preventive or mitigative measures to further protect public health and safety in the event of a deliberate aircraft crash into a nuclear power plant or spent fuel storage facility. The final results from that analysis are not yet available. If the ongoing research and security review recommends any other security enhancements, the NRC will take appropriate action.

4. Sabotage by Fire

Petitioner's Concerns

The Petitioner raised concerns about fires in multiple rooms and areas, and that fire hazards analysis (FHA) information developed by licensees in response to the Browns Ferry fire could be used by saboteurs to disable critical emergency systems that are needed to cool the reactor core.

In addition, the Petitioner stated that "the NRC must cancel it's [sic] plans to allow PSE&G to not replace all of it's [sic] bogus raceway fire barriers, and instead require PSE&G to indeed replace ALL the fire wrap in question" at Salem. The Petitioner added that Salem

should not be allowed to operate with combustible fire seals, and instead, the NRC should require PSEG to replace all its combustible fire seals.

NRC Response

The Petitioner referred to a scenario in which saboteurs could use FHA information to start multiple fires and disable critical emergency systems that are needed to cool the reactor core. The NRC staff recognizes that it could contemplate a variety of plausible scenarios that result in a broad spectrum of damage and potential adverse consequences at a nuclear facility. Each scenario would involve varying elements of complexity: (1) number of saboteurs, (2) potential target(s), (3) weapons and/or devices necessary to carry out the terrorist mission, and (4) various tactical considerations. In order for the specific scenarios presented by the Petitioner to be carried-out, saboteurs would have to successfully penetrate and/or circumvent a number of defense-in-depth security practices that currently exist, including:

- access authorization measures
- routine searches of personnel entering controlled areas of the plant
- routine searches for explosives and weapons entering controlled areas
- multiple physical barriers, sophisticated surveillance equipment, and access control systems
- routine maintenance work control practices
- routine radiological area access controls
- other “barriers” (e.g., plant workers observing suspicious behavior on the part of potential terrorists)

In addition, the defense-in-depth design philosophy has resulted in plants having redundant fire detection and suppression systems and other fire barriers in order to ensure safety. Consequently, the saboteurs would have to also be successful at preventing these fire

mitigation systems, fire brigade personnel, and plant operators from responding to and/or extinguishing the fires in a timely manner. As previously stated, the Commission directed licensees to develop specific guidance and strategies to respond to scenarios resulting in damage to large areas of the plant due to explosions or fire. These strategies are now in place, and will support those responsible for maintaining and/or restoring reactor core, containment, and spent fuel cooling in the event of a large fires or terrorist attack.

Therefore, to the extent that appropriate measures are now in place to limit the accessibility of vital plant areas to terrorists, and that mitigative measures are in place to address potential fires or explosions, the NRC has, in effect, partially granted the Petitioner's request that action be taken to protect nuclear power plants from large-scale or multiple fires.

With respect to the Petitioner's concerns about fire wrap materials at Salem, the staff is aware that PSEG is implementing various corrective actions in response to a 1997 violation associated with the failure to adequately qualify certain electrical raceway fire barrier systems installed at the plant. The NRC staff concludes that the defense-in-depth protection afforded by fire detection and suppression systems and other fire protection measures is adequate to ensure public health and safety while the licensee corrects items identified in the violation.

5. Spent Fuel Security

Petitioner's Concerns

The UCS report on spent fuel security recommends that the NRC address the issue of spent fuel storage at all U.S. nuclear power plants. The Petitioner contends that the storage of spent fuel presents "a softer target that could yield graver consequences than an aircraft crashing through the reactor containment structure." As a result, the Petitioner concludes that "all of the spent fuel pools must be brought into the containment building, or a new containment building, able to withstand a jet crash, should be built for them." The Petitioner

also states that the NRC should cancel any plans for dry cask storage at any of New Jersey's plants, until a jet-bomber-proofed containment is built for them. Similarly, the Petitioner requests that: (1) the NRC should halt and reverse all permits that have allowed the construction of dry cask storage of nuclear waste at Oyster Creek; and (2) no dry cask storage should be allowed to be built without the NRC first holding an adjudicatory public hearing, without all of the Petitioner's security requests being met.

The basis for the Petitioner's concerns with respect to spent fuel pool security is related to the ability of the spent fuel pool structure to withstand the impact of a large jet aircraft. The requests associated with the Oyster Creek interim spent fuel storage facility are partially based upon concerns about the proximity of this facility to a nearby highway, and that dry cask systems are above-ground instead of buried.

NRC Response

As previously stated, the NRC staff concluded that, in view of the intelligence information at hand, enhancements to site security, and steps taken to improve aviation security, nuclear power plants should continue to be allowed to operate. The NRC staff's determination considered spent fuel pools since the pools are located within the protected area and are afforded protection under the same physical security protection program as the nuclear power plant.

The staff notes that certain spent fuel pool design features could contribute to ensuring public health and safety in the event of a deliberate attempt to crash an aircraft into a spent fuel pool. Specifically, spent fuel pools are small in size relative to the rest of the plant. This characteristic would make the pools difficult to target. In addition, the NRC's requirements that spent fuel pools be designed to withstand a variety of design-basis events such as tornadoes (and missiles generated by tornadoes), hurricanes, fires, floods, and earthquakes have

resulted in nuclear plant designs that afford a measure of protection against deliberate aircraft impacts. Spent fuel pools are massive structures with thick walls constructed of reinforced concrete. Furthermore, the defense-in-depth design philosophy used in nuclear facilities means that systems critical to the safety of stored fuel have redundant and separated systems in order to ensure safety.

Notwithstanding the defense-in-depth design features of the Salem, Hope Creek and Oyster Creek facilities, including the spent fuel pools, the NRC identified additional physical protection measures that all licensees should implement given the current threat environment. These measures were first communicated to licensees in safeguards advisories. NRC inspectors subsequently verified that plants had implemented the enhanced requirements outlined in the advisories. On February 25, 2002, the Commission issued Orders to all operating nuclear power plants requiring compliance with specified ICMs involving spent fuel pools.

The staff recognizes that additional requirements beyond those provided by existing regulations and the ICMs may be warranted. The comprehensive review of the NRC's safeguards and physical security programs initiated by Chairman Meserve following the September 11, 2001, terrorist attacks includes specific studies on the impacts of aircraft on nuclear power plant facilities, including the spent fuel pool. The review also includes an evaluation of the potential consequences of terrorist attacks using various explosives or heat-producing devices on spent fuel pools and spent nuclear fuel dry casks at spent nuclear fuel storage sites. The staff will use the insights gained from these studies as it considers the need for further security enhancements.

However, during this intervening period, the NRC concludes that, based on the intelligence information at hand, additional measures implemented by the licensees to

enhance spent fuel pool security, and steps taken to improve aviation security, there is reasonable assurance that nuclear power plants can continue to operate safely without the need to construct containments around spent fuel pools. Therefore, the NRC staff denies the Petitioner's request that all spent fuel pools be brought into the containment, or that a new containment building be constructed for spent fuel.

The Petitioner also requested that: (1) the NRC halt and reverse all permits associated with Oyster Creek that have allowed the construction of dry cask storage of nuclear waste; and (2) no dry cask storage should be allowed to be built without the NRC first holding an adjudicatory public hearing, without the Petitioner's security requests being met.

The rule that established the process for the general licensing of independent spent fuel storage installations (ISFSIs) at operating reactors became effective in 1990, and implemented the requirements of the Nuclear Waste Policy Act of 1982 (NWPA). Before the rule became effective, the public was offered the opportunity to comment on the rulemaking for this general licensing process. Also, under this process, the NRC approves and certifies spent fuel storage casks for use under the general licensing provisions. As each cask design is certified, it is added to the list of certified casks in 10 CFR 72.214 through a separate rulemaking effort. The rulemaking process for cask certification includes opportunities for public comment.

AmerGen Energy Company, LLC (AmerGen) is licensed by the NRC to operate the Oyster Creek nuclear power reactor under the provisions of 10 CFR Part 50. The licensee has also been granted a general license under the provisions of 10 CFR Part 72 to operate an ISFSI at the Oyster Creek reactor site. AmerGen will be using dry storage cask designs at Oyster Creek that the NRC has already approved for use. Because there are no pending licensing or other agency actions before the Commission, there is no additional process

available to the Petitioner for which an adjudicatory hearing might be appropriate. Consequently, the Petitioner's request for an adjudicatory hearing is denied.

The Petitioner also raised concerns about the proximity of the Oyster Creek ISFSI to U.S. Route 9, stating that it was vulnerable to a terrorist attack. The Petitioner is also concerned that, since ISFSIs are located above ground, they are more exposed to the possibility of a successful terrorist attack. Security requirements for the Oyster Creek ISFSI are outlined in 10 CFR 73.51, "Requirements for the Physical Protection of Stored Spent Nuclear Fuel and High-level Radioactive Waste." This section requires the licensee to establish and maintain a physical protection system with the objective of providing high assurance that activities involving spent nuclear fuel and high level radioactive waste do not constitute an unreasonable risk to public health and safety. This is accomplished, in part, by:

- storing spent nuclear fuel and high level radioactive waste only within a protected area
- granting access to the ISFSI's protected area only to individuals who are authorized to enter the protected area
- providing barriers, systems and procedures necessary to detect and assess unauthorized penetration of, or activities within, the protected area
- providing timely communication to a designated response force whenever necessary

The licensee has taken additional security measures in response to threat advisories issued following September 11, 2001, and the facility remains at a heightened security level. Furthermore, the dry cask storage containers used at Oyster Creek are designed to withstand the effects of natural phenomena such as earthquakes, tornadoes, lightning, hurricanes, floods, tsunamis, and seiches. The NRC requires that all ISFSI components important to safety must be designed and located so that they can continue to perform their safety functions effectively under credible fire and explosion exposure conditions. As a result, dry

cask storage containers inherently afford a high level of protection. Therefore, based upon the additional security measures being taken by the licensee, and the inherent level of protection already provided by the dry cask storage container design, the Petitioner's request to halt and reverse all permits associated with the Oyster Creek ISFSI is denied.

Although the enforcement action requested by the Petitioner is denied, the NRC staff has determined that additional measures should be taken to enhance ISFSI security and, on October 16, 2002, issued Orders to all licensees of ISFSIs requiring compliance with interim safeguards and security compensatory measures. In addition, the NRC's comprehensive review includes the potential consequences of terrorist attacks using various explosives or heat-producing devices on spent nuclear fuel dry casks at ISFSIs. As the results of this review become available, the NRC will determine if additional safety or physical protection actions or requirements need to be taken at ISFSIs and will take appropriate actions to implement those measures.

6. Complete Loss of AC Power

Petitioner's Concerns

The Petitioner stated that Salem must demonstrate that it has a viable plan to protect the plant in the event of a terrorist attack that cuts off all electric power, in conjunction with an attack on the diesel generators. The concern is that equipment that is vital to plant safety would not be available when necessary.

NRC Response

Section 50.63 of 10 CFR, "Loss of All Alternating Current Power," requires that each nuclear power plant be able to withstand and recover from a station blackout (SBO) for a specified period of time. SBO is defined as the complete loss of ac electric power to the

essential and nonessential switchgear buses in a nuclear power plant. A plant's specified SBO duration is based on an engineering evaluation that considers the following factors:

- redundancy of the onsite emergency ac power sources
- reliability of the onsite emergency ac power sources
- expected frequency of loss of offsite power
- probable time needed to restore offsite power

NRC rules further require that the reactor core and associated coolant, control, and protection systems, including station batteries and any other necessary support systems, must also provide sufficient capacity and capability to ensure that the core is cooled and appropriate containment integrity is maintained in the event of an SBO. The minimum SBO coping time for Salem Unit Nos. 1 and 2, based on the licensee's conservative analysis, is 4 hours.

Hot shutdown is generally the mode that plants are designed to achieve following a design-basis event (such as a large earthquake or loss-of-coolant accident.) If offsite power is lost, but the emergency diesel generators are unaffected, a plant can stay in a hot shutdown condition for an extended period of time. If an SBO condition exists, the time in which the reactor core could be damaged would depend upon the status of important parameters such as station battery capacity, environmental effects, water inventory in emergency tanks, and reactor coolant pump seal leakage. During an SBO, plant operators could employ certain strategies (i.e., use steam-driven auxiliary feedwater pumps and atmospheric dump valves) to cool the reactor. Provided that the operators retain the capability to replenish water in tanks, and station batteries have sufficient charge for control and instrument power, nuclear power plants can operate for extended periods at hot shutdown while ac power is being restored.

The NRC staff considers that, even under the current threat environment, there is a very low likelihood that saboteurs would be able to successfully damage all offsite and onsite

sources of ac power at Salem. This conclusion is based on the separate and redundant sources of offsite and onsite ac power that are available at the plant, as well as the heightened security measures that the licensee is taking in conjunction with the Orders issued on February 25, 2002. Therefore, to the extent that the licensee is implementing additional measures in response to the Orders, the NRC is partially granting the Petitioner's request that action be taken to protect nuclear power plants from the loss of ac power resulting from postulated acts of sabotage.

B. Other Concerns and Recommendations

1. Operational Security Readiness Evaluation (OSRE) Requirements

Petitioner's Concerns

The Petitioner raised several concerns about the NRC's program to verify security readiness through inspections and tests conducted under the OSRE program. The concerns included an observation that the NRC does not use force-on-force exercises to demonstrate security compliance at reactors that have permanently shut down, non-power reactors, spent fuel storage at operating reactors and reactors that have permanently shut down, and "operating reactors during outages where dozens of temporary workers, with minimal background checks, are allowed onsite."

On the basis of a report prepared by the UCS, the Petitioner also contends that NRC force-on-force tests have revealed serious security problems at approximately half of the operating plant sites, and that the majority of plant sites have only been tested once. The UCS report concluded that there is "little assurance that sites failing an OSRE several years ago have adequate security today." As a result, the Petitioner recommends that: (1) the NRC should conduct OSRE tests at all operating nuclear power plants, reactors that have permanently shut down with onsite spent fuel storage, and non-power reactors; (2) OSRE tests

must be expanded to include spent fuel as a sabotage target; (3) OSRE tests must account for an active role by multiple insiders; (4) the frequency of the OSRE tests must be no less than once every 4 years; (5) OSRE tests should be administered by NRC headquarters rather than by its regional offices to ensure consistent quality; and (6) the NRC should cancel the proposal to allow nuclear plants to conduct their own security inspection.

NRC Response

As previously stated, 10 CFR 73.55 requires all licensees to establish a physical protection system and a security organization with the objective of providing high assurance that activities involving special nuclear material are not inimical to the common defense and security, and do not constitute an unreasonable risk to the public health and safety. The physical protection system is required to protect against the DBT of radiological sabotage.

Licensees are also required to develop physical security plans (PSPs) in accordance with 10 CFR 73.55(a), and these plans must be submitted to the NRC for approval before they are implemented. Prior to establishing the OSRE program, NRC regional security teams conducted routine inspections that were designed to evaluate compliance with commitments made in approved PSPs and to assess the capabilities of the licensees' security programs. Although these commitments were intended to ensure that the security organizations were able to protect against the DBT, the inspections carried out to evaluate compliance with these commitments did not provide for performance testing of tactical response capabilities or evaluation of the effectiveness of these commitments to protect against the DBT.

As a result, the NRC established the OSRE program in 1991. The OSRE program, which is performance-based, was designed to enhance regional inspection efforts by using force-on-force exercises conducted by licensees as a method of evaluating their response capabilities, and it included the validation of licensees' target sets. A target set consists of

interrelated equipment or components that if disabled or destroyed would result in core damage, assuming no credit for operator intervention or emergency response action. Between August 1991 and August 2001, the NRC conducted 81 OSRE inspections. During these inspections, OSRE teams identified weaknesses at 37 plants. In general, these weaknesses were attributed to deficiencies in the licensees' contingency response plan, training, or execution of the plan. No one issue dominated the weaknesses found. The staff also notes that for the 15 OSREs conducted between April 2000 and August 2001, weaknesses were identified in 9 of 59 exercises or 15 percent of the time; hence the attacking force was not able to accomplish its objective and commit radiological sabotage 85 percent of the time.

The performance of licensees in OSRE exercises is sometimes mischaracterized. OSRE exercises are tough commando-style raids, designed to identify shortcomings in security personnel performance or strategy. Prior to the exercise, the attacking force is made aware of the licensee's defensive strategies as well as its methods and provisions for protecting target sets and critical equipment. In addition, plant operators and emergency response personnel are not allowed to intervene during the exercise to mitigate the consequences of the attacking force's actions. The NRC staff is not aware of any comparable performance testing of security measures for any other type of commercial industrial facilities. Identification of a weakness during an exercise leads to immediate corrective or compensatory measures to ensure that the security programs remain effective.

Following the events of September 11, 2001, the NRC temporarily discontinued force-on-force exercises under the OSRE program because the conduct of these exercises would be a significant distraction from actual site security and could elicit inappropriate responses by armed security personnel. The NRC had also diverted its limited security inspection resources to staff response centers to monitor and evaluate licensees' heightened

security posture. The NRC has recently reinitiated OSRE-type tests by initially implementing the table-top component of these exercises. For the first time, these tests involve a wide array of Federal, State and local law enforcement and emergency planning officials. The NRC expects to expand the exercises to include a force-on-force component at the beginning of next year. Full security performance reviews, including force-on-force exercises, are planned to be carried out at each nuclear power plant on a 3-year cycle instead of the 8-year cycle that had been used prior to September 11, 2001.

Moreover, the staff notes that actions associated with the Safeguards Performance Assessment (SPA) task force were also affected by the events of September 11, 2001. The SPA task force was created in 1998 to study the lessons learned from the OSRE program, and make recommendations for future tactical response evaluations. One recommendation included a proposal for the industry to assume a greater role in assessing licensee tactical response capability. However, further developments associated with this proposed program have been suspended pending completion of the NRC's comprehensive security review.

Finally, the other recommendations raised by the Petitioner (items 1, 2, 3 and 5) concerning the current OSRE program, such as the administration, frequency, assumed threat scenarios, and types of plants (e.g., decommissioned plants and ISFSIs) within the scope of these programs, have been included as a part of NRC's comprehensive security program review. Thus, the NRC has, in effect, partially granted the Petitioner's requests to the extent that: (1) table-top drills have resumed; (2) force-on-force drills will resume in the near future on a planned 3-year cycle; and (3) the other issues raised by the Petitioner concerning the OSRE program are being examined as a part of the NRC's comprehensive security review.

2. Availability of Potassium Iodide

Petitioner's Concerns

On the basis of a report prepared by the UCS, the Petitioner requested that the NRC require potassium iodide (KI) be readily available for people living in the vicinity of all nuclear reactors. The Petitioner stated that this step would ensure that people would be protected to the fullest extent possible in the event of a successful sabotage attack against a nuclear reactor.

NRC Response

Potassium iodide is a salt, similar to table salt. Its chemical symbol is KI, and it is routinely added to table salt to make it "iodized." If taken as a pill within the appropriate time and at the appropriate dosage, KI blocks the uptake of radioactive iodine by the thyroid gland, thereby reducing the risk of thyroid cancers and other diseases that might otherwise be caused by thyroid uptake of radioactive iodine that could be dispersed in a severe reactor accident.

On April 19, 2001, the NRC revised its regulations to permit States or Tribes with a population within the 10-mile emergency planning zone of commercial nuclear power plants to consider including KI as a protective measure for the general public to supplement sheltering and evacuation in the unlikely event of a severe nuclear power plant accident. Concomitant with this action, the Commission decided to provide funding for an initial supply of KI for a State or Tribe that chose to incorporate KI for the general public in its emergency plans. Individual States and Tribes were given the responsibility to further decide how best to stockpile and/or distribute KI to affected localities and citizens.

Following the events of September 11, 2001, the NRC expedited its process for providing KI to the States. On December 20, 2001, the Commission showed its continued support for the KI program by announcing its intent to supply KI to requesting States within approximately 30 days.

As of October 21, 2002, 17 States; Massachusetts, Connecticut, Maryland, Vermont, Delaware, Florida, Alabama, Arizona, New York, New Jersey, North Carolina, South Carolina, Pennsylvania, California, Ohio, Virginia, and New Hampshire have requested and/or received KI tablets. Delaware and New Jersey have received their requested amounts of KI. Each State is developing an implementation program to ensure that KI will be readily available should the need arise. Therefore, to the extent that KI will be available to the general public in the States of Delaware and New Jersey residing within 10 miles of Salem, Hope Creek, and Oyster Creek, the Petitioner's request regarding the distribution of KI has been satisfied.

3. Emergency Planning Oversight

Petitioner's Concerns

The Petitioner recommended that the NRC direct the New Jersey Department of Emergency Management and the State Police to allow citizen stakeholder groups such as UNPLUG Salem and Jersey Shore Nuclear Watch to observe and comment upon emergency planning (EP) and evacuation drills. In addition, the Petitioner suggested that the NRC should direct the above to include nuclear terrorism as a subject of evacuation drills and emergency planning.

NRC Response

The response to a radiological emergency at a nuclear facility involves a number of interrelated functions performed by onsite and offsite components of each site's emergency response organization. The effectiveness of this organization is critical to ensure the health and safety of the public. In recognition of this important function, 10 CFR 50.47(b)(14) requires that licensees must conduct periodic drills and exercises. This regulation is further supported by Appendix E to 10 CFR Part 50, "Emergency Planning and Preparedness for Production and Utilization Facilities." Appendix E requires that EP drills and exercises must be

conducted as close to actual accident conditions as practical, and must involve the principal functional areas of the licensees' emergency response capabilities.

The stated purpose for EP drills and exercises is to develop and maintain key skills, including: (1) testing the adequacy of timing and content of implementing procedures and methods; and (2) testing emergency equipment, communication networks, and public notification systems. Appendix E further directs that: (1) the EP training program provide for the training of employees through periodic drills and exercises to ensure that employees of the licensee are familiar with their specific emergency response duties; and (2) other persons whose assistance may be needed in the event of a radiological emergency must participate in the training and drills. The licensee's emergency response training program must comprise the following categories of plant workers:

- directors and/or coordinators of the plant emergency organization
- personnel responsible for accident assessment
- control room shift personnel
- radiological monitoring teams
- fire control (fire brigades) and damage control (repair) teams
- first aid and rescue teams, and medical support personnel
- licensee's headquarters support personnel
- security personnel

In addition, a radiological orientation training program should be made available to local services personnel (e.g., local emergency services/Civil Defense, local law enforcement personnel, and local news media).

The NRC's regulations further address the need for licensees to promptly rectify problems identified during drills and exercises. This is accomplished, in part, through formal

critiques conducted by licensees in order to identify any weak or deficient areas in need of correction. Consequently, licensees are expected to perform an effective performance evaluation following a drill or exercise, and NRC inspectors scrutinize the licensees' critique process. Any deficiency or observation noted by NRC inspectors is processed through the Significance Determination Process under the Reactor Oversight Process (ROP), and these findings will be formally documented in an Inspection Report. Inspection Reports are available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of NRC's electronic records system (ADAMS). ADAMS is accessible from the NRC Web site at: http://www.nrc.gov/reading-rm.html (the Public Electronic Reading Room).

The NRC uses inspection findings together with objective performance indicators (PIs) to assess plant performance within a regulatory framework of seven cornerstones of safety: (1) initiating events; (2) mitigating systems; (3) integrity of barriers to release of radioactivity; (4) emergency preparedness; (5) occupational radiation safety; (6) public radiation safety; and (7) physical protection. PIs and inspection findings are evaluated and given a color designation based on their safety significance. Green inspection findings or PIs indicate a very low risk significance and therefore have little or no impact on safety. White, yellow, or red inspection findings or PIs each, respectively, represent a greater degree of safety significance. The performance indicators, inspection findings, and the assessment letters describing plant performance—including emergency preparedness performance—are posted on the NRC Web site at: http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html.

The NRC and the Federal Emergency Management Agency (FEMA) are the two Federal agencies responsible for evaluating emergency preparedness at and around nuclear power plants. The NRC is responsible for assessing the adequacy of onsite emergency plans

developed by the licensee, while FEMA is responsible for assessing the adequacy of offsite emergency planning. Although the NRC regulates its licensees' EP programs, FEMA serves as the lead Federal agency for planning preparedness for all types of peacetime radiological emergencies. The NRC works in consultation with FEMA on a number of emergency preparedness issues. As the lead agency, FEMA issues policy and guidance to assist State and local governments in developing and implementing their radiological emergency response plans and procedures. Much of this guidance is developed with the assistance of the Federal Radiological Preparedness Coordinating Committee (FRPCC) and its member agencies. The exercise demonstration provides an input to the review process in order for the NRC and FEMA to evaluate the state of emergency preparedness. The NRC relies on FEMA's reasonable assurance findings to determine that adequate protective measures can and will be taken in the event of a radiological emergency to protect public health and safety.

Although citizen groups such as UNPLUG Salem and Jersey Shore Nuclear Watch may be key stakeholders within their communities, they are not a part of the licensee's emergency response organization and do not have a stated or active emergency response role at Salem, Hope Creek, or Oyster Creek. As stated above, FEMA and the NRC are the agencies legally charged with regulatory oversight of nuclear power plant emergency planning. The inclusion of non-participating individuals or groups would, thus, not contribute to the stated purpose of the drills and exercises. Furthermore, the NRC lacks the authority to direct a State or local government agency to permit citizen groups to participate in emergency response drills or exercises. Individuals or groups desiring to observe EP drills need to contact the New Jersey Office of Emergency Management (NJOEM) directly. Therefore, the NRC is denying the Petitioner's request to direct the NJOEM and the State Police to allow citizen stakeholders groups to observe and comment upon EP drills and exercises.

As previously stated, current regulations require that major portions of a licensee's emergency response capabilities must be exercised. The scenarios used during EP exercises, along with minimum frequencies, are developed by licensees in consultation with State emergency planning representatives in order to demonstrate specific response capabilities. The NRC staff expects that the scenarios will vary from exercise to exercise, such that all major elements of the plans and emergency response organizations are tested. The specific details of any particular scenario are best left to the participating organizations to be mutually determined. Because nuclear power plant security is an important cornerstone in protecting public health and safety, some States have included security-related events as one of the emergency plan elements tested.

Therefore, to the extent that security-related events are already considered among other possible EP drill scenarios tested, the Petitioner should consider the request, that the NRC direct the NJOEM and the State Police to include nuclear terrorism as a subject of EP exercises and drills, has been satisfied.

4. Miscellaneous Recommendations

Petitioner's Concerns

The Petitioner raised other concerns that were not specific to the nuclear power plants located in New Jersey:

- Existing security regulations do not provide adequate protection against known terrorist threat capabilities. For example, the regulations do not require protection against attacks by aircraft, boats, and trucks. Therefore, the NRC should revise the design-basis threat to include attacks by aircraft, boats, and trucks and ensure that all nuclear reactors are adequately protected against the revised design-basis threat.

- Regulations assume that only a single insider will attempt sabotage. The events of September 11, 2001, demonstrated that terrorists may devote the time and effort necessary to place more than one individual working at a nuclear reactor site.
- The NRC assumes that its regulations governing access control and authorization are fully effective in preventing sabotage by an insider. These regulations require background checks, drug and alcohol screening, and continuing behavior observation. But while background checks and the drug and alcohol screening have resulted in individuals being denied access or having their access privileges withdrawn, the continuing behavior observation has seldom, if ever, identified a potential problem. Thus, all individuals getting past the background checks and screenings have virtually unfettered ability to sabotage the nuclear reactor and spent fuel.
- Existing regulations governing changes to nuclear reactor facilities and their operating procedures require prior NRC approval for changes that reduce safety margins. But nuclear reactor owners routinely make changes without NRC approval even though they have not evaluated whether the proposed changes make it easier for insiders to carry out sabotage. Therefore, the NRC should require all nuclear reactor owners to formally evaluate the risk of sabotage by an insider when they make physical modifications to facilities and revise procedures.

NRC Response

The Petitioner made a number of recommendations associated with the current DBT, access authorization requirements, and facility changes that could potentially impact plant security. As previously stated, the NRC is conducting a comprehensive review of the agency's security and safeguards programs. This effort includes a thorough review of the adequacy of the DBT described in 10 CFR Part 73, as well as current access authorization requirements.

As the results of this on-going effort become available, individual recommendations will be evaluated and, if appropriate, incorporated into NRC's regulatory processes. With respect to modifications to plant facilities and procedures, the site security plan describes the critical features of the plant design necessary to defend against radiological sabotage. Paragraph 50.54(p)(2) to 10 CFR states that the licensee may make changes to the security plan without prior NRC approval if the changes do not decrease the safeguards effectiveness of the plan. Therefore, existing regulations ensure that changes to facility design or procedures that affect the security plan are evaluated for their impact. Changes that would reduce the effectiveness of the security plan need NRC review and approval prior to implementation.

5. Availability of Information to the Public

Petitioner's Concerns

The Petitioner requested that NRC shall agree to reopen its entire web site to stakeholder groups like UNPLUG Salem and Jersey Shore Nuclear Watch, with acceptable means of security involved.

NRC Response

Soon after September 11, 2001, the NRC withdrew information that could be sensitive or useful to potential terrorists from its public web site. On December 3, 2001, the NRC deployed Release 1 of its redesigned web site, and, since that time, has gradually added new information to the web site as the staff continues to review potential sensitive information. The NRC will continue to make additional information available as it completes more reviews. The NRC considers all members of the public to be stakeholders in its activities, and appreciates the public's patience as the agency proceeds with the task of rebuilding its web site. However, in the NRC's continued effort to ensure the safeguarding of nuclear material and safety at U.S.

nuclear power plants, the NRC is denying the Petitioner's request for special access to sensitive information by public interest groups on its web site.

III. Conclusion

The Petitioner raised a number of issues and policy questions concerning public health and safety associated with the possibility of terrorist activity directed at the four nuclear power plants located in the State of New Jersey. The NRC staff maintains that the immediate closure of Salem, Hope Creek, and Oyster Creek is not necessary to provide adequate protection of public health and safety. The staff considers that current regulations, as augmented by the interim compensatory security measures set forth by the Orders issued on February 25, 2002, and the actions taken by other various Federal agencies, adequately address the current threat environment in a consistent manner throughout the nuclear industry.

Therefore, the NRC concludes that it has, in effect, partially granted the Petitioner's request for increased security at Salem, Hope Creek, and Oyster Creek to the extent that many of the concerns raised by the Petitioner are included within the scope of the Orders issued to all nuclear power plants on February 25, 2002, or are a part of the NRC staff's comprehensive review to evaluate the agency's security and safeguards programs. The Orders required that all commercial nuclear power plant licensees implement interim compensatory security measures for the generalized high-level threat environment. The remainder of the Petitioner's requests are denied for the reasons previously stated in the Director's Decision.

The NRC staff further notes that the Orders do not obviate the need for licensees to continue to implement protective measures in response to changes in the threat environment as described in NRC Regulatory Issue Summary 2002-12A, "NRC Threat Advisory and Protective Measures System," and maintain the effectiveness of existing security measures

taken in response to the events of September 11, 2001. The requirements will remain in effect pending notification from the Commission that a significant change in the threat environment has occurred, or until the Commission determines that other changes are needed following a more comprehensive reevaluation of current safeguards and security programs, presently underway.

A copy of this Decision will be filed with the Secretary of the Commission so that the Commission may review it in accordance with 10 CFR 2.206(c). As provided for by this regulation, the Decision will constitute the final action of the Commission 25 days after the date of the Decision unless the Commission, on its own motion, institutes a review of the Decision within that time.

Dated at Rockville, Maryland, this 1st day of November 2002.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/

Jon R. Johnson, Deputy Director
Office of Nuclear Reactor Regulation

October 15, 2002

MEMORANDUM TO: Ledyard Marsh, Chairman
Petition Review Board

FROM: Robert Fretz, Petition Manager **/RA/**

SUBJECT: STAFF RESPONSE TO COMMENTS ON PROPOSED DIRECTOR'S DECISION DD-02-XX

This memorandum documents the NRC staff's response to comments on the proposed Director's Decision (DD) DD-02-xx (UNPLUG Salem Campaign petition regarding security at New Jersey's nuclear power plants). The Petitioner's comments were solicited by letter dated May 16, 2002.

The Petitioner replied in a letter dated August 4, 2002. In addition, the Union of Concerned Scientists responded on behalf of the petitioner in a letter dated August 7, 2002. The licensees did not provide comments that required a response by the NRC staff. The Petitioner's comments and the NRC staff's responses are discussed in the attachment.

Attachment: As stated

NRC STAFF'S RESPONSE TO COMMENTS ON
PROPOSED DIRECTOR'S DECISION DD-02-XX

Comment By	Text	NRC Response
UNPLUG Salem	Page 8 - we disagree with the assertion that security guards can "foster an effective deterrence" against potential terrorists. David Lochbaum of the Union of Concerned Scientists has provided much information to you. The bottom line is that the events of 9/11 mean that standards for deterring terrorists have risen. You do not explain how NRC has raised those standards.	The statement referenced by the Petitioner describes how a site's security organization is part of the overall defense-in-depth approach to safeguarding nuclear facilities. The Director's Decision (DD) explains, in certain detail, how the NRC and its licensees have responded to the events of 9/11, and how security standards have been raised.
UNPLUG Salem	At the bottom of page 8 - please explain in detail what you define as a "background check". Please explain in detail what you define as "screening personnel, packages and vehicles."	Details on background checks are found in the paragraph of the DD that follows the paragraph on which the Petitioner commented. In summary, the screening of personnel and packages is performed, in part, by requiring that all workers pass through portal monitors that detect weapons and explosives. Also, vehicles are searched prior to entering the protected area.
UNPLUG Salem	On page 9, line 4, saying that you "develop information" (relating to security background investigations) gives no time parameters. How long do these checks take? How do you deal with out of country information?	There are no strict time parameters associated with completing individual background checks for unescorted access to vital equipment. However, full background checks can usually be completed in 3 to 5 days. With respect to out-of-country information, licensees may currently grant unescorted access only to those individuals with a completed background check. Licensees shall make a best effort to obtain the required information pertaining to the applicant's employment, education, credit, criminal, and military service histories, as well as the applicant's character and reputation. Actions that constitute a "best effort" will not be a minimal attempt to collect the information needed but rather it will be determined by the circumstances and documented accordingly. If the desired source cannot be contacted or the information cannot be obtained from **(CONTINUED ON FOLLOWING PAGE)**

Comment By	Text	NRC Response
		sources initially chosen, the licensee must pursue secondary sources for the essential information. The NRC staff is working to improve the access to information necessary to perform background checks. Additional interim compensatory measures (ICMs) are being considered.
UNPLUG Salem	The paragraphs following "Protection of Vital Equipment" were based on information from before 9/11. Thus what you have written on pages 9 and 10 are no longer relevant and need to be revisited in light of 9/11. The last line on page 9, "hand-held automatic weapons" must be reviewed in light of 9/11.	The "Protection of Vital Equipment" section referenced by the Petitioner provides background information on security requirements in existence prior to 9/11. The staff considers those requirements to remain relevant to physical security. The DD goes on to discuss additional security measures imposed by Order as a result of the events of September 11, 2001, and the DD further describes how the NRC is conducting a comprehensive review of its security and safeguards programs. This effort includes a review of the Design Basis Threat (DBT), and the weaponry that would be required to respond to the DBT.
UNPLUG Salem	On page 10: what kind of review of vehicle barriers has been done to see if they can withstand a commando attack of sufficient size to overpower the guards and then use explosives to clear the barriers away?	The NRC has reviewed the licensees' compliance with NRC regulations and the Orders dated February 25, 2002. The licensees are currently meeting these requirements. Details of the measures being implemented by the licensees are considered Safeguards Information. As such, this information cannot be released to the public.
UNPLUG Salem	The last line on page 10 shows how your thinking is mired in the past: "most likely terrorist acts". The whole point of 9/11 is that it is the unlikely terrorist acts we must prepare for.	Security regulations and requirements in place prior to September 11, 2001, were designed to protect nuclear plants against the DBT, or the "most likely terrorist acts" as determined by Federal agencies involved in threat assessment. As previously discussed, the DD also discusses those actions taken in response to the September 11, 2001, attacks.

Comment By	Text	NRC Response
UNPLUG Salem	On page 11 you say that "NRC performed numerous onsite…assessments". You give no indication of the results of those assessments. This paragraph MUST be re-written to tell us what the results were and what improvements were made. This can be in a general sense, for example, "322 assessments were made, 120 high level and 450 low level suggestions were made." NRC should not be able to get away with an unquantifiable statement. In the next paragraph you discuss how NRC worked with other agencies. This is just whitewashing. Again, you provide NO quantifiable data about what improvements have been made or are in the pipeline. This section MUST be rewritten to provide us with data.	Results of the NRC's onsite assessment of security measures implemented by licensees following September 11, 2001, is considered safeguards information and cannot be made available to the public. The NRC is working closely with the Office of Homeland Security in order to help develop a National Physical Infrastructure Protection Plan. The DD describes, in limited detail, the steps that the NRC has taken to improve security at nuclear power plants. The DD also describes additional actions or areas being considered in the NRC's comprehensive security review. As previously stated, many of the details involve Safeguards Information and cannot be released to the public.
UNPLUG Salem	On page 12, line 9, again you really tell us nothing. Lines 10-13 should be re-written to specifically detail what improvements were made.	Details of specific security requirements are considered safeguards information, and cannot be made public. The NRC diligently strives to provide an appropriate level of detail to the public regarding security information.
UNPLUG Salem	On page 13, under "NRC Response", we disagree with the statement that "vital area barriers….are generally robust". First of all, by using the word "generally", you are implying that SOME barriers are NOT robust. The barriers that are not robust, such as the spent fuel pools at all 4 of NJ's nukes, should be listed, and NRC should admit that SOME barriers are NOT robust. Secondly, the word "robust" needs to be defined, or a more accurate word used.	This section was changed to clarify that vital area barriers are designed to meet the requirements of Sections 73.55(a), 73.55(c), and 73.1(a) to Title 10 of the *Code of Federal Regulations* (10 CFR).
UNPLUG Salem	On page 14, you say "vital area barriers at many facilities". Again, the use of the word "many" implies that SOME barriers do NOT afford sufficient protection. These lines should be rewritten to indicate which barriers do NOT protect. At the end of the second paragraph you refuse to say what size of bomb barriers **(CONTINUED ON FOLLOWING PAGE)** can protect plants from. This is a use of "national security" to withhold vital information from a stakeholder. This section should be rewritten to give us	This section was changed to clarify the sentences on page 14 of the proposed DD referenced by the Petitioner. Details of the DBT, uncluding the size of the land vehicle bomb, are classified and cannot be publically released. Regarding your concerns about Oyster **(CONTINUED ON FOLLOWING PAGE)** Creek, all nuclear power plant licensees meet the current regulations regarding protects against the design basis vehicle bomb. The Director's Decision states

Comment By	Text	NRC Response
	more information as to what size bomb barriers will not withstand and what NRC plans to do about it. In the last paragraph, while we are pleased that NRC is granting our request, we disagree that this "granting" really means anything, because you have NOT demonstrated that Oyster Creek can indeed withstand the effects of an explosive device transported by a vehicle. This section should be rewritten by you to accurately demonstrate how Oyster Creek can withstand the effects.	that all licensees, including Oyster Creek, have increased the stand off distance of their vehicle barrier system, as required, to provide further protection following changes to the DBT as determined by the Federal government.
UNPLUG Salem	On page 15 and 16, while we are pleased that NRC again grants our request that Oyster Creek and Salem must be able to protect their water intakes from attack, nowhere on page 15 do you describe HOW this protection occurs. Page 15 must be rewritten to describe in more detail, how the intakes are, and will be, protected. We would also like to know what liability NRC has if, after granting our petition on intake defense without additional explanation, an attacker does succeed in penetrating the intake structure, thus causing a LOCA.	The Orders issued on February 25, 2002, included compensatory measures to improve the ability to detect, deter, and respond to a waterborne attack, the details of which cannot be disclosed to the public. The Orders also directed licensees to assess the vulnerability of the cooling water intake structures from water-borne attack and take certain action, as appropriate. In addition, the NRC's Orders require licensees to develop guidance and strategies to respond to an event resulting in damage to a large area of the plant due to fire and explosion. These strategies are intended to identify and utilize remaining core cooling capabilities.
UNPLUG Salem	Pages 16-18 discuss vulnerabilities to airplane attack. Professor Frank von Hippel of Princeton University, and a workgroup of students have concluded in a recent study that all 4 of NJ's nukes are indeed vulnerable to a 767-type airplane strike. Thus we reject your refusal to grant us that portion of our 2.206 and request that you review your decision. On page 16, you agree that nuclear plants were not designed to stop a jet impact and **(CONTINUED ON FOLLOWING PAGE)** say that defense in depth affords a "measure" of protection. That line must be rewritten to define what a "measure" of protection means. On page 17 you continue to avoid to precisely define how well protected nuclear plants are. Lines 1 through 5 must be rewritten to give more	The staff clarified the response to the Petitioner's concern regarding aircraft attack. The NRC and other Federal agencies has taken measures, as discussed in the Director's Decision, and have concluded that continued operation of the these nuclear power plants is appropriate without requiring modifications to the plants to withstand deliberate aircraft impact. The NRC contends that, while not **(CONTINUED ON FOLLOWING PAGE)** specifically designed to withstand a direct aircraft impact, nuclear plants are massive structures with thick exterior walls and interior barriers of reinforced concrete. The defense-in-depth philosophy also means that critical systems have redundant systems that are

Comment By	Text	NRC Response
	information to the stakeholder. On page 18, line 1 should be rewritten to list at least the threat against TMI and the general threats made to nuclear plants. We STRONGLY disagree with the statement that you feel that the possibility of an airliner strike remains "acceptably low". You must rewrite that section to define what "acceptably low" means, and to define at what level "unacceptably high" begins. Any comparison of chances must be based on the formerly "acceptably low" chances of four airliners being hijacked at the same time and then crashed into buildings. If the odds of an airliner strike are at least as high as 9/11, then those odds are TOO HIGH. Finally, on page 18,you must detail what "additional actions" (line 11) NRC will take. NRC should rewrite the above section to better answer our request, and to answer it in such a way that "odds" are not the key reason for rejection.	physically and electrically separated from each other as part of the basic design philosophy. This provides the plant a "measure of protection" to respond to a variety of events, including an aircraft attack. With respect to the alleged threat to Three Mile Island (TMI) referenced by the Petitioner, the NRC assessed the July 4, 2002, threat against TMI as non-credible. The assessment was made in complete consultation with the intelligence community and law enforcement agencies, and concluded that there was no specific credible threat to attack a nuclear power plant on July 4th. The NRC staff provided additional information in this section to clarify actions currently underway to further protect plants from a deliberate aircraft crash. The DD also notes actions taken by other Federal agencies and Departments to preclude an aircraft attack.
UNPLUG Salem	On page 19, we are referring to a number of scenarios submitted by David Lochbaum, of the Union of Concerned Scientists, that show vulnerabilities of all 4 NJ nukes to multiple sabotage. On line three, we suggest that "staff considers", be replaced by "staff AGREES". By listing all the barriers the way you do on this page, you do not respond to each concern separately. Each concern raised by Mr. Lochbaum should be answered separately, because some of your answers do not apply to each specific scenario. In addition, you need to define **(CONTINUED ON FOLLOWING PAGE)** "other barriers" (bullet point 6), as "other barriers" means nothing. While we are pleased that you have granted our request, without additional information from NRC it is not clear what you are granting. We totally disagree with you that reliance on defense-in-depth can be used, as it is on pages 19-20, as a	Licensees are required to develop a physical security plan necessary to protect the plant against the DBT. The DBT is based on the current threat environment, and is determined by various Federal agencies involved in threat assessment. As previously stated in the DD, the NRC staff is continually reviewing the DBT to determine whether changes to licensees' physical security plans are necessary to adequately protect nuclear power plants. The NRC's defense-in-depth philosophy **(CONTINUED ON FOLLOWING PAGE)** toward protecting nuclear power plants provides multiple barriers to deter potential terrorist attacks. This approach reduces the likelihood that one or more terrorists could be successful at inflicting damage to a nuclear plant's safety systems. A discussion of specific scenarios with respect to the DBT and defense-in-depth barriers is considered

Comment By	Text	NRC Response
	catch-all to cover inadequacies in design and safety. We request that you more deeply explain how NJ's 4 nukes are protected against multiple attacks or fires.	safeguards information, and may not be provided to the public. The opening paragraph to the NRC's response was modified to clarify and enhance the staff's intended response. The staff clarified what was intended by "other barriers."
UNPLUG Salem	As to your response on page 20 to Salem's bogus fire wraps, we demand more than just your "belief" (line 8) that defense-in-depth is adequate. Using the word "belief" on a science test essay would get you an F. We demand detailed proof of why you "believe" that NRC's deal with PSEG that allowed PSEG to not replace much of its bogus safe-shutdown cable wraps will not lead to safety problems IN CONJUCTION WITH a terrorist attack and/or fire in two or more places at the same time at Salem Units 1 or 2.	The NRC staff considered the concerns raised by the Petitioner in its response, and believes that its response is adequate.
UNPLUG Salem	On page 21, line 5, please change that line to read that the "requests….are PARTIALLY based…" Then add that we have concerns based on the security of any dry cask system, including concerns that the dry cask is above-ground instead of buried.	The Petitioner requested that his concerns on dry cask storage at Oyster Creek be clarified. These concerns were incorporated into the DD.

Comment By	Text	NRC Response
UNPLUG Salem	Your "NRC Response" that follows is unacceptable because it is merely a repeat of your standard response about nuclear plants in general. The spent fuel pools at Hope Creek and Oyster Creek are above ground and thus subject to a loss of water accident. The pools at Salem Units 1 and 2 are covered by a building, "no stronger than a K-Mart (Lochbaum)." By using the word "typically" in line 16 you avoid being specific about NJ's four nukes. Rewrite line 16 and specify the strengths and weaknesses of the four spent fuel pools in NJ. On line 17 (last paragraph), the use of the word "certain" avoids the issue. Exactly how much of a level of protection is there. Rewrite that line to be accurate.	The staff's response was clarified to emphasize that the continued operation of nuclear power plants, which includes the storage of spent fuel, is based on the actions taken by the Federal government following the events if September 11. The storage of spent fuel is afforded the same physical protection as the nuclear power plant. In view of the current intelligence information, enhancements to security at nuclear plants, and improvements in aviation security, the NRC concludes that nuclear plants are safe to operate, regardless of their specific design. In this regard, while the NRC acknowledges that nuclear power plants were not specifically designed to withstand the impact of a large commercial airplane, the hardened design and defense-in-depth design philosophy of nuclear power plants, including the spent fuel pools, could mitigate the effects of a deliberate aircraft impacts. While spent fuel storage poses a lesser immediate risk to the public health compared to an operating reactor and safety due to it lower decay heat rate, the staff recognizes that additional requirements beyond those provided by existing regulations and the ICMs may be warranted. The NRC's comprehensive security and safeguards review includes specific studies on the impacts of aircraft on nuclear power plant facilities. The results of this study are not yet available. Based on the results of the study, additional requirements may be considered.

Comment By	Text	NRC Response
UNPLUG Salem	On page 22, we vehemently disagree with your statement that threat advisories adequately safeguard spent fuel pools. Those remarks are totally wrong and must be eliminated from your response. Your denial of our request that spent fuel storage facilities be made capable of withstanding a crash is one of the more indefensible parts of this document. We suggest that your staff revisit this part of your analysis because the spent fuel pools are some of the most vulnerable parts of a nuclear plant. Your refusal to strengthen the fuel pools is inexcusable.	The staff has clarified the response regarding the storage of spent fuel at nuclear power plants. See the response to the previous UNPLUG Salem response.
UNPLUG Salem	We disagree with your denial, on page 23, of our request for an adjudicatory hearing on the dry cask storage at oyster Creek. Your response is based mostly on procedural grounds. The NRC has the ability to overcome procedural concerns if this action is in the public interest. The safety of the public is the paramount issue. On pages 23 and 24, we disagree with your denial of our request to halt and reverse all dry cask permits. The bottom line is that the dry casks were built within 400 feet of Route 9 and are basically indefensible against a concerted terrorist attack. The requirements you raise on page 23 as part of 10 CFR 73.51 have been made irrelevant by 9/11. None of your requirements stops a rocket attack. In addition, in the third line from the bottom, you again use the word "robust". Please remove that word and use terms that define exactly how well a cask is defensible.	As stated in the DD, AmerGen has been granted a general license under the provisions of 10 CFR Part 72 to operate an ISFSI at the Oyster Creek reactor site. The licensee will be using dry storage cask designs that the NRC has already approved for use. Because there are no pending licensing or other agency actions before the NRC, there is no process available to the Petitioner for which an adjudicatory hearing might be appropriate. ISFSI security requirements are outlined in 10 CFR 73.51, “Requirements for the Physical Protection of Stored Spent Nuclear Fuel and High-level Radioactive Waste.” The NRC staff is currently evaluating whether additional measures should be taken to enhance ISFSI security. As previously stated, the NRC’s comprehensive review of security requirements includes the potential consequences of terrorist attacks using various explosives or heat-producing devices on spent nuclear fuel dry casks at ISFSIs. If the NRC determines that additional or revised safety or physical protection actions or requirements need to be taken at ISFSIs, the NRC will take appropriate actions to implement those measures. Additional information on ISFSI design requirements was added to the DD to clarify the staff’s response.

Comment By	Text	NRC Response
UNPLUG Salem	Pages 24 and 25 discuss our concerns over complete loss of power, as that would be one way for a terrorist to cause a LOCA and/or meltdown. Because Salem is isolated on Artificial Island, which has only one road to the plant, and because determined terrorists could defend that road for an unknown amount of time, your SBO evaluation of 4 hours is flawed. Again, 9/11 changed everything, including your "engineering evaluation". The SBO should be refigured based on the assumption that terrorists with heavy weapons have cut all incoming power lines to the plant and have damaged the diesel generators. We feel that a four-hour battery backup is not sufficient. We disagree with your analysis in paragraph 2 on page 25, because of your assumption on line 15 ("Provided that"). We feel that this assumption of control of replenishment of water and sufficient battery power can be overcome by terrorists under certain conditions.	As stated in the DD, the DBT is determined in joint consultation with intelligence community and is constantly reassessed. Current security requirements for nuclear power plant licensees are based on this DBT. You provide no basis other than speculation that the DBT should be revised to reflect your postulated scenario. The NRC staff is reassessing the current DBT as part of the comprehensive review, and will make conforming changes to licensee security requirements, if required.
UNPLUG Salem	On page 25, third paragraph, change the word "considers" to "agrees". While we appreciate that you partially grant our request, we urge you to rewrite this section to more accurately reflect the true post-9/11 realities.	The staff has clarified this section of the DD. See the previous NRC comment responses above.
UNPLUG Salem	Pages 26-30 deal with our concerns about OSRE. While we appreciate that you have partially granted our requests, your partial granting does not go far enough. We do not think that NRC should be allowed to wait until reviews are done or until Congress issues specific orders on OSRE. In light of 9/11, OSRE is the one program that should be expanded by NRC, not eliminated. Thus we urge that the responses on page 26-30 be rewritten in light of 911. Your excuse on page 28, line 11 that other industries do not have comparable testing **(CONTINUED ON FOLLOWING PAGE)** is irrelevant and should be excised from your response. What matters is what NRC does, not what other agencies do.	Following the terrorist attacks, force-on-force exercise activities were temporarily postponed because, in the heightened threat environment, the conduct of exercises would be a significant distraction to security forces. In addition, the NRC had diverted its limited security inspection resources to staff response centers and to monitor and evaluate the licensees' heightened security posture. Moreover, the NRC believed that it would be imprudent and inefficient to conduct exercises using performance criteria based on a pre-September 11 threat while at the **(CONTINUED ON FOLLOWING PAGE)** same time defenses were being upgraded. The NRC recognizes, however, that force-on-force drills are an

Comment By	Text	NRC Response
	We totally disagree with your assertion in line 16 that the industry can assume accepting that assertion, you are placing peoples' lives in jeopardy. There must be an independent agency, in light of 9/11, to test nuke plant security.	important means to assess security readiness. The NRC has recently reinitiated OSRE drills by initially exercising the table top component of these exercises. For the first time, these drills involve a wide array of Federal, State and local law enforcement and emergency planning officials. The NRC expects to expand the exercises to include a force-on-force component at the beginning of next year. Full security performance reviews, including force-on-force exercises, are planned for each nuclear power plant on a 3-year cycle instead of the 8-year cycle that had been used prior to September 11, 2001.
UNPLUG Salem	Pages 30 and 31 deal with items you consider to be "rulemaking". We appreciate your partial granting of these requests. However, you do not detail which parts you have granted and which you have not. We request that the response be more detailed in this area and explain which requests were included and which were not, and why.	The Petitioner requested that the NRC order security enhancements with respect to the current DBT, access authorization requirements, and facility changes. These recommendations cover a broad spectrum of security-related issues currently being addressed by the NRC's comprehensive review of the agency's security and safeguards programs. As of this date, the review has not been completed. The Petitioner is one of many persons who have called for changes to the current DBT outlined in 10 CFR Part 73. Changes to DBT regulatory requirements may involve rulemaking. As stated in the DD, the NRC is currently conducting research to provide information that would be needed to support potential changes to DBT requirements. Furthermore, other changes requested by the Petitioner are included within the scope of the NRC's comprehensive security programs review. Since this review has not been completed, the staff is unable to determine at this time whether the changes requested by the Petitioner will eventually be incorporated **(CONTINUED ON FOLLOWING PAGE)** into regulatory requirements. As a result, the Petitioner should consider that his request has been partially granted to the extent that the Petitioner's recommendations are included within the

Comment By	Text	NRC Response
		scope of the NRC's review.
UNPLUG Salem	Pages 31 to 33 deal with KI. We request that your response be rewritten to read "NRC supports KI distribution in the 50 mile EPZ zone."	As stated in the DD, the NRC support revised its regulations to permit States and tribes within a 10-mile emergency planning radius of a nuclear plant to consider including KI as a protective measure to supplement sheltering and evaluation. The NRC does not support KI distribution in the 50 mile EPZ zone
UNPLUG Salem	Pages 33 to 37 deal with how stakeholder organizations can be allowed to observe emergency planning exercises and be integrated into the emergency planning system. We oppose your denial of our request because it is based on poor logic. You deny us the ability to participate because we presently do not participate. That makes no sense at all. NRC has the ability to work out a framework that would allow access to emergency preparedness exercises by stakeholder groups. In light of 9/11, citizen groups would be a tremendous additional resource to emergency planners, both as a source of ideas and as a source of volunteers.	Denial of the Petitioner's request is based on the staff's conclusion that allowing non-participating individuals or groups to observe EP drills would not contribute to the stated purpose of the drills and exercises. Furthermore, the NRC lacks the authority to direct a State or local government agency to permit citizen groups to participate in emergency response drills or exercises.
UNPLUG Salem	Finally, on page 38, while we appreciate your partial granting of our request, overall, your responses do not go far enough and are often evasive and at times not logical. We urge that you incorporate the changes requested in this letter into your final document.	See the previous response regarding the completeness of the response to the Petitioners' request to participate in EP drills.

Comment By	Text	NRC Response
UCS	First, I frankly do not understand why Mr. Samuel J. Collins rather than Mr. Roy P. Zimmerman is the director making the decision in this matter. Your letter transmitting the proposed Director's Decision is dated May 16, 2002, or nearly six weeks after the Nuclear Regulatory Commission created the Office of Nuclear Security and Incident Response (NSIR) on April 7, 2002. Mr. Collins is the Director of the Office of Nuclear Reactor Regulation (NRR). When Mr. Cohen submitted his petition in September 2001, NRR had responsibility for nuclear plant security. Mr. Glenn M. Tracy and his staff within NRR handled this responsibility. But Mr. Tracy and the majority of his staff moved to NSIR when the NRC reconfigured how it handles nuclear plant security. The last bullet on page 6 and the first seven bullets on page 7 cover various requirements for nuclear plant security - all of which are under the purview of the NRC's Office of Nuclear Security and Incident Response and NOT the NRC's Office of Nuclear Reactor Regulation. This is relevant because the wrong Director is attempting to decline Mr. Cohen's petition.	The Office of Nuclear Security and Incident Response (NSIR) has assisted NRR in preparation of the DD, and members of the NSIR staff have reviewed and concurred on the DD. The DD represents the NRC's position on security issues raised by the Petitioner.
UCS	Since the NRC began checking physical protection capability with force-on-force tests in 1991, more than 300 force-on-force exercises have been conducted by the NRC at US nuclear power plants. None, repeat NONE, of these exercises has targeted spent fuel, whether in wet-pool storage or in dry casks. All of the exercises targeted the irradiated fuel in the reactor. Consequently, the capability of all the required physical protection features to adequately defend against sabotage of spent fuel has never been demonstrated. This is relevant because Mr. Cohen's petition specifically sought to compensate for this shortcoming.	The NRC recognizes that force-on-force drills are an important means to assess security readiness. The NRC has recently reinitiated OSRE drills by initially exercising the table top component of these exercises. For the first time, these drills involve a wide array of Federal, State, and local law enforcement and emergency planning officials. The NRC expects to expand the exercises to include a force-on-force component at the beginning of next year. Full security performance reviews, including force-on-force exercises, will be carried out at each nuclear power plant on a 3-year cycle instead of the 8-year cycle that had been used prior to September 11, 2001. These exercises may include spent fuel pools as a part of test scenarios.

Comment By	Text	NRC Response
UCS	The second bullet on page 7 implies that the screening of personnel and vehicles prior to permitting access to the protected area of a nuclear plant is sufficient to prevent explosives and incendiaries within the facility. Not true. There are plenty of such materials readily available within the facility. For example, on January 7, 1989, workers at the HB Robinson nuclear power plant in South Carolina responded to a number of small fires. It turns out that the fires were caused by workers accidentally connecting the hydrogen supply system to the plant's instrument and service air systems. These systems carried hydrogen gas throughout the plant, causing flammable concentrations in the turbine building, auxiliary building, and reactor containment structure. This is relevant because an insider or small band of outsiders could intentionally do what workers accidentally did at Robinson, and provide ignition sources once the hydrogen concentrations reached flammable mixtures.	As previously stated, the threat advisories and Orders dated February 25, 2002, required that licensees take ICMs to enhance security. The staff recognizes that further research and evaluation is needed with respect to certain concerns before any changes to NRC security regulations or requirement are made. This effort is currently in progress. As stated in the DD, if the NRC determines that additional or revised safety or physical protection actions or requirements need to be taken, the NRC will take appropriate actions to implement those measures.
UCS	The third bullet on page 7 implies that background checks and other measures to control which workers access which parts of nuclear power plants are sufficient to prevent insider sabotage. Not true. The Central Intelligence Agency and the Federal Bureau of Investigation had even more extensive measures, including periodic polygraphing of personnel, yet these federal agencies were unable to prevent Aldrich Ames and Robert Hansen from compromising national security from the inside. The NRC does not polygraph nuclear plant workers and therefore cannot pretend to have more effective protection than agencies that do. This is relevant because Mr. Cohen's petition specifically sought to provide additional barriers that insiders would have to defeat before the public would be harmed.	The third bullet on page 7 of the proposed DD generally discusses the access requirements for nuclear power plant licensees. These requirements are part of a more comprehensive defense-in-depth approach to physical plant security that is outlined on the rule. If further measures to prevent insider sabotage are identified following the staff's comprehensive security review, the NRC will take additional regulatory actions, as necessary.

Comment By	Text	NRC Response
UCS	The first paragraph on page 18 provides the NRC's judgment, based in large part of the absence of "specific credible threats against any NRC-licensed facility since September 11, 2001," that "the probability of terrorists using a large airliner to successfully damage a nuclear power plant remains acceptability low." UCS questions the NRC's judgment on two points. First, the Bush administration repeatedly stated that there were no specific credible threats against the World Trade Center or the Pentagon prior to September 11, 2001. The lack of "specific credible threats" therefore may be true, but it's hardly relevant. Second, the NRC concedes that US nuclear power plants were not specifically designed to withstand aircraft crashes. From 1980 to 1983, I worked at the Browns Ferry Nuclear Plant in Alabama. In 1975, a worker checking for air leaks with a candle in the room beneath the control room accidentally started a fire that burned out of control for nearly six hours, disabling virtually all of the emergency core cooling systems on Unit 1 and many of those systems on Unit 2. While many fire protection upgrades have been made since the Browns Ferry fire, the NRC staff seems to have discounted the potential for a large aircraft laden with jet fuel to do more damage to defense-in-depth than one worker with one candle. This is relevant because Mr. Cohen's petition sought to address these shortcomings pro-actively, whereas the NRC's position would wait until after a plant was attacked and then "close the barn door."	Fire protection regulations and requirements have been greatly enhanced since the 1975 Browns Ferry fire. Since 1975, the NRC also amended its regulations to require that licensees be able to cope with a complete loss of power (Station Blackout). As stated in the DD, the NRC is continuing a major research and engineering effort at the Sandia National Laboratory to evaluate the vulnerabilities and potential effects of a large commercial aircraft impacting a nuclear facility. This effort includes a careful consideration of additional mitigative measures necessary to further protect nuclear facilities from a deliberate aircraft crash. The final results from that analysis are not yet available. Based on the results stemming from this review, the Commission may take additional actions to protect nuclear power plants from this threat if deemed necessary. Also, the Commission has directed licensees to develop specific guidance and strategies to respond to an event resulting in damage to large areas of the plant due to explosions or fire. Strategies now in place or being developed by licensees to address mitigation of explosions or fires will assist those responsible for responding in the unlikely event that saboteurs could inflict damage to equipment necessary to maintain and/or restore reactor core, containment, and spent fuel cooling.
UCS	The last paragraph on page 19 provides the NRC's dismissal of Mr. Cohen's concerns about fires in multiple rooms. The NRC relies in part on access screening, which is insufficient because of the HB Robinson hydrogen near-miss described earlier. The NRC additional relies on the saboteurs being unable to prevent "these fire mitigation systems, fire **(CONTINUED ON FOLLOWING PAGE)** brigade personnel, and plant operators from responding to and/or extinguishing	See the NRC's response to the previous comment submitted by UCS.

Comment By	Text	NRC Response
	the fires in a timely manner." There are numerous flaws in this NRC position, including: - Ten years ago this month, Hurricane Andrew inflicted considerable damage on the Turkey Point nuclear plant in southern Florida. The plant's fire protection system was severely damaged when a tower collapsed onto the primary storage tank (500,000 gallons) and the secondary storage tank (750,000 gallons). The plant's fire sprinkler system did not have water to use in event of fire until workers jury-rigged a temporary line to the screen-wash pump. The two tanks were located side by side outside the plant - convenient for destruction by saboteurs. - Five years ago, oil used to cool the main transformer at the Pilgrim nuclear plant in Massachusetts flowed into the reactor building through a bus duct and pooled on the floor of the switchgear rooms. While this flammable oil did not catch fire, the NRC determined that Pilgrim faced a total loss of AC and DC power (i.e., worse than station blackout) had it ignited. The fire hazards analyses are based on installed combustibility loadings - saboteurs can significantly alter those loadings. - Attacks on nuclear plants may directly or indirectly impair the capability of the plant's fire brigade. For example, an aircraft crashing into the facility is obviously hazardous to personnel. A ground attack could also be detrimental to plant workers considering they are not bullet-proof. Even if fire brigade members survive the initial assault, their freedom to move about the facility to fight the fire could be slowed. Thus, it is rather cavalier for the NRC to dismiss Mr. Cohen's security concerns without specifically addressing his concerns for the potential scenarios.	

Comment By	Text	NRC Response
UCS	Pages 27 to 30 contain the NRC's response to Mr. Cohen's petition calling for increased force-on-force testing by the NRC. Missing from the NRC's response is this fact - on September 10, 2001, the NRC had plans for fourteen (14) force-on-force security tests at US nuclear power plants during Fiscal Year 2002, six Operational Safeguards Readiness Evaluations (OSREs) by NRC and eight Safeguards Performance Assessments (SPAs) by licensees. No force-on-force security test has been conducted since September 11, 2001. Thus, a measure thought prudent when America was at peace was discarded by NRC now that America has declared war on terrorism (and vice-versa). Rather than show off it's mathematical prowess (page 28), the NRC should conduct force-on-force tests as requested by Mr. Cohen.	The NRC recognizes that force-on-force drills are an important means to assess security readiness. The NRC has recently reinitiated OSRE drills by initially exercising the table top component of these exercises. For the first time, these drills involve a wide array of Federal, State, and local law enforcement and emergency planning officials. The NRC expects to expand the exercises to include a force-on-force component at the beginning of next year. Full security performance reviews, including force-on-force exercises, will be carried out at each nuclear power plant on a 3-year cycle instead of the 8-year cycle that had been used prior to September 11, 2001.
UCS	On page 28, the NRC describes the rigor of its currently-abandoned force-on-force security tests and states "The NRC staff is not aware of any comparable performance testing of security measures for any other type of commercial industrial facilities." So what? Is the NRC staff aware of any other type of commercial industrial facilities that are so hazardous that they require federal liability protection, as the nuclear industry does under the Price-Anderson Act? If so, then the disparity in security testing rigor would be relevant. If not, the point is pointless. The NRC talks a lot about providing protection commensurate with the risk. The fact that nuclear power plants are the most hazardous commercial industrial facilities in the US of A clearly warrant their getting more than K-Mart security protection.	When Congress first authorized the civilian use of atomic power through the Atomic Energy Act of 1954, it understood the inherent need for strict security measures at commercial nuclear power plants. NRC regulations have ensured that these are among the most hardened and secure industrial facilities in our nation. The NRC will continue to ensure that nuclear power plants are adequately protected.

7590-01-P

U.S. NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-272, 50-311, 50-354, AND 50-219

LICENSE NOS. DPR-70, DPR-75, NPF-57, AND DPR-16

PSEG NUCLEAR, LLC AND AMERGEN ENERGY COMPANY, LLC

NOTICE OF ISSUANCE OF DIRECTOR'S DECISION UNDER 10 CFR 2.206

Notice is hereby given that the Director, Office of Nuclear Reactor Regulation, has issued a Director's Decision with regard to a letter dated September 17, 2001, filed by the UNPLUG Salem Campaign, hereinafter referred to as the "petitioner." The petition was supplemented on January 9 and 10, 2002. The petition concerns the operation of the Salem Nuclear Generating Station, Unit Nos. 1 and 2 (Salem), Hope Creek Generating Station (Hope Creek), and Oyster Creek Nuclear Generating Station (Oyster Creek).

The petitioner requested that the U.S. Nuclear Regulatory Commission (Commission or NRC) take the following actions:

(1) Order either the closure of, or an immediate security upgrade at, the Salem, Hope Creek, and Oyster Creek.

- Order the plants' defenses to be upgraded to withstand a jet crash similar to that which occurred at the World Trade Center (WTC) on September 11, 2001.
- Require all spent fuel pools to be brought into the containment buildings, or a new containment building, able to withstand a jet crash, should be built for them.
- Cancel all plans for a dry cask storage at any of New Jersey's plants until a jet-bomber-proofed containment is built for them.
- Triple the number of Operational Safeguards Response Evaluation (OSRE) security inspections.

- Cancel proposals to allow nuclear plants to conduct their own security inspections.

As a basis for the request described above, the Petitioner cited the terrorist attacks on September 11, 2001, stating that New Jersey's four nuclear power plants are vulnerable to terrorist threats, including a suicide airplane attack similar to the attack on the WTC. The UNPLUG Salem Campaign considers such operation to be potentially unsafe and to be in violation of Federal regulations.

On December 7, 2001, the NRC staff informed the Petitioner in a telephone call that the Commission had decided to treat the letter dated September 17, 2001, as a petition pursuant to Section 2.206 of Title 10 of the *Code of Federal Regulations* (10 CFR 2.206). In addition, the NRC staff informed the Petitioner that because the September 17, 2001, letter raised sensitive security issues, the Commission was deferring application of certain public aspects of the process described in Management Directive (MD) 8.11, "Review Process for 10 CFR 2.206 Petitions," pending further developments related to the NRC's security review. Accordingly, the NRC staff did not offer the Petitioner the opportunity to provide, in a public forum, additional information to support the September 17, 2001, letter before the NRC's Office of Nuclear Reactor Regulation (NRR) Petition Review Board (PRB). Rather, the NRC staff requested that the Petitioner forward any additional information related to the petition to the assigned petition manager.

By an acknowledgment letter dated December 20, 2001, the NRC staff formally notified the Petitioner that the letter dated September 17, 2001, met the criteria for review under 10 CFR 2.206, and that the NRC staff would act on the request within a reasonable time. The acknowledgment letter further stated that the Commission had, in effect, partially granted the Petitioner's request for immediate actions in that the NRC took action immediately after September 11, 2001, to enhance security at all nuclear facilities, including the four nuclear

power plants located in New Jersey. The NRC staff also informed the Petitioner in the acknowledgment letter that the issues raised in the petition were being referred to NRR for appropriate action.

The Petitioner responded to the acknowledgment letter by electronic mail on January 9 and 10, 2002, and provided additional information that the staff considered in its evaluation of the petition. When the NRC received the Petitioner's original letter and additional information, it was determining the criteria for releasing security-related information in light of the events of September 11, 2001. As such, certain correspondence was initially withheld from the public document room due to the potential for sensitive, security-related information to be contained in these documents. With the exception of one report, the Petitioner's incoming letter and subsequent correspondence are now publicly-available.

The NRC sent a copy of the proposed Director's Decision to the Petitioner and to licensees for comment on May 16, 2002. The Petitioner responded with comments on August 4 and 7, 2002, and PSEG Nuclear LLC (PSEG) responded on June 21, 2002. The comments and the NRC staff's response to them are included with the Director's Decision.

The Petitioner raised a number of issues associated with protecting our nation's nuclear power plants from terrorism. However, long before the tragic events of September 11, 2001, the Commission had recognized the need for strict safeguards and security measures at these facilities. NRC regulations have ensured that nuclear power plants are among the most hardened and secure industrial facilities in our nation. Since September 11, 2001, the NRC has directed a number of security enhancements at nuclear power plants to address the continuing threat environment. The Congress, as well as other Federal, State, and Local governmental authorities involved in protecting public health and safety, have also responded to protect all industrial facilities, both nuclear and non-nuclear, against terrorism. The Director

of the Office of Nuclear Reactor Regulation has determined that the Commission has, in effect, partially granted certain elements of the Petitioner's request for increased security at Salem, Hope Creek, and Oyster Creek to the extent that many of the Petitioner's requests were included within the scope of Orders issued to all nuclear power plants on February 25, 2002, and are a part of the NRC staff's comprehensive review to evaluate the agency's security and safeguards programs. The reasons for this decision are explained in the Director's Decision pursuant to 10 CFR 2.206 DD-02-03, the complete text of which is available for inspection at the Commission's Public Document Room, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, or from the ADAMS Public Library component on the NRC Web site, http://www.nrc.gov/reading-rm.html (the Public Electronic Reading Room). Documents associated with this Director's Decision may be found in ADAMS by referencing Package Accession No. ML022470404, or individually as follows: (1) Director's Decision, ML022470314; (2) UNPLUG Salem response dated August 4, 2002, ML022480149; (3) Union of Concerned Scientists letter dated August 7, 2002, ML022480163; (4) PSEG letter dated June 21, 2002, ML022480173; and (5) Memorandum to Ledyard Marsh, "Staff Response to Comments on Proposed Director's Decision," ML022470402.

A copy of the Director's Decision will be filed with the Secretary of the Commission for the Commission's review in accordance with 10 CFR 2.206 of the Commission's regulations. As provided for by this regulation, the Director's Decision will constitute the final action of the Commission 25 days after the date of the decision, unless the Commission, on its own motion, institutes a review of the Director's Decision in that time.

Dated at Rockville, Maryland, this 1st day of November 2002.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Jon R. Johnson, Deputy Director
Office of Nuclear Reactor Regulation