

November 18, 2002

Mr. Alex Matthiessen
Executive Director
Riverkeeper, Inc.
25 Wing & Wing
Garrison, NY 10524

Dear Mr. Matthiessen:

This letter responds to the petition you filed with Dr. William Travers, Executive Director for Operations, of the U.S. Nuclear Regulatory Commission (NRC) pursuant to Section 2.206 of Title 10 of the *Code of Federal Regulations* (10 CFR 2.206) on November 8, 2001, and as supplemented on December 20, 2001. In your petition, you requested that the NRC: (1) order the licensee to suspend operations, revoke the operating license, or adopt other measures resulting in a temporary shutdown of the Indian Point Nuclear Generating Unit Nos. 2 and 3 (IP2 and 3); (2) order the licensee to conduct a full review of the facility's vulnerabilities, security measures and evacuation plans; (3) require the licensee to provide information documenting the existing and readily attainable security measures which protect the IP facility against land, water, and airborne terrorist attacks; (4) immediately modify the IP2 and 3 operating licenses to mandate certain specified security measures sufficient to protect the facility; and (5) order the revision of the licensee's Emergency Response Plan and Westchester County's Radiological Emergency Response Plan (RERP) to account for possible terrorist attacks and prepare a comprehensive response to multiple, simultaneous attacks in the region which may impair the efficient evacuation of the area. In addition, you stated that if, after conducting a full review of the facility's vulnerabilities, security measures, and evacuation plans, the NRC finds that it cannot sufficiently ensure the security of the IP facility against terrorist threats, the NRC should take prompt action to permanently retire the facility. Further, separately from the above issues, you requested that the NRC order the licensee to undertake the immediate conversion of the current spent fuel storage technology from a water-cooled system to a dry cask system.

On December 20, 2001, the NRC staff acknowledged receiving your petition and stated that, pursuant to 10 CFR 2.206, your petition would be acted upon within a reasonable time. You were also told that the NRC did not consider the immediate closure of IP2 and 3 to be necessary to provide adequate protection for the public's health and safety in light of the defense-in-depth concept incorporated into the facility's design and the heightened security measures implemented in response to the events of September 11, 2001.

Although the NRC staff did not request Entergy Nuclear Operations, Inc. (ENO), to provide information related to the petition, ENO responded on February 11, 2002, and the information provided was considered by the staff in its evaluation of the petition.

The staff sent a copy of the Proposed Director's Decision to you and to ENO for comment on May 16, 2002. You responded with comments on August 9, 2002. ENO did not provide any comments. Your comments and the staff's response to them are included as enclosures.

With regard to the issues raised by the Petitioners, the NRC has, in effect, partially granted the Petitioners' request for an immediate security upgrade at IP2 and 3. As stated in its letter to the

Petitioners on December 20, 2001, the NRC took action to enhance security at all nuclear facilities, including IP2 and 3, on September 11, 2001. Immediately after the attacks, the NRC advised all nuclear power plants to go to the highest level of security, which they promptly did. These facilities have remained at a heightened security level since that time. Additionally, the NRC issued Orders to all operating commercial nuclear power plants on February 25, 2002, to implement interim compensatory security measures for the current threat environment. Some of the requirements formalized a series of security measures that NRC licensees had taken in response to advisories issued by the NRC, and others were security enhancements which have emerged from the Commission's ongoing comprehensive security review. In general, the requirements include 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 NRC continues to work with other Federal agencies and is monitoring relevant information it receives on security matters at nuclear facilities. The NRC is prepared to make immediate adjustments as necessary to ensure adequate protection of the public's health and safety. On the basis of these actions, the Petitioners' request that the licensee conduct a full review of the facility's vulnerabilities, security measures, and evacuation plans has been, in effect, partially granted. Regarding the Petitioners' request for specific information about the security measures, the NRC's policy is to not release safeguards information to the public. Thus, this request is denied.

The NRC in its February 25, 2002, Orders also directed licensees to evaluate and address potential vulnerabilities to maintain or restore cooling to the core, containment, and spent fuel pool and to develop specific guidance and strategies to respond to an event that damages large areas of the plant due to explosions or fires. These strategies are intended to help licensees to identify and utilize any remaining onsite or offsite equipment and capabilities. If NRC's ongoing security review recommends any other security measures, the NRC will take appropriate action.

The NRC denies the Petitioners' request to mandate certain security measures, as specified by the Petitioners, for the protection of the facility, such as a system to defend a no-fly zone. As part of its ongoing comprehensive security review, the NRC is examining the threat environment in coordination with other Federal agencies and the use of governmental assets to augment the licensee's response. These organizations will define the appropriate boundary between the public and private sector in the defense of nuclear facilities. Further, the current security requirements, along with the enhancements in the February 25 Orders, provide reasonable assurance of the protection of the facility.

The NRC finds that the existing emergency response plans are flexible enough to respond to a wide variety of adverse conditions, including a terrorist attack. The NRC advisories and the Orders issued since September 11, 2001, directed licensees to take specific actions deemed appropriate to ensure continued improvements to existing emergency response plans. The Petitioners' concern that the emergency plans do not contemplate multiple attacks on the infrastructure is alleviated by the fact that the emergency plans are intended to be broad and flexible enough to respond to a wide spectrum of events. Thus, the Petitioners' request that the onsite and offsite emergency plans be revised to account for possible terrorist attacks has been, in part, granted.

The NRC found that the current spent fuel storage system and the security provisions at IP adequately protect the spent fuel. Thus, the Petitioners' request to order the installation of a dry-cask storage facility is denied. However, the licensee has stated its intention to add such a facility.

A copy of the Director's Decision (DD-02-06) 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 the Agencywide Documents Access and Management System (ADAMS) 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 incoming petition was originally withheld from the public document room due to the potential for sensitive, security-related information to be included. When the NRC received your letter, the criteria for releasing security-related information was still being determined in light of the events of September 11, 2001. Your incoming letter, and subsequent correspondence, were later made publicly available.

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 the petition manager, Patrick Milano, at 301-415-1457 to discuss any questions related to this petition. I thank you for your time and interest in nuclear power plant security.

Sincerely,

/RA/

Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

Docket Nos. 50-003, 50-247, and 50-286

Enclosures: 1. Director's Decision 02-06
2. Petitioners' Comments on Proposed Director's Decision
3. Staff's Response to Petitioners' Comments
4. *Federal Register* Notice

The NRC found that the current spent fuel storage system and the security provisions at IP adequately protect the spent fuel. Thus, the Petitioners' request to order the installation of a dry-cask storage facility is denied. However, the licensee has stated its intention to add such a facility.

A copy of the Director's Decision (DD-02-06) 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 the Agencywide Documents Access and Management System (ADAMS) 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 incoming petition was originally withheld from the public document room due to the potential for sensitive, security-related information to be included. When the NRC received your letter, the criteria for releasing security-related information was still being determined in light of the events of September 11, 2001. Your incoming letter, and subsequent correspondence, were later made publicly available.

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 the petition manager, Patrick Milano, at 301-415-1457 to discuss any questions related to this petition. I thank you for your time and interest in nuclear power plant security.

Sincerely,

/RA/

Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

Docket Nos. 50-003, 50-247, and 50-286

- Enclosures: 1. Director's Decision 02-06
2. Petitioners' Comments on Proposed Director's Decision
3. Staff's Response to Petitioners' Comments
4. *Federal Register* Notice

ACCESSION NO.: ML022630099

PACKAGE: ML022630294

INCOMING: ML013480179, ML013610467, ML 022630472

*See previous concurrence

| | | | | | | | |
|--------|-----------|------------------|-----------------------|-----------|------------|----------|----------|
| OFFICE | PDI-1/PM | PDI-1/LA | TechEd* DD | PDI-1/SC* | DSSA* | IEHB/SC* | NSIR/C* |
| NAME | PMilano | SLittle | PKleene | RLauffer | RPalla | KGibson | GTracy |
| DATE | 11/12/02 | 11/13/02 | 05/02/02 | 10/28/02 | 09/25/02 | 10/25/02 | 11/01/02 |
| OFFICE | PDI/D* | P DR/RI* | DLPM/D* | ADPT/NRR | ADIP/NRR | NRR/D | |
| NAME | SRichards | BHolian by phone | LMarsh for JZwolinski | BSheron | WBorchardt | SCollins | |
| DATE | 11/05/02 | 09/19/02 | 11/07/02 | 11/13/02 | 11/13/02 | 11/15/02 | |

OFFICIAL RECORD COPY

DISTRIBUTION:

PUBLIC

PDI-1 Reading

EDO # G20010508

EDO Reading File

W. Travers

W. Kane

C. Paperiello

P. Norry

J. Craig

K. Cyr/S. Burns

S. Collins/J. Johnson

B. Sheron

W. Borchardt

R. Zimmerman, NSIR

M. Weber, NSIR

H. Miller, R-I

J. Zwolinski

S. Richards

R. Laufer

P. Milano

S. Little

M. O'Brien (2)

A. Madison, NSIR

K. Gibson

R. Palla

B. Platchek, R-I

R. Subbaratnam

J. Goldberg, OGC

OPA

OCA

NRR Mail Room (EDO #
G20010508)

L. Cox, DLPM Secretary

Indian Point Nuclear Generating Unit Nos. 2 & 3

cc:

Mr. Jerry Yelverton
Chief Executive Officer
Entergy Operations
1340 Echelon Parkway
Jackson, MS 39213

Mr. Michael R. Kansler
Senior Vice President and
Chief Operating Officer
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. Fred Dacimo
Vice President Operations
Entergy Nuclear Operations, Inc.
Indian Point Nuclear Generating Units 1 & 2
295 Broadway, Suite 1
P.O. Box 249
Buchanan, NY 10511-0249

Mr. Robert J. Barrett
Vice President - Operations
Entergy Nuclear Operations, Inc.
Indian Point Nuclear Generating Unit 3
295 Broadway, Suite 3
P.O. Box 308
Buchanan, NY 10511-0308

Mr. Dan Pace
Vice President Engineering
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. James Knubel
Vice President Operations Support
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. Christopher J. Schwarz
General Manager Operations
Entergy Nuclear Operations, Inc.
Indian Point Nuclear Generating Unit 2
295 Broadway, Suite 1
P.O. Box 249
Buchanan, NY 10511-0249

Mr. Joseph DeRoy
General Manager Operations
Entergy Nuclear Operations, Inc.
Indian Point Nuclear Generating Unit 3
295 Broadway, Suite 3
P.O. Box 308
Buchanan, NY 10511-0308

Mr. John Kelly
Director of Licensing
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Ms. Charlene Faison
Manager, Licensing
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Mr. John McCann
Manager, Nuclear Safety and Licensing
Indian Point Nuclear Generating Unit 2
Entergy Nuclear Operations, Inc.
295 Broadway, Suite 1
P.O. Box 249
Buchanan, NY 10511-0249

Mr. Harry P. Salmon, Jr.
Director of Oversight
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Indian Point Nuclear Generating Unit Nos. 2 & 3

cc:

Mr. Thomas Walsh
Secretary - NFSC
Entergy Nuclear Operations, Inc.
Indian Point Nuclear Generating Unit 2
295 Broadway, Suite 1
P.O. Box 249
Buchanan, NY 10511-0249

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
475 Allendale Road
King of Prussia, PA 19406

Senior Resident Inspector, Indian Point 2
U. S. Nuclear Regulatory Commission
295 Broadway, Suite 1
P.O. Box 38
Buchanan, NY 10511-0038

Resident Inspector's Office, Indian Point 3
U.S. Nuclear Regulatory Commission
295 Broadway, Suite 3
P.O. Box 337
Buchanan, NY 10511-0337

Mr. John M. Fulton
Assistant General Counsel
Entergy Nuclear Operations, Inc.
440 Hamilton Avenue
White Plains, NY 10601

Ms. Stacey Lousteau
Treasury Department
Entergy Services, Inc.
639 Loyola Avenue
Mail Stop: L-ENT-15E
New Orleans, LA 70113

Mr. William M. Flynn, President
New York State Energy, Research, and
Development Authority
Corporate Plaza West
286 Washington Avenue Extension
Albany, NY 12203-6399

Mr. J. Spath, Program Director
New York State Energy, Research, and
Development Authority
Corporate Plaza West
286 Washington Avenue Extension
Albany, NY 12203-6399

Mr. Paul Eddy
Electric Division
New York State Department
of Public Service
3 Empire State Plaza, 10th Floor
Albany, NY 12223

Mr. Charles Donaldson, Esquire
Assistant Attorney General
New York Department of Law
120 Broadway
New York, NY 10271

Mr. Ronald Schwartz
SRC Consultant
64 Walnut Drive
Spring Lake Heights, NJ 07762

Mr. Ronald J. Toole
SRC Consultant
Toole Insight
605 West Horner Street
Ebensburg, PA 15931

Mr. Charles W. Hehl
SRC Consultant
Charles Hehl, Inc.
1486 Matthew Lane
Pottstown, PA 19465

Mayor, Village of Buchanan
236 Tate Avenue
Buchanan, NY 10511

Mr. Ray Albanese
Executive Chair
Four County Nuclear Safety Committee
Westchester County Fire Training Center
4 Dana Road
Valhalla, NY 10592

Indian Point Nuclear Generating Unit Nos. 2 & 3

cc:

Paul Leventhal
The Nuclear Control Institute
1000 Connecticut Avenue NW
Suite 410
Washington, DC, 20036

Karl Copeland
Pace Environmental Litigation Clinic
78 No. Broadway
White Plains, NY 10603

Jim Riccio
Greenpeace
702 H Street, NW
Suite 300
Washington, DC 20001

U.S. NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-003, 50-247, AND 50-286

LICENSE NOS. DPR-5, DPR-26, AND DPR-64

ENTERGY NUCLEAR OPERATIONS, INC.

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 petition dated November 8, 2001, filed by Riverkeeper, Inc., et al., hereinafter referred to as the "Petitioners." The petition was supplemented on December 20, 2001. The petition concerns the operation of the Indian Point Nuclear Generating Unit Nos. 1, 2, and 3 (IP1, 2, and 3).

The petition requested that the U.S. Nuclear Regulatory Commission (NRC): (1) order the licensee to suspend operations, revoke the operating license, or adopt other measures resulting in a temporary shutdown of IP2 and 3; (2) order the licensee to conduct a full review of the facility's vulnerabilities, security measures, and evacuation plans; (3) require the licensee to provide information documenting the existing and readily attainable security measures which protect the IP facility against land, water, and airborne terrorist attacks; (4) immediately modify the IP2 and 3 operating licenses to mandate certain specified security measures sufficient to protect the facility; and (5) order the revision of the licensee's emergency response plan and Westchester County's radiological emergency response plan (RERP) to account for possible terrorist attacks and prepare a comprehensive response to multiple, simultaneous attacks in the region, which could impair the efficient evacuation of the area. In addition, the Petitioners requested that the NRC take prompt action to permanently retire the facility if, after conducting a full review of the facility's vulnerabilities, security measures, and evacuation plans, the NRC

finds that the IP facility cannot be adequately protected against terrorist threats. Further, separately from the above issues, the Petitioners requested that the NRC order the licensee to undertake the immediate conversion of the current water-cooled spent fuel storage system to a dry-cask system.

As the basis for the November 8, 2001, request, the Petitioners stated that: (1) the IP facility is a plausible target of future terrorist actions, (2) actual threats against nuclear power plants have been documented, (3) IP is currently vulnerable to a catastrophic terrorist attack, (4) a terrorist attack on IP2 and 3 would have significant public health, environmental, and economic impacts, and (5) the Westchester County's RERP is inadequate because it is based on erroneous assumptions.

The NRC sent a copy of the proposed Director's Decision to the Petitioners and to the licensee for comment on May 16, 2002. The Petitioners responded with comments on August 9, 2002, and the licensee had no comments. The Petitioners' comments and the NRC staff's response to them are included with the Director's Decision.

The Director of the Office of Nuclear Reactor Regulation has determined that the request to order the licensee to suspend operations, revoke the operating license, or adopt other measures resulting in a temporary shutdown of IP2 and 3, be denied. The reasons for this decision, along with the reasons for decisions regarding the remaining Petitioners' requests, are explained in the Director's Decision pursuant to 10 CFR 2.206 (DD 02-06), the complete text of which is available in the Agencywide Documents Access and Management System (ADAMS) 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 NRC Web site (<http://www.nrc.gov/reading-rm.html>).

As stated in its letter to the Petitioners on December 20, 2001, the NRC has, in effect, partially granted the Petitioners' request for an immediate security upgrade at IP2 and 3. On

September 11, 2001, the NRC took action to enhance security at all nuclear facilities, including IP2 and 3. Immediately after the attacks, the NRC advised all nuclear power plants to go to the highest level of security, which they promptly did. These facilities have remained at a heightened security level since that time. The NRC continues to work with other Federal agencies and is monitoring relevant information it receives on security matters at nuclear facilities. The NRC is prepared to make immediate adjustments as necessary to ensure adequate protection of the public.

The NRC issued Orders on February 25, 2002, to all commercial nuclear power plants to implement interim compensatory security measures for the current threat environment. Some of the requirements made mandatory by the Orders formalized the security measures that NRC licensees had taken in response to advisories issued by the NRC in the aftermath of the September 11 terrorist attacks. The Orders also imposed additional security enhancements, which have emerged based on the NRC's assessment of the current threat environment and its ongoing security review. The requirements will remain in effect until the NRC determines that the level of threat has diminished, or that other security changes are needed. The specific actions are sensitive, but include 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. Regarding the Petitioners' request for specific information about the security measures, the NRC's policy is to not release safeguards information to the public. Thus, this request is denied.

The NRC in its February 25, 2002, Orders also directed licensees to evaluate and address potential vulnerabilities to maintain or restore cooling to the core, containment, and spent fuel pool and to develop specific guidance and strategies to respond to an event that damages large areas of the plant due to explosions or fires. These strategies are intended to

help licensees to identify and utilize any remaining onsite or offsite equipment and capabilities. If NRC's ongoing security review recommends any other security measures, the NRC will take appropriate action.

The NRC denies the Petitioners' request to mandate certain security measures, as specified by the Petitioners, for the protection of the facility, such as a system to defend a no-fly zone. The NRC considers that the collective measures taken since September 11, 2001, provide adequate protection of public health and safety.

The NRC finds that the existing emergency response plans are flexible enough to respond to a wide variety of adverse conditions, including a terrorist attack. The NRC advisories and the Orders issued since September 11, 2001, directed licensees to take specific actions deemed appropriate to ensure continued improvements to existing emergency response plans. The Petitioners' concern that the emergency plans do not contemplate multiple attacks on the infrastructure is alleviated by the fact that the emergency plans are intended to be broad and flexible enough to respond to a wide spectrum of events. Thus, the Petitioners' request that the onsite and offsite emergency plans be revised to account for possible terrorist attacks has been, in part, granted.

The NRC finds that the current spent fuel storage system and the security provisions at IP adequately protect the spent fuel. Thus, the Petitioners' request to order the installation of a dry-cask storage facility is denied. However, the licensee has stated its intention to add such a facility.

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 18th day of November 2002.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

UNITED STATES OF AMERICA
 NUCLEAR REGULATORY COMMISSION
 OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

| | | |
|--|---|-----------------------------|
| In the Matter of |) | Docket Nos. 50-003, 50-247, |
| |) | and 50-286 |
| ENTERGY NUCLEAR OPERATIONS, INC. |) | License Nos. DPR-5, DPR-26, |
| |) | and DPR-64 |
| |) | |
| (Indian Point Nuclear Generating Unit Nos. 1, 2, and 3) |) | (10 CFR 2.206) |
| |) | |

DIRECTOR'S DECISION UNDER 10 CFR 2.206

I. Introduction

By letter dated November 8, 2001, as supplemented on December 20, 2001, Riverkeeper, Inc., et al. filed a Petition pursuant to Title 10 of the *Code of Federal Regulations*, Section 2.206 (10 CFR 2.206). The Petitioners requested that the U.S. Nuclear Regulatory Commission (NRC) take the following actions: (1) order the licensee to suspend operations, revoke the operating license, or adopt other measures resulting in a temporary shutdown of the Indian Point Nuclear Generating Unit Nos. 2 and 3 (IP2 and 3); (2) order the licensee to conduct a full review of the facility's vulnerabilities, security measures, and evacuation plans; (3) require the licensee to provide information documenting the existing and readily attainable security measures which protect the IP facility against land, water, and airborne terrorist attacks; (4) immediately modify the IP2 and 3 operating licenses to mandate certain specified security measures sufficient to protect the facility; and (5) order the revision of the licensee's emergency response plan and Westchester County's Radiological Emergency Response Plan (RERP) to account for possible terrorist attacks and prepare a comprehensive response to multiple, simultaneous attacks in the region, which could impair the efficient evacuation of the

area. In addition, the Petitioners requested that the NRC take prompt action to permanently retire the facility if, after conducting a full review of the facility's vulnerabilities, security measures, and evacuation plans, the NRC finds that the IP facility cannot be adequately protected against terrorist threats. Further, separately from the above issues, the Petitioners requested that the NRC order the licensee to undertake the immediate conversion of the current water-cooled spent fuel storage system to a dry cask system. The bases for the requests are that (1) the IP facility is a plausible target of future terrorist actions, (2) actual threats against nuclear power plants have been documented, (3) IP is currently vulnerable to a catastrophic terrorist attack, (4) a terrorist attack on IP2 and 3 would have significant public health, environmental, and economic impacts, and (5) the Westchester County's RERP is inadequate because it is based on erroneous assumptions.

In a letter dated December 20, 2001, the NRC informed the Petitioners that their request for a full review of the facility's vulnerabilities, security measures, and evacuation plans was, in effect, partially granted, because the NRC had already taken action to require licensees to enhance security and the Commission had directed the staff to undertake a comprehensive review of plant security. In light of the defense-in-depth concept incorporated into the facility's design and the heightened security measures implemented in response to the events of September 11, 2001, the NRC did not consider the immediate closure of IP2 and 3 to be necessary to provide adequate protection of the public health and safety.

In its December 20, 2001, letter, the NRC told the Petitioners that a public meeting or telephone conference with the NRR Petition Review Board was not necessary or appropriate at the time since the Petitioners' request was already being treated as a 2.206 Petition and because of the possible sensitive nature of the information. Under normal circumstances, the NRC would follow Management Directive (MD) 8.11, "Review Process for 10 CFR 2.206 Petitions," when reviewing requests for enforcement action; however, since the Petition involved

possible sensitive information, the NRC deferred application of certain public aspects of the MD 8.11 process pending further developments of the NRC's security review.

On December 20, 2001, the Petitioners provided a declaration from Dr. Gordon Thompson dated December 20, 2001, and requested that the declaration be included as a supplement to their Petition. The NRC treated the declaration as a supplement to the Petition. Although the NRC had initially withheld the Petition from public distribution pending Commission guidance about public dissemination of potential security information, the NRC has now determined that the Petition can be made publicly available. Therefore, the documents are available in the NRC's Agencywide Documents Access and Management System (ADAMS) for inspection at the Commission's Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland. Publicly available records are also accessible from the ADAMS Public Electronic Reading Room on the NRC Web site <http://www.nrc.gov/reading-rm/adams.html>. Persons who do not have access to ADAMS or have problems in accessing the documents located in ADAMS should contact the NRC PDR reference staff by telephone at 1-800-397-4209 or 301-415-4737 or by e-mail to pdr@nrc.gov.

Entergy Nuclear Operations, Inc. (the licensee), responded to the Petition on February 11, 2002, and the staff considered the information in reviewing the Petition.

The NRC sent a copy of the proposed Director's Decision to the Petitioners and to the licensee for comment on May 16, 2002. The Petitioners responded with comments on August 9, 2002. The licensee did not provide comments. The comments and the NRC staff's response to them are enclosed with the final Director's Decision.

II. Discussion

Full Review of Vulnerabilities and Security Measures

In the Petition, as supplemented, the Petitioners requested that the NRC order the licensee to conduct a full review of the facility's vulnerabilities and security measures. The Petitioners stated that the reactor, spent fuel, control rooms, and electrical switching were vulnerable to terrorist attack. The Petitioners' request was based on the following assertions: (1) IP2 and 3 are a plausible target because of the population density of the surrounding area and the proximity to New York City, (2) news releases have documented threats against nuclear facilities, (3) an operational plant is more vulnerable, (4) an attack could damage cooling to the spent fuel pools (SFPs) and/or drain the pools, leading to fuel cladding oxidation, fire, and release of radioactive materials, and (5) the design-basis threat did not consider a terrorist attack. The Petitioners also stated that the facility is not currently equipped to defend itself from terrorist attacks, the licensee has a poor record in security and emergency preparedness, and nuclear industry security forces have repeatedly failed to repel mock attacks. The Petitioners also believe that an attack on an operating reactor would force plant operators to face competing interests between safe operations and physical security.

Staff's Response

The Petitioners' request for a review of vulnerabilities and security measures has been partially granted based on actions initiated by the NRC following the events of September 11, 2001. The NRC concludes that Indian Point has sufficient security measures in place to defend itself from a broad spectrum of potential terrorist attacks. The basis for these conclusions is discussed below.

The NRC and its licensees have dealt with the issue of protection of licensed facilities against sabotage or attack for a number of years. Security against sabotage has been an important part of the NRC's regulatory activities, with defense-in-depth as the guiding design

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

The NRC requirements for the defense of nuclear power plants are defined, in part, by the "design basis threat" (DBT). The DBT is specified in general terms in 10 CFR 73.1 and in greater detail in sensitive documents. The DBT was prepared by safeguards experts on the basis of information from the Department of Energy and the intelligence community about terrorist-related information both abroad and in the United States. The DBT is a reasonable characterization of an adversary force against which nuclear power plant licensees must design their physical protection systems and response strategies.

In 10 CFR Part 73, "Physical Protection of Plants and Materials," the NRC provides detailed requirements designed to protect nuclear power plants against acts of radiological sabotage, prevent the theft of special nuclear material, and protect safeguards information against unauthorized release. The requirements of Part 73 are summarized as follows:

1. The licensee permits only authorized activities and conditions within established protected areas, material access areas, and vital areas by using controls and procedures, defined boundaries, detection, communication and surveillance subsystems, and by establishing schedules of authorized operations.
2. The licensee prevents unauthorized access of persons, vehicles and objects into protected and vital areas by using detection and barrier systems.
3. The licensee provides for authorized access and assures detection of and response to unauthorized penetrations of the protected area.

4. The licensee permits only authorized control and movement of special nuclear material.
5. The licensee provides response capabilities to assure that NRC requirements are achieved.
6. The licensee maintains a well-equipped and highly trained security organization.
7. The licensee installs physical barriers to protect vital equipment and material.
8. The licensee installs detection, surveillance, and alarm systems capable of sensing unauthorized penetrations of isolation zones and ensuring a prompt response action.
9. The licensee provides access authorization (e.g., background checks, routine worker screening, badging, etc.) programs and procedures.
10. The licensee ensures that all guards and armed response individuals have the ability to communicate with a continuously manned alarm station.
11. The licensee establishes an effective testing and maintenance program to verify that all physical barriers, and detection and alarm systems are capable of meeting NRC requirements.

Licensees are also required to develop specific physical security plans (PSPs) and submit these plans to the NRC for approval before implementing them. The NRC conducts periodic inspections of the licensees' security programs. Performance testing of physical security has been conducted by the NRC staff through Operational Safeguards Response Evaluations. In addition, the licensees are required to establish a liaison with local law enforcement organizations for added assistance in the event of an attack.

Shortly after September 11, 2001, the NRC recognized the need to reexamine the basic assumptions underlying the current nuclear facility security and safeguards programs. Chairman Richard A. Meserve, with the full support of the Commission, directed the staff to undertake a comprehensive review of the NRC's security regulations and 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 review includes consultation with the Office of Homeland Security, the Federal Bureau of Investigation (FBI), the Departments of Transportation and Energy, and others. The NRC's participation with these agencies allows the NRC to communicate its actions to other Federal agencies, ensuring an appropriate and balanced response throughout the nation's entire critical energy infrastructure.

The attacks of September 11, 2001, were unprecedented and required the NRC and its licensees to reevaluate the type of assault that might be mounted against a nuclear power plant. As a result, on February 25, 2002, the NRC issued Orders to all operating power reactor facilities to require that certain interim compensatory security measures be taken beyond those called for by current regulations. Although licensee responses to the prior NRC Threat and Safeguards Advisories provided reasonable assurance of adequate protection of public health and safety, the NRC determined that certain compensatory measures were prudent to address the current threat environment in a consistent manner throughout the nuclear reactor industry. 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 and added certain security enhancements. For security reasons, the details of these interim compensatory measures cannot be made public. Some of the specific measures implemented by the licensees in response to the advisories and interim compensatory measures 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 directed licensees to evaluate and address potential vulnerabilities to maintain or restore cooling to the core, containment, and spent fuel pool and to develop specific guidance and strategies to respond to an event resulting in damage to large areas of the plant due to explosions or fires. These strategies are intended to help identify and

utilize any remaining equipment and capabilities to maintain or restore core, containment, and spent fuel pool cooling, including both onsite and offsite resources. These requirements will remain in effect until the NRC notifies licensees that the threat environment has significantly changed or until the NRC determines, as a result of the ongoing comprehensive reevaluation of current safeguards and security programs, that other changes are needed.

The Petitioners are correct that the DBT did not consider a terrorist attack such as occurred on September 11, 2001. As part of the comprehensive review of safeguards vulnerabilities, the NRC will reexamine the DBT and modify it as appropriate. As in the past, the NRC will coordinate its evaluation with various other Government agencies and discuss resource commitments with the military, the States, and local law enforcement. If a credible vulnerability is identified that is not addressed by another Federal agency, the NRC staff will consider additional physical protection, material control, and other appropriate requirements.

Although the NRC cannot rule out the possibility of future terrorist activity directed at a licensee's site before implementing any further enhancements to its safeguards programs, the NRC believes that these facilities can continue to operate safely.

The staff also recognizes that design and construction of commercial nuclear power plants could contribute to their survivability in the event of an attack not considered by the current design-basis threat, such as an aircraft impact. Nuclear power plant design is based on defense-in-depth principles, and includes many features to protect public health and safety. For example, reinforced containment buildings and redundant safety systems would help trained operators prevent or limit the release of radioactive material in the event of a terrorist attack. In addition, NRC requirements for coping with fires and station blackout (loss of offsite and onsite power) provide added capability to bring the plant to safe shutdown conditions assuming such aspects as loss of the control room or failure of the emergency diesel generators.

The NRC requires careful background checks (to minimize the risk of insider assistance) and facility access controls, delay barriers, and intrusion detection systems (to detect potential attackers). The NRC also requires licensees to be able to respond with force to a group of armed attackers, using protective strategies involving layers of defense. Therefore, the NRC believes that the facilities are adequate to withstand many of the challenges from safety or safeguards events, such as armed assaults.

In summary, a robust security program existed at IP prior to the events of September 11, 2001. Since September 11, the NRC has initiated a review of nuclear facility security and safeguards programs, and has taken action to enhance security in the interim.

Full Review of Radiological Emergency Preparedness and Evacuation Planning

In its December 20 supplement, the Petitioners cited a prior NRC study prepared by Sandia National Laboratory that discussed source terms and potential radiological consequences of an attack on IP. The Petitioners were concerned about the economic and environmental consequences of an attack causing a massive release of radioactive materials.

Regarding emergency preparedness planning, the Petitioners believe that the IP onsite and offsite emergency plans did not envision an act of terrorism of the magnitude seen on September 11, 2001. Additionally, the Petitioners stated that the Westchester County RERP is inadequate and does not consider the possibility of multiple simultaneous attacks on vital infrastructure relied on in the current plan.

Staff's Response

The NRC finds that the emergency preparedness plans and evacuation planning at IP2 and 3 are appropriate to use in response to a radiological emergency, including a release caused by a terrorist attack. The basis for this conclusion is discussed below.

The overall objective of emergency response planning is to minimize the dose to the public for a spectrum of accidents that could produce offsite doses in excess of protective

action guidelines. No single accident sequence should be isolated as the one for which to plan because each accident could have different consequences, both in nature and degree.

Emergency plans are intended to be broad and flexible enough to respond to a wide spectrum of situations, including various initiating events, sources of release, types of nuclides released, and magnitude, timing, or duration of release.

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 evaluating the adequacy of onsite emergency plans developed by the utility, while FEMA is responsible for assessing the adequacy of offsite (State and local) radiological emergency planning and preparedness activities. The NRC requires licensees to have detailed procedures for responding to events, making timely notifications to appropriate authorities, and providing accurate radiological information. For the offsite plans, the NRC relies on FEMA's findings in determining whether there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The licensee, local and county emergency response officials, and State emergency management officials discuss and agree on the facility's emergency response plan.

NRC regulations require the establishment of a plume exposure pathway emergency planning zone (EPZ) about 10 miles in radius and an ingestion exposure pathway EPZ about 50 miles in radius around each nuclear power plant site.

In the unlikely event of a severe reactor accident with offsite consequences, NRC guidance calls for the prompt evacuation of the population within a 2-mile radius of the plant and about 5 miles in the downwind direction. The guidance states that these protective actions would be expanded, as necessary, based on further assessment of plant conditions, dose assessment, and field monitoring information. At longer distances, shelter is usually the appropriate protective action, followed by relocation of segments of the population, if warranted

by the results and analysis of radiological measurements taken in the field. The main protective action planned for the 50-mile EPZ is protection of the public from the ingestion of contaminated food and water. It is considered extremely unlikely that evacuation would be required at a distance of 50 miles even after the most severe accident. The planning established for the 10-mile and 50-mile EPZs, the decreasing consequences and increasing time available for taking protective actions as the distance from the plant increases, and the availability of monitoring data on which to base protective action decisions provide assurance that appropriate protective actions would be taken to protect the population within 50 miles of a site.

NRC regulations also require that the applicant for a nuclear power reactor operating license provide an analysis of the time required to evacuate and take other protective actions within the plume exposure pathway EPZ. This analysis is referred to as the "evacuation time estimate" (ETE). There are no preset minimum evacuation times that a nuclear power plant site must meet. However, the NRC expects that the ETEs for a site are a reasonably accurate reflection of the time it would take to evacuate the site environs under normal and adverse conditions. ETEs are mostly used to identify potential traffic bottlenecks so that appropriate traffic control plans can be developed. Nuclear power reactor licensees are expected to review and revise their ETEs for their sites. The revisions must take into account changes in population, road capacities, potential traffic impediments, and other factors affecting the ETEs. The ETEs are assessment tools used by decision makers for determining whether evacuation is the preferred protective action option for the general public under specific accident and offsite conditions.

On August 1, 2001, the NRC issued Regulatory Issues Summary (RIS) 2001-16, "Update of Evacuation Time Estimates," to all holders of operating licenses for nuclear power

plants. In this RIS, the NRC alerted licensees of the possible need to update ETEs as a result of the 2000 Census. The licensee is currently preparing a new ETE report for IP2 and 3.

FEMA has established the Radiological Emergency Preparedness Program to (1) ensure that the health and safety of citizens living around commercial nuclear power plants can be adequately protected in the event of a nuclear power plant accident, (2) inform and educate the public about radiological emergency preparedness, and (3) make findings and determinations as to the adequacy of State and local plans and the capability of State and local governments to effectively implement these plans and preparedness measures. Federal agencies also have plans in place to coordinate their response activities and share their resources in support of State and local officials during an emergency. Coordination of activities includes joint planning and training sessions and exercise participation. Emergency plans are continually improved based on experience gained through plan implementation and as a result of exercises, drills, and actual events.

In late January 2002, the State of New York issued its annual letter of certification to FEMA. By this letter, the State informed FEMA that specific preparedness activities have been completed including training and the updating of State and local plans. However, the updating of State and local plans is an ongoing activity. The NRC staff understands that the State and counties have addressed the adequacy of evacuation plans through their required review process in preparation for the exercise conducted in September 2002 and, in doing so, continue to review evacuation-related procedures in light of changes in demographics and conditions. FEMA's specific findings on the exercise will be issued later this year, but the preliminary assessment indicates that the offsite emergency plans are adequate to protect public health and safety.

The Petitioners refer to the 1982 Sandia National Laboratory (SNL) Report, "Calculation of Reactor Accident Consequences" (CRAC-2 Report), and cite this report as a basis for

concern that a terrorist attack could result in a massive release of radioactive materials. The reactor siting studies in the CRAC-2 Report were performed as part of research on the sensitivity of various plant siting parameters. The studies used generic postulated releases of radioactivity from a spectrum of severe (core melt) accidents, independent of the probabilities of the event occurring or the impact of mitigation mechanisms. The studies were never intended to be realistic assessments of accident consequences. The estimated deaths and injuries resulted from assuming the most adverse condition for each parameter in the analytical code. In the cited studies, the number of resulting deaths and injuries also reflected the assumption that no protective actions were taken for the first 24 hours. The studies did not, and were never intended to, reflect reality or serve as a basis for emergency planning. The CRAC-2 Report analyses used more simplistic models than current technologies. The two basic conclusions from the SNL siting studies were that the mean estimated number of health effects from the assumed releases for all reactor sites varied by up to more than 4 orders of magnitude and that the financial costs of the releases were dominated by clean-up costs and replacement power costs. The SNL studies provided a useful measure to compare sites, not to analyze plant-specific accident consequences.

Regarding the Petitioners' assertion that the emergency plans do not contemplate multiple attacks on the infrastructure (i.e., roads, bridges, transportation, communications, etc.), the NRC finds that the existing emergency response plans allow considerable flexibility to respond to a wide variety of adverse conditions, including the results of a terrorist attack. As previously discussed in this Director's Decision, the NRC considers that commercial nuclear power plants have sufficient security measures in place to defend against a broad spectrum of potential terrorist threats, thereby precluding the release of radioactive material to the environment. If a terrorist attack inflicted damage on a nuclear plant, the redundant design features inherent in the plant, and the high level of training accorded the plant staff, would likely

result in actions being taken by the plant staff to prevent or minimize the release of radioactive material. In the unlikely event of a significant release of radioactive material, for whatever reason, the emergency response plans provide for protective actions for the surrounding population. While the emergency response plans provide alternative actions in the event of some failures of the local infrastructure, there are limits to the degree to which it is reasonable to assume that infrastructure components are unavailable. The responsibility to preclude the large scale and resource intensive effort that would be required for a successful terrorist attack on multiple targets, rests with agencies of the Federal government. The NRC considers the actions of various intelligence and law enforcement agencies, combined with the actions of the Department of Defense, to provide assurance that a successful large scale terrorist attack is unlikely. Additionally, the NRC advisories and the Orders issued since September 11, 2001, directed licensees to take specific actions to improve existing emergency response plans, including heightened coordination with local, State, and Federal authorities. In summary, the NRC concludes that emergency preparedness plans and evacuation planning are routinely revised and updated, and are appropriate to use in response to a radiological emergency, including a release caused by a terrorist attack.

Information about Security Measures to Protect Against Terrorist Attacks

The Petitioners requested that the NRC require the licensee to provide information documenting the existing and readily attainable security measures which provide IP with protection against land, water, and airborne terrorist attacks. This information should provide sufficient basis for the NRC to determine that physical barriers, intrusion alarms, and other measures are in place or constructed and are sufficient to meet realistically expected threats.

Staff's Response

As previously discussed, the NRC and its licensees have taken a number of steps since September 11, 2001, to increase security at NRC-licensed facilities, including safeguards advisories. At IP, the licensee's security force was augmented by the New York State Police and the National Guard (including Hudson River patrols) and local law enforcement personnel.

The NRC issued Orders on February 25, 2002, to all commercial nuclear power plants to implement interim compensatory security measures for the current threat environment. Some of the requirements made mandatory by the Orders formalized the security measures that NRC licensees had taken in response to advisories issued by the NRC in the aftermath of the September 11 terrorist attacks. The Orders also imposed additional security enhancements, which have emerged based on the NRC's assessment of the current threat environment and its ongoing security review. The requirements will remain in effect until the NRC determines that the level of threat has diminished, or that other security changes are needed. The specific actions are sensitive, but include 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 require additional security measures pertaining to the owner-controlled land outside of the plants' protected areas. Currently, the New York State Naval Militia provides security measures to detect and deter watercraft access from entering the exclusion area around the IP plants.

In its report on security, the State of New York Office of Public Security (OPS) provided recommendations to enhance security at IP. Many of the measures suggested have been implemented by the licensee and others are currently under advisement. The measures are recommendations by OPS to further enhance security and are not requirements in current NRC regulations. In response to the NRC Orders of February 25, 2002, the licensee provided

information, that taken in conjunction with other sources of security information, resulted in the NRC finding the licensee's security posture to be appropriate under the current circumstances.

The Petitioners additionally seek specific details of security measures in place to respond to the potential for terrorist attacks. The NRC's policy is to withhold safeguards information from the public. Therefore, this request is denied.

Mandate Security Measures Sufficient to Protect the Facility

The Petitioners requested the NRC to mandate, at a minimum, the following security measures sufficient to protect the facility:

1. Obtainment of a permanent no-fly zone from the Federal Aviation Administration (FAA) in the air space within 10-nautical miles of the IP facility.
2. A defense and security system sufficient to protect and defend the no-fly zone.
3. A defense and security system sufficient to protect the entire facility, including the containment and spent fuel storage buildings, control room and electrical equipment.

Staff's 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 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 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 Department of Defense 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 NRC is also reviewing measures to bolster defenses and to establish new antiterrorism strategies in a thorough and systematic manner. The NRC is taking a realistic and prudent approach toward assessing the magnitude of the potential threat and the strength of licensee defenses.

NRC licensees must defend nuclear power plants against the DBT. September 11 showed that the NRC and its licensees must reevaluate the scope of potential assaults of all types. However, there are limits to what can be expected from a private guard force, even assisted by local law enforcement. Even if it is determined that nuclear power plants should be defended against aircraft attack, the NRC cannot expect licensees to acquire and operate anti-aircraft weaponry. Protection against this type of threat may be provided by other means within the Federal government.

In summary, the Petitioner's request is denied because the NRC considers that the collective measures taken since September 11, 2001, provide adequate protection of public health and safety.

Dry-Cask Spent Fuel Storage System

The Petitioners requested that the NRC order the licensee to immediately convert the current spent fuel storage from water-cooled SFPs to a dry-cask storage system in a bunkered structure. As the basis for the request, the Petitioners state that this action would reduce the long-term risk of potential exothermic oxidation in the existing fuel storage facility. The Petitioners state that the NRC has never established that the spent fuel storage facility at IP is secure against foreseeable attacks nor can the NRC be certain that the spent fuel storage

facility is sufficiently sound to preclude the possibility of a spent fuel fire in the event of an airborne, land, or water-based assault. The Petitioners' concerns were based, in part, on information in an NRC report, "Final Technical Study of Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants," dated October 2000, and on the Petitioners' evaluation of the consequences of a terrorist attack on the spent fuel pool buildings. In their December 20, 2001, supplement, the Petitioners state that the NRC has not performed an environmental impact statement or probabilistic risk analysis assuming all modes of water loss from the SFPs, including terrorist attack, and the Petitioners further discuss the probability and consequences of exothermic oxidation of the spent fuel cladding.

Staff's Response

The NRC staff presently concludes that spent fuel can be safely stored at the IP reactor site in the current system of SFPs and therefore, the Petitioners' requests are denied. Although the spent fuel storage buildings at IP are not as hardened as the reactor containment structures, the SFPs themselves are robust, and relatively small structures, that are partially below ground level. The spent fuel is stored in racks resting on the floor of the pools and is covered by more than 20 feet of water. The pools are designed to prevent a rapid loss of water with the structure intact, and the pool water level and cooling system are monitored and alarmed in the control rooms. Thus, the response time for events involving the SFP is significantly longer than for other event scenarios. It is also easier to add water to the SFP from various sources because it is an open pool. The robust design and small size of the pools minimize the likelihood that a terrorist attack would cause damage of a magnitude sufficient to result in an offsite release of radioactive material. Further, offsite resources can be brought onsite to assist the response to an event.

When the NRC staff completes its reevaluation of the physical security requirements, the NRC will be able to judge whether modifications to the SFP structures and enclosures are warranted and whether additional safeguards measures should be established. If so, the NRC will act accordingly. In the meantime, the NRC has issued Orders to all nuclear power plants requiring certain interim compensatory measures to augment security and strengthen mitigation strategies. The SFPs are within the protected area of the facility and therefore protected from certain external threats under the security provisions identified in the PSPs.

During the NRC review of the transfer of the licenses for IP1 and 2, the licensee indicated that it was evaluating the possible construction of an independent spent fuel storage facility. In a public meeting on March 14, 2002, the licensee stated that it was expediting its engineering review for this facility.

III. Conclusion

As stated in its letter to the Petitioners on December 20, 2001, the NRC has, in effect, partially granted the Petitioners' request for an immediate security upgrade at IP2 and 3. On September 11, 2001, the NRC took action to enhance security at all nuclear facilities, including IP2 and 3. Immediately after the attacks, the NRC advised all nuclear power plants to go to the highest level of security, which they promptly did. These facilities have remained at a heightened security level since. The NRC continues to work with other Federal agencies and is monitoring relevant information it receives on security matters at nuclear facilities. The NRC is prepared to make immediate adjustments as necessary to ensure adequate protection of the public.

On February 25, 2002, the NRC issued Orders to IP2 and 3 and all other operating commercial nuclear power plants to implement interim compensatory security measures for the high-level threat environment. Some of the requirements formalized a series of security measures that NRC licensees had taken in response to advisories issued by the NRC, and

others are security enhancements that have emerged from the Commission's ongoing comprehensive security review. The Commission issued the Orders, which incorporated the threat advisories and added additional requirements, to formalize the security enhancements at commercial nuclear power plants. Because the threat environment had persisted longer than expected, it is appropriate to maintain these security measures within the established regulatory framework. The details of these security requirements are sensitive and will not be provided to the public. Some of the specific measures implemented by the licensees in response to the advisories and interim compensatory measures 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. Therefore, the Petitioners' request that the licensee conduct a full review of the facility's vulnerabilities, security measures, and evacuation plans has been, in effect, partially granted. Regarding the Petitioners' request for specific information about the security measures, the NRC believes that it is inappropriate to discuss perceived vulnerabilities and current or planned security measures in the public domain. Thus, this request is denied.

The NRC in its February 25, 2002, Orders also directed licensees to evaluate and address potential vulnerabilities to maintain or restore cooling to the core, containment, and SFP and to develop specific guidance and strategies to respond to an event that damages large areas of the plant due to explosions or fires. These strategies are intended to help licensees to identify and utilize any remaining onsite or offsite equipment and capabilities. If NRC's ongoing security review recommends any other security measures, the NRC will take appropriate action.

The NRC denies the Petitioners' request to mandate certain security measures, as specified by the Petitioners, for the protection of the facility, such as systems to defend a no-fly zone. As part of its ongoing comprehensive security review, the NRC is examining the threat environment in coordination with the new Office of Homeland Security, the FBI, FEMA, the FAA, the military, the intelligence community, and the Department of Energy, among others. The NRC will take appropriate action based on the results of this review. The NRC considers that the current security requirements, along with the enhancements in the February 25 Orders, provide reasonable assurance of the protection of the facility.

The NRC finds that the existing emergency response plans are flexible enough to respond to a wide variety of adverse conditions, including a terrorist attack. The NRC advisories and the Orders issued since September 11, 2001, directed licensees to take specific actions deemed appropriate to ensure continued improvements to existing emergency response plans. The Petitioners' concern that the emergency plans do not contemplate multiple attacks on the infrastructure is alleviated by the fact that the emergency plans are intended to be broad and flexible enough to respond to a wide spectrum of events. Thus, the Petitioners' request that the onsite and offsite emergency plans be revised to account for possible terrorist attacks has been, in part, granted.

The NRC finds that the current spent fuel storage system and the security provisions at IP adequately protect the spent fuel. However, the licensee has stated its intention to install an Independent Spent Fuel Storage Installation. The Petitioners' request to order the installation is denied.

As provided in 10 CFR 2.206(c), a copy of this Director's Decision will be filed with the Secretary of the Commission for the Commission to review. 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 18th day of November 2002.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Samuel J. Collins, Director
Office of Nuclear Reactor Regulation