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May 1, 2006

MEMORANDUM TO: Chairman Diaz

FROM: Hubert T. Bell */RA/*
Inspector General

SUBJECT: NRC'S OVERSIGHT OF THE FORCE-ON-FORCE PROGRAM

Attached is an Office of the Inspector General (OIG), U.S. Nuclear Regulatory Commission (NRC) Special Inquiry that addresses concerns with the adequacy of NRC's oversight of the Force-on-Force program.

Please call me if you have any questions regarding the Special Inquiry. This report is furnished for whatever action you deem appropriate. Please notify this office within 120 days of what action, if any, you take based on the results of this Special Inquiry.

Attachment: As stated

cc w/attachment:
Commissioner McGaffigan
Commissioner Merrifield
Commissioner Jaczko
Commissioner Lyons
L. Reyes, EDO

CONTACT: George A. Mulley, OIG
415-5967

**"NRC'S OVERSIGHT OF
THE FORCE-ON-FORCE PROGRAM"**

Case No. 05-01S

May 1, 2006

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OFFICE OF THE INSPECTOR GENERAL

Special Inquiry



"NRC'S OVERSIGHT OF THE FORCE-ON-FORCE PROGRAM"

/S/
Rodolfo Rivera, Special Agent

/S/
Rossana Raspa, Team Leader

/S/
George A. Mulley, Acting Assistant Inspector General
for Investigations

05/ /06
Date

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BASIS AND SCOPE

The Office of the Inspector General (OIG), U.S. Nuclear Regulatory Commission (NRC) initiated this Special Inquiry in response to concerns about the NRC's approval of the selection of The Wackenhut Corporation (Wackenhut) by the nuclear industry to provide the mock aggressor force during NRC evaluations of the security of commercial nuclear power plants. The concerns, raised by the public and Members of Congress, focused on the ability of Wackenhut to conduct independent and objective force-on-force exercises at commercial nuclear power plants in light of the fact that Wackenhut also provided security guard services for approximately 50 percent of the nation's nuclear power plants. Because of this apparent conflict, the validity of force-on-force exercises conducted during NRC evaluations of plant security was questioned.

This Special Inquiry examined the following actions taken by the NRC staff to ensure there were appropriate management and administrative controls in place to ensure force-on-force exercises evaluated by the NRC were valid, credible tests of power plant defensive capabilities:

- Efforts between May and December 2003 to identify alternatives for developing a credible, well-trained mock adversary force to be used in force-on-force exercises.
- Handling of a Department of Energy proposal to provide NRC a mock adversary force.
- Oversight of the development and implementation of a mock adversary force by the nuclear industry.
- Efforts to address the perception of conflict resulting from the selection by the nuclear industry of Wackenhut to provide a mock adversary force.
- Efforts to ensure exercises were valid tests of nuclear plant security.

BACKGROUND

Since 1982, NRC has conducted force-on-force (FOF) exercises as part of its evaluations of the security program at nuclear power plants. During an FOF exercise, a mock adversary force attempts to reach and damage key safety systems and components that protect the nuclear reactor or spent fuel pool. The nuclear power plant's security force, in turn, seeks to stop the adversaries from reaching the plant's nuclear fuel and equipment.

Force-on-Force Exercises Before September 11, 2001

From 1991 to 2001, FOF exercises were conducted under the NRC Operational Safeguards and Response Evaluation (OSRE) program which was developed to assess licensees' protective strategies and capabilities against a design basis threat (DBT). The DBT characterizes the adversary against which licensees must design plant physical protection systems and response strategies.

During an OSRE, NRC security inspectors conducted tabletop drills during a pre-visit to the plant, and they evaluated the performance of the security guard force during the subsequent FOF exercise. Under the program, the nuclear industry was responsible for staffing the mock adversary force and the NRC was responsible for determining the scenarios that defined the systems or components (i.e., target sets) that the force would attack during an FOF exercise. The adversary force was composed of security guards from the plant being evaluated, security guards from other nuclear power plants, and/or law enforcement personnel.

NRC Re-evaluates the Force-on-Force Program After Terrorist Attacks

In response to the September 11, 2001, terrorist attacks, NRC initiated a review of the agency's safeguards and security programs. As part of this effort, the NRC suspended FOF evaluations at nuclear power plants while it conducted a comprehensive review of the overall security of commercial nuclear reactor facilities. NRC developed a new DBT that modified the types of threat and attacks that plants had to be able to deter. The NRC also reviewed the OSRE program.

Between 2002 and 2004, the Office of Nuclear Safety and Incident Response (NSIR)¹, led an effort to review the OSRE program. This effort consisted of the following three phases:

¹In April 2002, NRC consolidated all agency safeguards activities into a single, newly created office, NSIR, which was responsible for regulatory oversight of the physical protection programs at NRC-licensed facilities.

- Tabletop drills at seven nuclear power plants which evaluated the impact of specific adversary characteristics, interim compensatory measures mandated by NRC, and protective strategies used by the participating licensees;
- Pilot Expanded FOF (EFOF) exercises at 14 plants which increased the complexity of the FOF exercises based on the information obtained from the tabletop drills. The aim of the pilot EFOF exercises was to develop more realistic exercises and to improve NRC's processes for assessing the licensee's readiness to respond to the DBT; and
- Transitional FOF exercises were conducted at sample sites to test lessons learned from the first two phases. The transitional FOF exercises incorporated the characteristics of a new DBT that included expanded mock adversary force capabilities. All licensees had to meet the requirements of the new DBT with the new mock adversary force by October 29, 2004.

One of the lessons learned from the pilot EFOF exercises was that the mock adversary force teams did not always execute offensive tactics at a level expected of a credible, well-trained adversary force. The NSIR staff identified, among other things, a need to improve the offensive capabilities, consistency, and effectiveness of the mock adversary forces.

FINDINGS

In September 2003, in SECY-03-0208, "Adversary for Force-on-Force Exercises at NRC Licensed Facilities," the NRC staff presented the NRC Commission with five alternatives for implementing an adversary force. OIG found that these alternatives did not include any reference to a proposal submitted by the Department of Energy (DOE) to NSIR in June 2003 to provide an adversary force to participate in the force-on-force (FOF) exercises. OIG learned that to implement the proposal, DOE would probably have contracted with Wackenhut Services, Inc., a subsidiary of The Wackenhut Corporation (Wackenhut) that is not involved in providing security guard services at any nuclear power plants. OIG found that because the DOE proposal was a viable plan that could have met NRC's deadline for implementing an adversary force within the time constraints directed by the Commission, it should have been included in SECY-03-0208 as an alternative.

In response to NRC Commission, Congressional, and public concerns resulting from the selection of Wackenhut by the Nuclear Energy Institute (NEI) to provide the mock adversary force, NSIR requested NEI to address the perception of a conflict regarding the ability of Wackenhut to act as the mock adversary force during NRC FOF exercises in light of the fact that Wackenhut was also employed to protect approximately 50 percent of the nuclear power plants. OIG determined that NEI and Wackenhut took reasonable steps to mitigate the potential conflict between the Wackenhut guard forces responsible for providing security at power plants and the Wackenhut adversary force team members who participated in FOF exercises. Additionally, the NRC staff, during evaluations of FOF exercises, observed the performance of the guard and mock adversary forces to ensure the exercises were credible.

OIG determined that despite (1) the steps taken by NEI; (2) the commitments by Wackenhut to address the perceived conflict; and (3) NSIR's efforts to maintain control over the FOF inspection schedule, plan, and process, it was not possible to guarantee complete separation between the Wackenhut security guard forces and the Wackenhut mock adversary force members. It was also not possible to ensure with certainty that sensitive FOF exercise planning information or scenario details were not exchanged between the staffs of the Wackenhut Vice President of Special Operations, responsible for the mock adversary force, and the President of Wackenhut Nuclear Services, responsible for providing security. Furthermore, the mitigative steps implemented by NEI and Wackenhut were voluntary commitments, and NRC had no regulatory authority to enforce them.

OIG also determined that the NRC staff provided the FOF inspection schedule to NEI and NRC contractors well in advance of their operational need for this information. The advanced distribution of the FOF schedule to individuals with no need to know at the time they receive the schedule can jeopardize the security of this information. For example, OIG determined that while the NRC provided a 6-month FOF schedule to NEI,

NEI had no need for this information and merely served as a conduit to forward the schedule to Wackenhut. Additionally, OIG discerned no operational need for the NRC contractors, which provide support to the FOF exercises, to receive a 3-year schedule.

OIG found that despite the potential vulnerabilities with the security of the FOF exercise information, the NRC inspection teams that evaluated FOF exercises had instituted measures which appeared to be sufficient to detect irregularities in the conduct of the exercises or indications that the exercise target scenarios had been compromised.

DETAILS

I. NRC EFFORTS TO DEVELOP A CREDIBLE ADVERSARY FORCE FOR FORCE-ON-FORCE EXERCISES

Between May and December 2003, the Office of Nuclear Security and Incident Response (NSIR) identified alternatives for developing a credible, well-trained mock adversary force to be used in revised force-on-force (FOF) exercises at NRC licensed facilities.

NSIR Develops Adversary Force Alternatives

OIG learned that in May 2003, an NSIR security specialist was assigned the task of identifying alternatives for developing an improved adversary force. The specialist was provided three alternatives by his supervisor, and he was instructed to consider these three alternatives, as well as others. The three alternatives were (1) NRC manage and control an adversary force recruited from licensee personnel; (2) NRC utilize Department of Defense (DOD) personnel for an adversary force; and (3) industry develop an adversary force recruited from industry personnel.

In addition to the three alternatives, the NSIR staff considered utilizing Department of Energy (DOE) personnel and allowing individual licensee facilities to develop their own adversary force. The staff also considered not making any changes to the existing adversary force composition, which, although not a viable option, was still an option. All alternatives were discussed in meetings among the NSIR staff responsible for conducting and evaluating FOF exercises and senior NSIR managers.

In approximately August 2003, the NSIR staff reached a consensus that the best alternative was for NRC to develop standards and guidelines which would define the individual skills and qualifications needed for adversary force members and for industry to establish and train a pool of personnel to comprise a mock adversary force. The NSIR staff considered the benefits associated with an industry adversary force to outweigh the other alternatives. The most important benefit was that after an assignment lasting 2 to 3 years, adversary force members would return to their respective plants and train those guard forces to better respond to offensive threats. An industry adversary force would also result in a more consistent aggressor capability.

NSIR Coordination With Industry and NRC Commission

During the period that NSIR was developing alternatives for a mock adversary force, NSIR staff held meetings with Nuclear Energy Institute (NEI) representatives to discuss security related issues and the pilot Expanded Force-on-Force (EFOF) exercises. Additionally, NSIR managers held meetings with the Nuclear Security Working Group (NSWG), a group of senior industry executives and security managers, on security

related matters. NSIR staff also met with the NRC Commissioners to discuss changes to the design basis threat (DBT), the pilot EFOF exercises, and the performance of the mock adversary force.

OIG learned that during meetings in the summer of 2003, NEI and NSWG representatives indicated a preference for not making changes to the composition of the adversary forces, and they expressed concern that a single mock adversary force representing industry would, over a period of time, enhance its skill level such that it would exceed the DBT. OIG was told by NSIR staff that NEI and industry executives supported NRC developing adversary force guidelines that individual licensees would use to establish and train their own adversary force teams. The industry preferred maintaining control over the adversary forces rather than having NRC control and manage the adversary forces.

During a September 2003 meeting at NRC Headquarters, NSIR managers discussed various alternatives for a mock adversary force with the NRC Commission, the NSWG, and NEI representatives. The alternatives included having utilities form individual adversary force teams or using a federal agency such as the DOD to develop a mock adversary force.

The NRC Chairman and a Commissioner told OIG that they directed the staff to identify alternatives for developing an adversary force. The NRC Commissioner said he recalled the staff presenting the results of the pilot EFOF exercises and the need to develop a well-trained mock adversary force. The NRC Commissioner believed that alternatives for developing a trained adversary force were possibly discussed earlier than September 2003. The NRC Chairman told OIG that he was aware that the industry was not receptive to formulating a single industry adversary force because it believed that, over time, the adversary force would become so effective at attacking plants that it would exceed the DBT.

NRC Submits Adversary Force Alternatives to NRC Commission

On December 3, 2003, the NRC Executive Director for Operations (EDO), forwarded SECY-03-0208, "Adversary for Force-on-Force Exercises at NRC Licensed Facilities," to the NRC Commission for review and approval. In SECY-03-0208, the NSIR staff evaluated alternatives for the development and implementation of a process that would result in a credible, well-trained, and consistent mock adversary force to be used in FOF exercises. SECY-03-0208 identified the following five alternatives:

1. Continue using licensee-provided adversary forces established on an exercise-by-exercise basis. (The status quo)
2. Establish adversary force standards and guidelines which each licensee would use to establish and train its own adversary team for use in FOF exercises at its sites.

3. Establish adversary force standards and guidelines for the industry as a group. The industry would select and train a pool of personnel for the adversary force cadre. Members of this pool would be assigned to specific mock adversary teams or a team would be assembled to support each FOF exercise.
4. Establish an adversary force composed of NRC staff or NRC contractor personnel.
5. Establish an adversary force using federal assets.

In SECY-03-0208, the NRC staff recommended that the Commission approve Alternative 3. NSIR staff told OIG that Alternative 3 was recommended because NRC was not prepared to establish an adversary force composed of NRC staff. This would have required NRC to recruit and hire 40 full-time employees with special operations and/or security training. The time required for the staff to accomplish this would not have met the Commission's expectation to have an adversary force in place by October 2004. Additionally, NRC did not have the infrastructure to establish an adversary force composed of NRC staff. To accomplish this would have entailed costs associated with equipment, training, and facilities.

On December 23, 2003, the NRC Chairman and two NRC Commissioners voted to approve the staff's recommendation to implement Alternative 3; however, the Commission directed the staff to be prepared to implement Alternative 4 in the event that Alternative 3 did not produce what NRC was looking for in an adversary force.

Interviews of NRC Chairman and Commissioners

The NRC Chairman told OIG that he voted for Alternative 3 because this alternative placed the responsibility for formulating an adversary force with the industry where he believed it belonged. The NRC Chairman said he instructed the NSIR staff to be prepared to implement Alternative 4 if Alternative 3 failed to produce an adversary force that met NRC expectations. He noted that Alternative 4 would have required the NRC to hire and train individuals for a mock adversary force which could have taken up to 1 year. The Chairman said he was not comfortable with having an adversary force composed of Federal employees, except as a last resort. The Chairman said that NRC was responsible for developing a security program that could be used to regulate the nuclear industry. Subject to NRC oversight, industry had the primary responsibility for maintaining plant safety and security, and complying with NRC requirements.

An NRC Commissioner who voted for Alternative 3 told OIG that he believed that Alternative 3 appeared to be the most viable. The Commissioner did not believe Alternative 4 was an option given the time constraints. The Commissioner said that to implement Alternative 4, NRC would have had to hire and train an adversary force which would have delayed conducting the FOF exercises.

Another NRC Commissioner who voted for Alternative 3 said he did so because, as a matter of policy, Alternative 3 was a reasonable option to effectuate the goal of establishing an effective mock adversary force program.

II. DOE PROPOSAL TO PROVIDE A MOCK ADVERSARY FORCE

OIG noted that the five alternatives identified in SECY-03-0208 did not include any reference to a proposal submitted by the DOE in June 2003 to provide the NRC a controller force² and a mock adversary force.

DOE Submits Proposal for an Adversary Force

OIG learned that as part of a Memorandum of Understanding (MOU) between NRC and DOE, NSIR had a work order agreement with DOE to provide logistical support and training for the pilot EFOF exercises. The logistical support included on-site training for the mock weapons used during these exercises. In June 2003, in its response to the NRC work order request for logistical support and training for the EFOF, DOE also submitted a proposal to provide a controller force and an adversary force trained specifically to meet the needs of the NRC evaluation and testing requirements. The DOE proposal established a permanent controller force and adversary force to provide a consistent exercise at all NRC facilities and to enhance the tactical response to any perceived threat. In July 2003, NRC and DOE agreed to the terms of the EFOF logistical support work order agreement. However, the agreement did not include any provision for DOE to provide a controller force and an adversary force.

Interview of a DOE Representative

A DOE representative involved in providing logistical support for the pilot EFOF exercises told OIG that in June 2003, DOE submitted a written proposal to NSIR to formulate an NRC controller force and adversary force. He did not recall discussing the proposal with NSIR staff at that time. Later, in the fall of 2003, he and an NSIR staff member discussed the possibility of DOE developing an adversary force for NRC.

The DOE representative told OIG that DOE would not have been able to provide full-time DOE employees for the adversary force. Instead, DOE would have probably obtained personnel from its contractor, Wackenhut Services, Inc., a subsidiary of The Wackenhut Corporation. The DOE representative said that Wackenhut Services, Inc., was not involved in providing guard services at any nuclear power plants.

² The controller force is responsible for ensuring that exercises are conducted in a safe manner and that those who play the role of the responder and/or adversary are following the rules of engagement during the exercises.

Interviews of NSIR Staff

The NSIR staff member involved in the DOE pilot EFOF July 2003 work order agreement told OIG that in the fall of 2002, DOE gave a presentation to NSIR staff and managers describing the range of services that DOE could provide. These services included controller and adversary forces as well as conducting the entire FOF program. He said that when NRC began developing the EFOF work order with DOE in February 2003, NRC was not interested in obtaining an adversary force from DOE. The NRC needed equipment, logistical support, and recommendations for improving the pilot EFOF exercises.

The NSIR Section Chief responsible for developing the FOF alternatives and his supervisor told OIG that they were aware of DOE's ability to provide the adversary force under DOE's contract (work order) proposal. A Division Director, NSIR, recalled attending the fall 2002 DOE presentation, but he did not recall if DOE discussed providing controller or adversary forces. When the staff began developing alternatives for an adversary force, he became aware that DOE had the capability of providing an adversary force.

The Division Director said that DOE was never specifically mentioned as one of the alternatives in SECY-03-0208. However, he noted that given the limited number of government agencies capable of providing this support, it was not hard to infer that DOE could provide the adversary force. The only other agency capable of providing an adversary force was DOD; however, this would have been unlikely given the restrictions on using military personnel for civilian purposes. The Division Director had no reservations about using DOE because the agency had experience in conducting FOF exercises at their nuclear weapon sites. However, he said he made sure that the Commission was aware that if they elected to have either the NRC or another government agency provide an adversary force, it would take time to implement because the resources were not readily available.

The NSIR Director told OIG that he could not recall if the NSIR staff briefed him on DOE's proposal to provide controller and adversary forces. The Director recalled the staff discussing with him their concern that DOE would not have the necessary resources to support the number of FOF exercises that would be conducted and their lack of confidence that DOE could logistically support the FOF schedule.

Information Provided to NRC Commission Regarding the DOE Proposal

The NSIR Section Chief who developed the FOF alternatives told OIG that prior to SECY-03-0208 being submitted to the Commission, he briefed the Commission on the five alternatives listed in SECY-03-0208. During the briefing, he discussed each of the alternatives and the basis for the staff's recommendation for an industry adversary force. The Section Chief told the Commission that under Alternative 4, which specified using an adversary force composed of NRC staff or NRC contractor personnel, the

contractor would be DOE because NRC already had a contract with DOE. He told the Commission that DOE could provide the adversary force personnel under NRC's existing contract and could meet the Commission's time constraints. The Section Chief said he did not advise the Commission that DOE had submitted a written proposal to NRC to provide a controller force and an adversary force.

Interviews of NRC Chairman and Commissioners Regarding the DOE Proposal

The NRC Chairman told OIG that he recalled being briefed by NSIR on the alternatives identified in SECY-03-0208 for implementing a mock adversary force. The Chairman said that he did not recall being briefed on a DOE proposal to provide an adversary force to NRC. He said that if the staff was aware of such a proposal, the staff should have provided the information to him.

An NRC Commissioner who voted for Alternative 3 told OIG that he recalled being briefed on the alternatives prior to receiving SECY-03-0208. The Commissioner said he did not recall being informed that DOE had submitted a proposal to NRC to provide a controller force and an adversary force for FOF exercises.

Another NRC Commissioner who voted for Alternative 3 told OIG that he did not specifically recall being briefed on the alternatives contained in the SECY; however, he said he was familiar with the alternatives presented by the staff. He said he did not recall being informed of a DOE proposal to provide a controller force and an adversary force for FOF exercises.

III. NRC OVERSIGHT OF INDUSTRY IMPLEMENTATION OF AN ADVERSARY FORCE

Following the Commission's endorsement of Alternative 3 in SECY-03-0208, NSIR and NEI took steps to implement an industry adversary force.

NRC Establishes Timelines and Develops Composite Adversary Force Performance Standards

On January 8, 2004, NSIR staff met with NEI and NSWG to inform them of the Commission's approval of Alternative 3 and NRC's expectations for the development and implementation of a mock adversary force, now renamed the Composite Adversary Force (CAF). NSIR also discussed NRC's expectations that by August 2004 the CAF would begin conducting transitional FOF exercises and by November 2004 the CAF would be fully implemented and NRC would begin evaluating redesigned FOF exercises conducted by the CAF. NSIR also informed industry of the Commission's direction to implement Alternative 4 if the industry CAF did not meet NRC's expectations.

In May 2004, NRC published standards and guidelines in the NRC Composite Adversary Force Performance Standards for Force-On-Force Exercises Manual. The manual identified minimum physical fitness and training standards. The manual also addressed knowledge of attack strategies to ensure CAF personnel were trained in offensive, rather than defensive, skills. NRC provided a copy of the manual to NEI. The manual noted that the standards were not requirements.

NEI Awards Composite Adversary Force Contract

In April 2004, NEI issued a solicitation for contract bid proposals to develop a CAF. In June 2004, after reviewing the two proposals in response to the solicitation, NEI awarded a 3-year contract to Wackenhut to develop a CAF. The contract specified that the selection of team members for the CAF was not limited to Wackenhut security guards but was open to all guards working for various security firms hired by member utilities. According to the contract, the time for development and implementation of the CAF, including training and team mobilization, could not exceed 8 weeks. The NEI contract included an option to terminate the contract if the CAF did not meet performance standards established by the NRC.

An NEI official told OIG that NEI awarded the contract to Wackenhut because it already had the infrastructure and administrative capabilities in place, such as the accounting system, pool of personnel to draw from, as well as experience with nuclear power plant security and conducting FOF exercises. By selecting Wackenhut, NEI was able to meet NRC's expectation that the CAF program would be implemented in time to support the transitional FOF exercises.

The NEI official told OIG that after awarding the contract to Wackenhut, NEI hired a Senior Project Manager for CAF Operations to oversee the CAF program and ensure that Wackenhut abided by the terms of the contract. The NEI Senior Project Manager also served as the conduit between NSIR and Wackenhut.

Wackenhut Proceeds With Contract Requirements

In June 2004, after receiving the NEI contract, the Wackenhut Chief Executive Officer (CEO) recruited a Vice President of Special Operations from outside the Wackenhut organization to develop and manage the CAF program. The Wackenhut Vice President of Special Operations told OIG his responsibilities included recruiting, training, and selecting team members. He initially recruited guards from the Wackenhut security guard forces because of time constraints imposed by the NEI contract. In the autumn of 2004, he began recruiting from non-Wackenhut security guard forces including guards from other contractor security firms working at nuclear power plants.

NRC Involvement in Industry Efforts to Implement Composite Adversary Force

An NEI official told OIG that the NRC was not involved in NEI's decision to award the contract to Wackenhut. However, NSIR managers were routinely informed of the progress being made in the contract award process. He kept NSIR informed because NSIR wanted assurance that the CAF team would be mobilized in time to support the transitional FOF exercises before NRC commenced security inspections in November 2004. The NEI official said that prior to the public announcement, he informed the NSIR Director that NEI had awarded the CAF contract to Wackenhut.

Several NSIR staff and managers told OIG that while they were generally aware that NEI was soliciting bids for the development of a CAF, they did not specifically know which security companies were being considered. However, some NSIR staff recognized that NEI was considering Wackenhut, among other security firms, because there was only a finite group of security companies that had the necessary experience working at nuclear power plants. Several NSIR staff and managers told OIG that they did not want to know the contract details because they did not want to influence the NEI contract process. They said that the NRC did not have a role in the implementation of the CAF because it was industry's responsibility.

The NSIR Section Chief who developed the alternatives in SECY-03-0208 told OIG that he never considered the possibility that NEI would award a contract to a security firm to implement the CAF. The framework he envisioned was that NEI would manage the CAF and recruit personnel from across the industry who would be detailed to the CAF for a 2- to 3-year period. In the past, this model had been used by industry and had

been very effective. The model he envisioned for the CAF was the Institute of Nuclear Power Operations (INPO)³ program where industry personnel are assigned to the organization for a 2-year period and responsible for conducting industry audits.

An NSIR Division Director told OIG that after being informed of the contract award to Wackenhut, he and his staff immediately considered a number of issues concerning the award. He recalled questioning whether (1) there would be independence between the Wackenhut CAF personnel and Wackenhut security guard forces; (2) Wackenhut CAF members would be testing Wackenhut sites; and (3) Wackenhut might be more aggressive in testing competitors' sites than Wackenhut sites.

The NSIR Director told OIG that he was not aware that NEI had initiated a contract award process. He said sometime in May or June 2004, he recalled being told that NEI had awarded a contract to Wackenhut. The Director was surprised by the contract award and immediately recognized the appearance of a conflict because Wackenhut also provided security guards to approximately 50 percent of the nation's nuclear power plants.

Public Response to NEI Selection of Wackenhut

NEI's announcement that they had awarded the CAF contract to Wackenhut brought protests from Members of Congress and public interest groups. Both groups felt that it was a conflict of interest to award Wackenhut the CAF contract. A public interest group representative stated that a Wackenhut mock adversary force could easily "throw" the results of an exercise at plants where Wackenhut provided the guard force even though NRC was observing the exercise.

³ The Institute of Nuclear Power Operations (INPO) is a private organization founded by the nuclear industry to promote the highest levels of safety and reliability in the operation of nuclear plants. Every 18 to 24 months, INPO sends a team of inspectors to each plant to review its operations. INPO's findings and recommendations are intended to assist licensees in their ongoing efforts to improve all aspects of their nuclear program.

IV. NRC EFFORTS TO ADDRESS THE PERCEPTION OF A CONFLICT

Following the award of an NEI contract to Wackenhut in June 2004, NRC and NEI took steps to address the perception of a conflict because of Wackenhut's dual roles of being an adversary force and guarding nuclear power plants.

NEI Provides Commitments to Address Perceived Conflict

In August 2004, NSIR requested NEI to respond to the following three questions:

1. What is the reporting relationship of the CAF manager within the Wackenhut organization?
2. What is the selection process for the CAF team members. Will they only be from sites that have Wackenhut security officers?
3. Will CAF team members be used in FOF exercises at the members' home plant?

In a September 10, 2004, letter to the Director, NSIR, NEI responded to concerns regarding the CAF and to the three questions posed by NRC. The letter noted that the CAF manager currently reported to the President of Nuclear Services Division (who was also responsible for the security guard forces). However, to allay any concerns of inappropriate influence on the CAF, the CAF manager and the President of Nuclear Services Division would each begin reporting directly to the Wackenhut Chief Executive Officer (CEO). NEI committed to the following:

- The manager responsible for the CAF (Vice President of Special Operations) would report directly to the CEO for The Wackenhut Corporation;
- CAF members would be selected from all nuclear sites, including those where security was provided by Wackenhut's competitors;
- CAF members would not participate in exercises at their home sites.

The NEI Director of Security told OIG that NEI and Wackenhut agreed to meet the three commitments made to NRC. He recognized that there was no formal process or requirement that obligated NEI to report to NRC if Wackenhut stopped meeting these commitments. However, the Director of Security told OIG that if NEI became aware that Wackenhut was not meeting the commitments, NEI would voluntarily provide the information to NRC.

The NEI Director of Security acknowledged that only two of the three commitments made by Wackenhut could be validated. NEI could validate that CAF members were selected from all nuclear sites by reviewing the CAF team composition, and by

reviewing the CAF roster, NEI could verify that a CAF member did not participate in an FOF exercise at his or her home site. However, whether the CAF manager actually answered only to the Wackenhut CEO could not be validated, and NEI had to take the Wackenhut CEO at his word.

The NEI official told OIG he believed there were sufficient measures to mitigate any potential conflict resulting from Wackenhut personnel being used to both provide and test the security at nuclear power plants. He noted that NEI did not have any role in the design or control of FOF exercises and that NEI attended FOF exercises to ensure that Wackenhut fulfilled the terms of the NEI contract. If the CAF did not meet the expectations established by NEI consistent with NRC requirements, NEI had the option of terminating the contract with 10 days written notice.

Wackenhut Implementation of NEI Commitments

The Wackenhut CEO told OIG that his organization addressed a perceived conflict by eliminating the reporting relationship between the Wackenhut manager responsible for the CAF program and the manager responsible for the security guard forces. These managers, the Vice President of Special Operations, responsible for the CAF, and the President of Nuclear Services Division, responsible for the security guard forces, now reported directly to him.

Wackenhut officials told OIG that they did not believe there was a conflict because the FOF exercises are controlled, directed, and evaluated by the NSIR staff during the NRC inspection process. According to Wackenhut officials, the perception of a conflict would exist regardless of which company was awarded the contract because one security firm or another has been hired to protect nuclear power plants. As part of Wackenhut's commitment to alleviate any perceived conflict, non-Wackenhut security guards who successfully completed the 3-week training course and met NRC standards were recruited to participate in the CAF. Approximately one-third of the CAF are individuals from security firms other than Wackenhut.

The Vice President of Special Operations confirmed to OIG that he reported directly to the Wackenhut CEO. He said he attended most of the FOF exercises to ensure that the CAF met NRC standards. The Vice President noted if the CAF did not meet NRC standards, it could adversely impact the Wackenhut contract with NEI.

NRC Efforts To Ensure Independence Between Composite Adversary Force and Wackenhut Guards

Following the receipt of concerns and questions from Members of Congress and the public, the NRC Commission directed the NSIR staff to ensure that there would be sufficient separation of functions, including appropriate management and administrative

controls within the Wackenhut organization to provide adequate independence between the CAF and the Wackenhut nuclear security guard forces.

An NSIR Deputy Division Director told OIG that he visited Wackenhut headquarters to review procedures for maintaining and securing Safeguards Information (a special category of sensitive unclassified information). During this review, he also reviewed Wackenhut's organizational chart and met with the Wackenhut CEO to validate the independent reporting requirement between the Vice President of Special Operations, responsible for the CAF, and the President of Nuclear Services Division, responsible for security guard services at commercial nuclear power facilities.

The NSIR staff told OIG that the two remaining commitments made by NEI were validated during the NRC FOF exercise inspection process. The NSIR staff reviewed the CAF team roster and verified that the CAF team was composed of Wackenhut and non-Wackenhut members and that CAF members were not participating in an FOF exercise at their home site.

NSIR managers and staff told OIG that the three commitments made by NEI adequately addressed and mitigated the perception of a conflict. The staff stated that the reporting relationship between the Vice President of Special Operations and the Wackenhut CEO helped to eliminate the potential to skew the results of FOF exercises in Wackenhut's favor. Further, allowing non-Wackenhut security guards to participate in the CAF hindered the CAF from performing in a manner that would potentially enhance the performance of Wackenhut security guards at Wackenhut sites. Potential conflict was also lessened by not allowing CAF members to participate in an FOF exercise at his or her home site.

Interview of NRC Chairman and Commissioners

The NRC Chairman told OIG that because of Wackenhut's role in providing the CAF, he recognized that there would probably be a perception of a conflict; however, he viewed this as a normal response. He said that it was his responsibility to make sure that the perceived conflict did not become a reality. The Chairman was very comfortable with the guidance given by NRC to the industry for the formulation of the CAF and execution of the FOF exercises. He was also comfortable with the administrative controls and measures implemented by Wackenhut to address the potential conflict within its organization. The Chairman told OIG that he was satisfied that the industry had produced a well-trained, credible adversary force to test the security at commercial nuclear power plants.

An NRC Commissioner told OIG he did not view Wackenhut performing the CAF function as a conflict because the NRC designed, executed, and evaluated the FOF scenarios. He was confident that there were enough NRC inspectors at the FOF exercises to ensure the exercises were being conducted in an above-board manner. The Commissioner was also confident that NEI and Wackenhut had sufficient internal

administrative control measures (e.g., organizational firewall) to mitigate any potential conflict. Although no one could guarantee that information about the drill scenarios would not be leaked, he was confident that the exercises were being conducted properly. He told OIG that if there was ever a perception of a conflict, it should have been with the earlier NRC Operational Safeguards and Response Evaluation program when individual power plants used their own security guard forces as the adversary force during the FOF exercises at their sites.

Another NRC Commissioner told OIG he was comfortable with the three commitments made by NEI to address concerns regarding the Wackenhut CAF program. The NRC Commissioner said that in the past the adversary force program worked in a spotty manner and had problems with the quality of the guard force and level of training. He noted that under the former program, the same security guards were used to compose the mock aggressor force and to provide security at the same plant.

V. NRC EFFORTS TO ENSURE FORCE-ON-FORCE EXERCISES WERE VALID TESTS OF POWER PLANT SECURITY

The NRC FOF inspection process contains four features to ensure that the CAF's participation in the FOF exercises will yield credible results that identify deficiencies in a licensee's security strategy:

- Utilization of Trusted Agent Agreements
- Protection of FOF schedule
- Protection of FOF exercise scenario information
- NSIR oversight of FOF exercises.

Background

In November 2004, NRC implemented the current FOF program which requires that an NRC-evaluated exercise be conducted at each nuclear power plant at least once every 3 years. These FOF exercises are performance-based inspections used by the NRC to assess a licensee's protective capabilities against the DBT. Each FOF exercise involves several weeks of planning, a pre-visit to the plant to perform analysis, and a second visit to observe a number of commando-style attack scenarios conducted to disclose potential deficiencies in the licensee's defensive strategy.

During the pre-visits, the NRC inspection team conducts several security inspections; tabletop drills to look for weaknesses in the protective strategy of the plant; and determines target sets (equipment systems or components which could be vulnerable) for the FOF exercise. After NRC selects the target sets, the CAF prepares mission plans describing how to attack these targets. The NRC reviews and approves the CAF mission plans.

OIG learned that during the FOF exercise, controllers and two sets of security officers – guards who are actually on duty and guards who are participating in the exercise – are positioned at every security post to ensure that the exercise scenarios are conducted safely and that all players are following the “rules of engagement.” NRC inspectors position themselves in vantage points where they can observe most of the FOF exercise. Throughout the exercise, CAF members are shadowed by NRC contractors who assist NRC during the exercise. At the conclusion of each FOF exercise, the NRC inspection team, utility security managers, and FOF participants meet to discuss the outcome of the exercise. NRC inspectors make the final determination regarding the FOF test results.

NRC Trusted Agent Agreements

OIG learned that NSIR utilizes a Trusted Agent Agreement and a Special Trusted Agent Agreement to assist in maintaining the integrity of FOF exercises. These agreements summarize the two main responsibilities of a licensee, NEI, and Wackenhut personnel who receive sensitive FOF exercise schedule and planning information or details such as test scenarios. First, they agree not to communicate the details of the test plan and its execution to any individual who is not a Trusted Agent. Second, they work closely with NSIR staff and site personnel to ensure that tests are rigorous, realistic, and safe, and that sensitive information that might affect the validity of the exercise is not compromised.

NRC Efforts To Control Force-on-Force Schedule

OIG learned that NSIR developed an FOF exercise schedule which lists the order in which nuclear power plants are to be tested. This schedule contains the dates and locations of the NRC FOF exercises and carries the classification of "Official Use Only." For safety and logistical purposes, NSIR notifies plant operators 10 weeks in advance of each FOF exercise. Additionally, NSIR provides the FOF exercise schedule in 6-month increments to CAF management. In January 2005, NSIR provided the NEI Senior Project Manager for CAF Operations the first 6-month FOF exercise schedule and beginning in March 2005 provided the schedule in 3-month increments thereafter.

An NSIR manager told OIG that the NEI Senior Project Manager for CAF Operations received a copy of the FOF schedule from the NRC. The NEI Senior Project Manager executed a Special Trusted Agent Agreement. He provided the FOF schedule to the Wackenhut Vice President of Special Operations for the purpose of scheduling CAF team members for the FOF exercises.

The NEI Senior Project Manager told OIG that he executed a Special Trusted Agent Agreement so he could receive the NRC FOF schedule. He provided the FOF schedule to the Wackenhut Vice President of Special Operations so CAF team members could be scheduled for FOF exercises.

The Wackenhut Vice President of Special Operations told OIG that he received the FOF schedule from the NEI Senior Project Manager for operational planning purposes. He said that he never identified the specific plant to CAF team members until after they arrived at the city to conduct the FOF exercise. The Vice President did not execute a Special Trusted Agent Agreement prior to receiving the FOF schedule information.

OIG also learned that in January 2005, the NSIR staff provided the FOF exercise schedule of plants to be tested during the next 3 years to the NRC's logistical support contractor and subject matter expert contractor who are both involved in FOF exercises.

OIG learned that the distribution of the FOF schedule well in advance of the actual conduct of FOF exercises may have allowed unauthorized person(s) to prematurely obtain this information. During the course of this inquiry, OIG obtained information that as a result of an effort by a licensee official to obtain the date of a scheduled FOF exercise as early as possible, a licensee employee detailed to NEI may have provided scheduling information pertaining to an upcoming FOF exercise at one of its plants.

In addition to the possible premature release of FOF schedule information, the early distribution of the FOF schedule by NSIR provided sufficient leeway for person(s) in trusted positions with access to this information to change jobs thus furthering the distribution of this information. OIG learned that as of December 2005, the NEI Senior Project Manager for CAF operations was no longer employed at NEI. At the time of his departure from NEI, the Senior Project Manager left the FOF schedule information in his file cabinet and left keys to his file cabinet with his supervisor. The individual who replaced the NEI Senior Project Manager has also since departed NEI and is currently employed by a licensee. Similarly, in March 2006 the Wackenhut Vice President of Special Operations, whose role was to ensure a separation existed between the Wackenhut CAF program and the security guard forces, left his position as the CAF Program Manager and now occupies an operations position within The Wackenhut Corporation.

NRC Efforts To Control Exercise Scenario Information

During each FOF inspection, the NSIR team leader and a member of the licensee's security staff, who is designated as the point of contact for the FOF inspection, determine which licensee participants have a need to know sensitive FOF exercise information. These individuals were required to execute a Trusted Agent Agreement. According to NSIR staff, the number of trusted agents was limited to the fewest number of individuals as practicable.

An NSIR manager told OIG that CAF team members were not required to execute a Trusted Agent Agreement because they are "vetted" through the security clearance process and are cleared to receive Safeguards Information. However, the Wackenhut Vice President of Special Operations told OIG that although neither NEI nor NRC required CAF team members to execute a Trusted Agent Agreement, he required team members to execute a Trusted Agent Agreement prior to each FOF inspection.

NSIR Oversight of Composite Adversary Force Performance and Force-on-Force Exercises

An NSIR Deputy Division Director told OIG that during FOF exercises the NRC not only evaluates the licensee's ability to thwart the adversary threat but also evaluates how the licensee conducts the entire FOF exercise. Through direct observations, the NSIR staff evaluates the performance of the CAF and performance of the licensee's security guard force. The Deputy Division Director and staff said that from the onset of an FOF

exercise, NRC contractors "shadow" the CAF team to observe and evaluate their performance and provide feedback to NRC. NSIR staff position themselves so that as the exercise unfolds they can observe, evaluate, and monitor both the CAF and security guard performance. To assist in the evaluation, the NSIR staff utilizes security guard response timelines which are pre-determined measures of time that it should take a guard to get from one point to an alternate point when various alarms or signals are sounded. Because the staff is aware of the security guard post locations and the timelines for responding to exercise events, a variation from the expected response would indicate that something was amiss. He added that controllers are also positioned to observe the interaction between the CAF and the security guards to make determinations on the outcomes of encounters, time-outs, safety issues, and to resolve contentions that may develop during the exercise.

The NSIR Deputy Division Director and staff told OIG that through direct observations NRC assured that the FOF exercise was credible and that the CAF performed at a level that met NRC expectations. However, he recognized that it was impossible to observe everything that occurred during an FOF exercise. The Director noted that at some point during the FOF exercise, security guards recognize the CAF's intended target(s) based on the CAF activities and direction of movement. However, this knowledge would not affect the outcome of the FOF exercise. He explained that once exercise activities begin, everyone has a role and the security guards still have to respond and thwart the CAF attack.

OIG Observes Force-on-Force Exercises

The OIG observed FOF exercises conducted at San Onofre Nuclear Generating Station, Vermont Yankee Nuclear Power Plant, and Oconee Nuclear Power Plant. OIG did not observe any indication of compromise of exercise scenarios or other irregularities during the exercises. OIG interviewed CAF team members, which included non-Wackenhut security guards, licensee guard forces, and licensee security guards participating in the FOF exercises. OIG did not develop any information that licensee security guards had advance knowledge of exercise scenarios.

INQUIRY SUMMARY

As a result of the September 2001 terrorist attacks, the NRC conducted an evaluation of the security and safeguards programs of nuclear power plants. During force-on-force (FOF) exercises in 2003, the NRC identified the need to improve the offensive abilities, consistency, and effectiveness of the mock advisory force. In SECY-03-0208 the staff provided the Commission with five alternatives that outlined various processes for the development and implementation of a credible, well-trained, and consistent mock adversary force for FOF exercises. The Commission voted to approve the staff's recommendation to implement the third alternative which called for the NRC staff to establish adversary force standards and guidelines and for the industry to select and train a pool of personnel for a Composite Adversary Force (CAF) that would meet the performance standards established by the NRC. Acting on this decision, the Nuclear Energy Institute (NEI) selected Wackenhut as the CAF through a competitive process. The selection of Wackenhut, a firm that provided security guard services for approximately 50 percent of the nation's nuclear power plants, to also act as an adversary force to test nuclear plant security resulted in concerns of a possible conflict.

As a result of public concerns, the Commission then directed the NRC staff to ensure there would be appropriate management and administrative controls within Wackenhut to provide adequate independence between CAF and nuclear power plant security forces. Consequently, steps were taken by NEI and Wackenhut to address the perception of a conflict. Also, the NRC staff had measures in place to maintain control of the FOF inspection schedule, plan, and process. Additionally, during FOF exercises, NRC inspectors evaluated the ability of the licensee to defend against the adversary threat and assessed how well the licensee conducted the exercise. The NRC inspectors also monitored and evaluated the performance of the CAF. At the conclusion of each FOF exercise, NRC inspectors made a final determination regarding the FOF test results.

During this inquiry, OIG determined that the NRC staff provided the FOF inspection schedule to NEI and NRC contractors well in advance of their operational need for this information. The advanced distribution of the FOF schedule to individuals with no need to know at the time they receive the schedule can jeopardize the security of this information.