ANNUAL STATUS REPORT ON THE RESULTS OF THE SECURITY INSPECTION PROGRAM CONDUCTED BY THE UNITED STATES NUCLEAR REGULATORY COMMISSION

CALENDAR YEAR 2005

Enclosure 1

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I Executive Summary

The Energy Policy Act of 2005, H.R. 6, Section 651(e), directed the U.S. Nuclear Regulatory Commission (NRC) to submit to the Committee on Environmental and Public Works of the Senate and the Committee on Energy and Commerce of the House of Representatives a report, in classified form and unclassified form, that describes the results of each of NRC's security response evaluation (i.e., force-on-force inspections) conducted by NRC and any relevant corrective action taken by a licensee during the previous year. This is the first annual report covering calender year 2005. The NRC is also providing additional information regarding the overall security performance of the commercial nuclear power industry to keep the Congress and the public informed of the NRC's efforts to help protect our Nation's electric power infrastructure against terrorist attacks.

The NRC is committed to protecting the public health and safety, promoting the common defense and security, and protecting the environment. Conducting our security inspection program, which includes force-on-force (FOF) exercises, is one of a number of regulatory oversight activities the NRC performs to ensure the secure use and management of radioactive materials by the commercial nuclear power industry. In support of these activities, the NRC employs relevant intelligence information and vulnerability analyses to determine realistic and practical security requirements and mitigative strategies. Further, a risk-informed, graded approach is used to establish appropriate regulatory controls, enhance NRC inspection efforts, assess the significance of licensee vulnerabilities, and to influence timely and effective corrective action by licensees of commercial nuclear power plants for identified deficiencies. These practices, which have evolved from the changing threat environment, encourage interagency cooperation in the development of an integrated approach to the security of nuclear facilities and contribute to NRC's comprehensive evaluation of licensee security performance.

During calendar year 2005, NRC-conducted security inspections, including FOF inspections, were scheduled at NRC-licensed commercial nuclear power plants (NPP) based on risk insights, security assessments, and logistical considerations. FOF inspections at NRC-licensed Category I (CAT I) fuel cycle facilities commenced in early 2006 and will be described in subsequent annual reports.

This report describes the evolution of the NRC's security inspection program, including the security baseline inspection program for CY 2005 and details for the FOF program from pre-September 11, 2001, to the present and highlights enhancements to the program. The reporting period included herein is October 29, 2004, through December 31, 2005.

The security inspection program included 141 inspections (of which 23 were FOF inspections). As a result of these inspections there were 114 findings across the NPP industry. This included 99 findings of very low security significance and 5 findings of low to moderate security significance.

II Background

Prior to September 11

Before the terrorist attacks on September 11, 2001, the NRC conducted security inspections at all NPP facilities to ensure compliance with NRC regulations. These included FOF exercises at each commercial NPP approximately once every 8 years. According to NRC regulations, NPP licensees conducted their own FOF exercises on an annual basis, which the NRC observed. However, in the wake of the terrorist attacks, the Commission temporarily suspended the FOF exercises at NPP facilities. The Commission's primary concern was that conducting such exercises could have distracted the licensees' security forces and the NRC staff during a time when licensees needed to focus on implementing the NRC's highest level of alert, as well as numerous security upgrades.[1] Although FOF inspections were temporarily suspended, NRC continued the security inspection program including its practice to periodically inspect licensees through the use of NRC security specialist inspectors and on-site resident inspectors who maintain daily vigilance over matters of nuclear safety, security, and emergency preparedness, as well as other regulatory activities.

Response to September 11 - Summary of Security Enhancements

In the weeks and months following September 11, 2001, the NRC focused its efforts on enhancing security at the facilities it regulates. The terrorist attacks reaffirmed the need for collective vigilance, enhanced security and safeguards, and improved emergency preparedness and incident response capabilities throughout the Nation's electrical infrastructure. As a result, the NRC conducted a thorough review of the agency's security and safeguards programs and made enhancements, in part to strengthen its requirements on NRC-licensees and to improve coordination to defend against a more challenging adversarial threat.

On February 25, 2002, the NRC issued Orders to NPP licensees requiring that they increase their defensive capabilities in the post 9/11 threat environment. These enhancements to security included increased security patrols, augmented security forces, additional security posts, increased standoff distances for vehicles, improved coordination with law enforcement and intelligence communities, and strengthened safety-related mitigation procedures and strategies.

On January 7, 2003, the NRC issued another Order requiring further enhancements to access controls for the NPPs. On April 29, 2003, the NRC issued three additional Orders requiring security enhancements in the areas of: 1) a supplemented design basis threat (DBT), 2) enhanced training on tactical and firearms proficiency and physical fitness, and, 3) fitness-for-duty, including security force personnel work-hour limitations. These Orders required all licensees to continue to meet all previous security requirements.

The DBT is a set of adversary characteristics established by the Commission as the basis for the design of the licensee's security systems. In establishing the DBT, the Commission considers intelligence information, protective measures that may be employed (including

[1] "Protecting Our Nation"

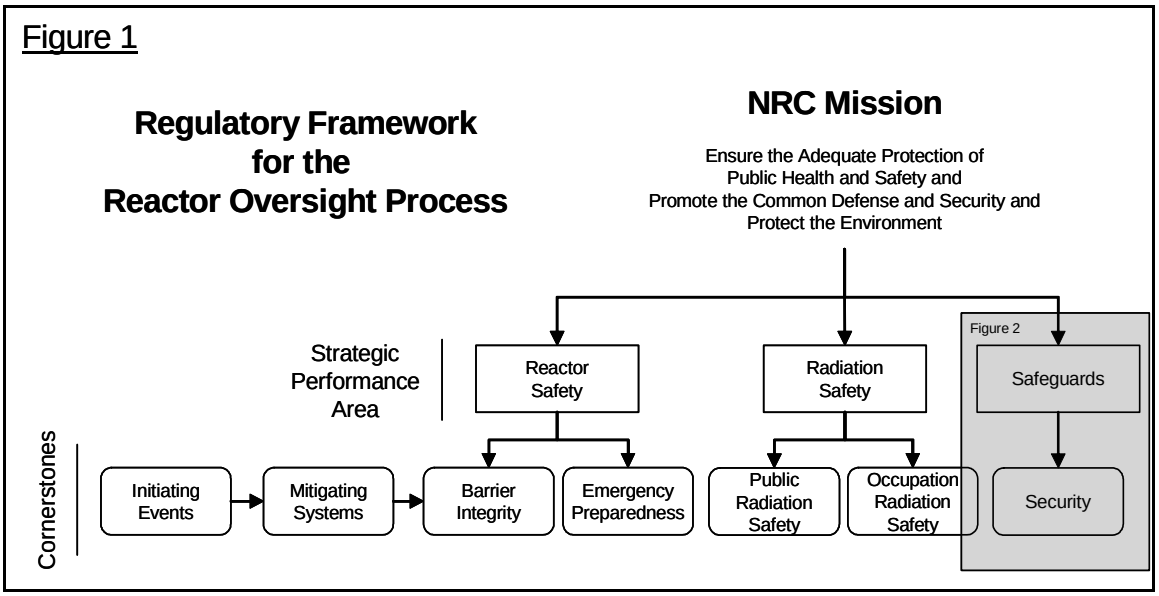
potential unintended consequences), and availability of such measures to private security forces, to determine the adversary characteristics that are reasonable to expect a private force to protect against.

The April 2003 Orders required NPP licensees to submit their revised security plans to the NRC for review and approval by April 29, 2004, and that the plans be implemented by October 29, 2004. All licensees met this requirement.[2] These measures and others are periodically evaluated by the NRC through its baseline security inspection program, which includes the conduct of FOF inspections. For other NRC licensees, NRC issued similar orders enhancing security-related requirements and measures to protect the public health and safety, to promote the common defense and security, and to protect the environment.

III Baseline Inspection Program

The NRC continues to implement the Reactor Oversight Process (ROP) which is the agency's program for ensuring plant and radiological safety, security, and emergency preparedness at all operating nuclear power plants. The basic principles and philosophy of the ROP are to ensure that a defined, repeatable, and objective process is applied to identify findings, determine their significance, and document results in accordance with ROP program guidance. Program instructions and inspection procedures help provide assurance that licensee actions and regulatory response are commensurate with the safety or security significance of the particular event, deficiency, or weakness. Within each ROP cornerstone (see Figure 1), NRC headquarters and regional specialist inspectors conduct inspections using detailed inspection

Figure 1



procedures whose results, in the aggregate, contribute to an overall assessment of licensee performance.

[2] Letter from Chairman Diaz to T. Ridge, dated September 8, 2004.

The NRC significantly enhanced its baseline security inspection program for commercial nuclear power plants since September 11, 2001. This inspection effort resides within the "Security Cornerstone" of the agency's ROP. The Security Cornerstone focuses on five key licensee performance attributes: access authorization; access control; physical protection; material control and accounting (MC&A); and response to contingency events. Through the results obtained from all oversight activities, including but not limited to baseline security inspections, the NRC determines whether licensees comply with requirements and can provide high assurance of adequate protection against the DBT.

NRC oversight of licensee security capability has increased significantly since the terrorist attacks of September 11, 2001. In 2000, approximately 40 staff weeks of direct inspection effort were spent on security inspections (excluding FOF exercises) for nuclear power reactors. By 2003, this inspection effort had increased to 205 staff weeks. This effort focused on licensee implementation of compensatory measures to address the post-9/11 threat environment. These compensatory measures were required by the Commission's February 25, 2002, Order. In late 2003, the staff developed the revised baseline inspection program for reactor security, taking into consideration the enhanced requirements and the higher threat environment. The staff began implementation of the revised baseline inspection program during March 2004. These inspections focused on those elements of the program that had been fully implemented under the previous orders, such as access authorization and security force work hour limits. The NRC also implemented a Management Review Panel to ensure that inspection findings and potential violations are treated in a consistent and appropriate manner. During CY 2005, the inspection effort focused on verifying licensee implementation of the remaining Commission’s Orders. The staff expended approximately 400 staff weeks of direct inspection effort in 2005. Implementation of all elements of the baseline inspection program commenced in January 2006.

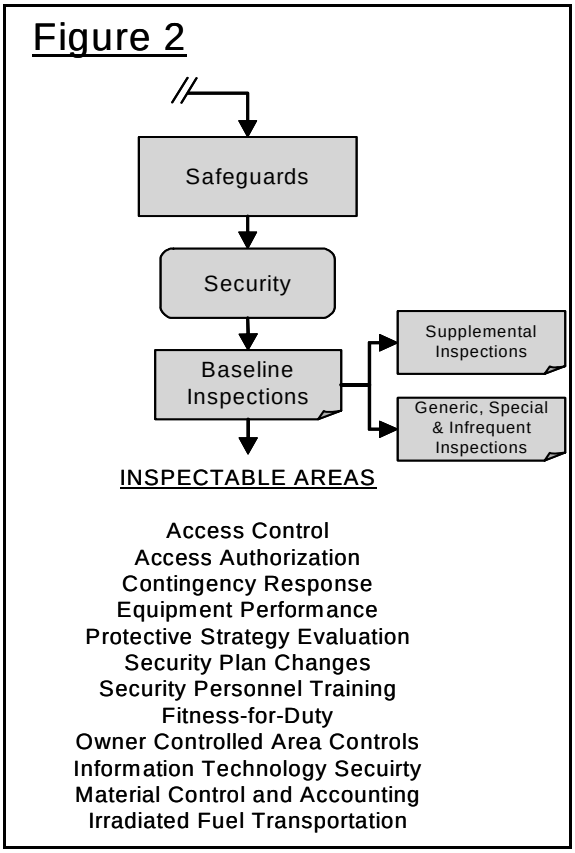
In a related matter, following the terrorist acts of September 11, 2001, the NRC determined that there was a potential that security-related information routinely made public through the NRC web-site and the NRC’s public reading rooms could aid potential adversaries seeking to cause radiological sabotage or theft or diversion of radioactive materials. Therefore, the NRC revised its information dissemination policy significantly restricting public access to security-related information. This policy specifically applied to information related to licensee security and safeguards performance, including generic or nation-wide performance information. As a result, the public is provided limited information on regulatory decisions or actions involving security inspection, assessment, or enforcement. Nonetheless, in keeping with the NRC strategic goal of openness in our regulatory process, the Commission has reassessed this policy on May 1, 2006, and is making generic results of its security inspection program for commercial NPPs more transparent to the public.

As discussed, the security inspection program for commercial NPPs resides within the Security Cornerstone. The cornerstone has four objectives: (1) to obtain information providing objective evidence that the security and safeguards at NRC-licensed NPPs are maintained in a manner that contributes to public health and safety and promotes the common defense and security; (2) to determine that licensees have established measures to deter, detect, and protect against the DBT as required by regulations and other Commission mandates such as orders; (3) to determine the causes of declining performance in the physical protection arena before such

performance reaches a level that may result in a degradation to reactor safety or undue risk to public health and safety; and (4) to identify those significant issues that may have generic or cross-cutting applicability. These objectives help ensure the secure use and management of radioactive materials.

The baseline inspection program requires each "inspectable area" be reviewed at each power reactor facility (see Figure 2). In addition, MC&A inspections are conducted to ensure that licensees take adequate measures to control the risk of loss, theft, or diversion of special nuclear material.

Figure 2



Where performance issues have been identified at a particular licensee, supplemental inspections may be conducted to further investigate a particular deficiency or weakness. In certain situations, the NRC Regional Administrator may authorize the conduct of a generic, special, or infrequent inspection. Such an inspection is not part of the baseline or supplemental inspection program and would only be conducted after a review and assessment of a particular security or safeguards event or condition. These types of inspections include, but are not limited to: resolution of employee concerns, security matters requiring particular focus, licensee plans for coping with strikes, and inspection of international safeguards. A special inspection was conducted at a NPP to review performance issues with the intrusion detection system.

The NRC is currently evaluating the efficacy of the Physical Security Performance Indicators (PIs) to determine if revisions are warranted to enhance their function as leading indicators, or if a different program would serve the need more efficiently.

Regulatory response to identified security-related deficiencies is in accordance with an action matrix based on the security significance of the inspection finding. Both the significance of the finding and the actions required are implemented through NRC procedures that ensure such assessments are predictable, repeatable, and commensurate with the event, deficiency, or performance weakness. The NRC periodically solicits industry and public involvement in the ROP to help ensure program effectiveness.

IV Significance Determination Process (SDP)

Security-related findings are evaluated using the baseline Physical Protection Significance Determination Process (PPSDP). These findings include both programmatic and process deficiencies. The PPSDP provides the security significance of any security program deficiency. Unresolved items (URI) are discussed within the inspection team, and documented in the inspection report. A URI is an issue about which more information is required to determine if it is acceptable, if it is a finding, or if it constitutes a deviation or violation. Such a matter may require additional information from the licensee or may require additional guidance or clarification/interpretation of the existing guidance.

In July 2004, the staff issued and began piloting a separate Significance Determination Process (SDP) for FOF inspections. The staff completed the FOF SDP pilot in December 2004. In addition to the pilot SDP, the staff applied NRC Inspection Manual Chapter 0609, "Significance Determination" guidance to ensure an objective and common framework was utilized. As lessons learned are compiled throughout the inspection process, the SDP may be reevaluated and revised.

The significance of findings associated with FOF adversary actions are dependent on how far into the plant they progress, their impact on a target set, and a determination of whether or not these actions had an adverse impact on the public.

Findings will be screened by using the FOF SDP. Other security-related findings identified during FOF activities are also evaluated using the baseline PPSDP. These findings may include programmatic and process deficiencies that are not directly related to a FOF inspection outcome, but are uncovered during the FOF exercise. All URIs are discussed within the inspection team, and documented in the inspection report. In situations where the NRC cannot clearly determine the outcome of an exercise, the exercise may be considered indeterminate and any identified process or programmatic deficiencies would be processed through the baseline PPSDP.

V CY 2005 Baseline Security Inspection Program Results

Table 1 summarizes the overall results of the security inspection program excluding FOF inspection results. This information provides a summary overview of licensee performance within the Security Cornerstone.

Violations and non-cited violations (NCV) are categorized by significance, and are given corresponding color or severity level (SL) codes, as follows: green or SL IV (very low security

significance); white or SL III (low to moderate security significance); yellow or SL II (substantial security significance); and red or SL I (high security significance). White, yellow and red findings are considered greater than green. Any finding that is greater than green proceeds in the normal enforcement process.

Table 1, CY 2005 Baseline Security Inspection Program Results without FOF Inspections

CY 2005 Baseline Security Inspection Program Results	
112	Total number of inspections conducted across the industry.
101	Total number of inspection findings across the industry.
86	Total number of Green findings.
3	Total number of greater than Green findings.
10	Total number of SL IV violations.
2	Total number of greater than SL IV violations.
6	Total number of special inspections conducted.
0	Total number of licensees within the Degraded Security Cornerstone.
0	Total number of licensees within the Repetitive Degraded Cornerstone.
0	Total number of licensees with Unacceptable Performance.

VI FOF Inspection

Evolution of FOF Inspections

The NRC phased in the enhanced FOF program over a 2-year period in conjunction with testing 56 percent of the commercial NPPs in the country. The first phase consisted of an expanded table-top program conducted in 2002 at seven NPP sites. The second phase, an expanded pilot FOF exercise program, began in February 2003 and was conducted at 15 NPPs. The second phase incorporated lessons learned from the expanded table-top program.
This pilot FOF program assessed the post-9/11 program changes that included additional participants; enhanced weaponry; more complex tactical approaches and protective strategies; increased attention to adversary approach, capture, and destroy tactics; and state-of-the-art exercise equipment. Additionally, one site conducted training exercises beyond the DBT with incrementally larger numbers of adversaries and enhanced weaponry. The licensees that participated in the FOF pilot program were pre-selected to represent a reasonable sampling of the various designs, locations, number of responders and size of facility.

In February 2004, the NRC began the final phase, starting with a transitional force-on-force (TFOF) program, that incorporated lessons learned from the previous 2 years. The TFOF mock adversary force used the characteristics of the DBT, as enhanced and supplemented by NRC Orders, that had expanded adversary force capabilities. A total of 13 sites had participated in the TFOF program by October 2004.

In November 2004, NRC began implementation of its redesigned, full-scale FOF inspection program that incorporates experience and lessons learned since September 11, 2001. The NRC has increased the frequency of FOF inspections so that each nuclear power plant site participates in one NRC-conducted FOF inspection (which typically includes three NRC-evaluated exercises) at least once every 3 years, rather than once every 8 years. In addition, each plant is required to conduct its own independent exercise (tactical response security exercises) at least once a year. The conduct of these licensee tactical response security exercises are subject to NRC oversight. The current FOF program reflects the supplemented DBT and significantly increases the level of realism, while ensuring NRC licensees are meeting regulatory requirements. Lastly, during 2004, the NRC enhanced its oversight of licensee security equipment performance testing and maintenance; protective strategy and severe accident management; fitness for duty; information and technology security; and physical protection of shipments of nuclear material.

In conducting FOF inspections, NRC notifies the licensee in advance for safety and logistical purposes. This notification provides adequate planning time for licensee coordination of two sets of security officers - one for maintaining actual security and the other for participating in the exercise. In addition, arrangements must be made by the licensee for a group of individuals who will control and monitor each exercise. A key goal of the NRC is to balance safety (both personnel and operational), while maintaining actual plant security during an exercise that is as realistic as possible.

In preparation for a FOF inspection, information from table-top drills, other baseline security inspections, and security plan reviews are used to design a number of commando-style attack scenarios seeking to probe for potential deficiencies in the licensee's protective strategy. The aim of the site's defenders is to keep the attackers from destroying or damaging (simulated in an FOF exercise) critical equipment (target sets). Any potentially significant deficiencies in the protective strategy identified during FOF exercises are promptly reviewed and corrected before NRC inspectors leave the licensee's site.[3]

Based on a concern raised by an NRC staff member, the NRC clarified that the FOF program does not focus solely on success or failure in protecting critical equipment (target sets), but also identifies licensee performance weaknesses and areas for improvement. This allows the NRC to more reliably assess the capability of a licensee security force to execute an effective protective strategy. The FOF program retains the goal of protecting target sets and applies the performance assessment tools and techniques. This philosophy comports with the principles of the NRC ROP and is more effective in both assessing and improving licensee performance.

Qualification of FOF Inspectors

In order to meet the needs of an accelerated inspection schedule, the NRC had to increase staffing levels. The NRC recruited and hired security specialists with substantial experience from outside the agency, including industry, law enforcement, and the military. Throughout 2004, the FOF inspection team members completed various training courses, self-study programs, and NPP site visits. Each inspector was required to sit before an oral qualification

[3]See "Protecting Our Nation," and Office of Public Affairs "Backgrounder" on Force-on-Force

board to demonstrate his or her knowledge of the regulatory and inspection processes, required as part of the NRC's inspector qualification program. Team members were certified as interim inspectors prior to November 2004, awaiting attendance of additional training courses and on-the-job training. Inspectors continue to enhance knowledge of the latest trends and advances in security and increase their understanding of reactor systems.

Exercise Simulation Systems (ESS)

As one of the ongoing enhancements to improve the realism of FOF exercises, the NRC incorporated Multiple Integrated Laser Engagement System (MILES) equipment into the exercises. With MILES, transmitters are mounted to the weapons, which emit lasers when blank cartridges are fired; sensors attached to the exercise participants detect the laser, and determine if that player is "neutralized." Prior to the integration of MILES into the FOF program, responders would engage using "red guns" or mock weapons carried and aimed like real weapons. Exercise controllers would determine the outcome of engagements by considering factors such as distance, use of cover and concealment, and number of shots fired. Considerable artificialities were introduced to the evaluation with this engagement method. When used properly and with sufficient training, MILES equipment provides a much greater degree of realism and reduces many artificialities of simulated combat.

In order to ensure use of MILES equipment at all FOF inspections, the NRC acquired its own dedicated MILES 2000 equipment which is maintained by the Department of Energy/National Nuclear Security Administration (DOE/NNSA). DOE contractors transport the equipment to each site and are responsible for distribution of the equipment and blank ammunition to each security responder and adversary. These contractors, along with the NRC inspection team, are important components of maintaining a safe and realistic exercise environment.[4]

An additional benefit of the MILES equipment maintained by DOE/NNSA is the After Action Review capability. Data is downloaded from each harness and can be formatted into a spreadsheet to concisely summarize the engagement outcomes.

If a licensee provides its own MILES, or equivalent ESS equipment, it may be used in lieu of the NRC-provided MILES equipment if it: functions reliably; has comparable operational and safety features to the NRC-provided MILES equipment; and is operated in accordance with written guidance for the use and training of MILES equipment that, at a minimum, is equivalent to the guidance used with NRC-provided MILES equipment. Prior to conducting FOF inspections, inspectors verify that the licensees meet the established performance and safety requirements in accordance with the inspection procedure and regulatory guidance. Through the end of 2005, three sites have used their own MILES or ESS equipment.[5]

Composite Adversary Force

A credible, well-trained, and consistent mock adversary force is vital to the NRC's FOF program. Previously, power plant operators had assembled adversary teams that frequently included security officers from their own sites, other licensees, and state police tactical team

[4] "Protecting Our Nation"

[5] Inspection Procedure 71130.03, "Contingency Response Force-on-Force Testing," issued December 30, 2005.

members. However, using these diverse sources caused inconsistencies in the capabilities of the adversary team.

To improve the program, the NRC worked with the nuclear industry to develop a composite adversary force (CAF) that is trained to standards issued by the Commission. The new adversary force has been used for all FOF exercises conducted after October 2004. The CAF has proven to be a significant improvement in ability, consistency, and effectiveness over the previous adversary forces. The CAF is evaluated at each exercise using NRC performance standards issued in April 2004. To date, the CAF has met the expectations of the NRC.

The CAF is primarily made up of employees from and managed by a company (The Wackenhut Corporation (TWC)) that provides much of the security for U.S. nuclear power plants and is, therefore, well-versed in the security operations of power plants. The NRC recognizes that there may be a perception of a conflict of interest where the management company cannot adequately test either the CAF or the plant security force. NRC established a clear separation of functions between the CAF and plant security force to ensure an independent, reliable, and credible mock adversary force. In addition, no member of the CAF may participate in an exercise at his or her home site. These measures in aggregate, serve to mitigate any potential conflict of interests as required by Section 651 of the Energy Policy Act of 2005.

It is important to emphasize that the NRC designs, runs, and evaluates the results of the FOF exercises. The NRC establishes the exercise objectives, boundaries, and timelines, and the NRC and its contractors continually observe the performance of the CAF. The CAF carries out the planned mock attacks, under the direction and guidance of the NRC. Should industry be unable to maintain an adequate and objective CAF that meets the standards mandated by the NRC, the NRC will take the necessary actions to ensure the effectiveness of the FOF evaluation program.[6]

To date, there have been two complete CAF graduating classes, and three abbreviated classes to supplement membership. Currently, the CAF consists of 73.3% members, and 26.7% non-TWC members. The contract ensures adequate non-TWC representation on the CAF.

Inspection Procedure 71130.03 Revision

Throughout the first year of FOF inspections, the staff compiled lessons learned regarding both the staff and licensees. Those lessons learned were subsequently fed back to all of the inspection teams, as well as licensees and industry representatives to increase regulatory stability and to ensure consistency throughout the inspections. FOF Inspection Procedure 71130.03, “Contingency Response Force-on-Force Testing,” was revised and issued on December 30, 2005, to reflect process improvements and the lessons learned from the previous year. Staff continues to compile lessons learned and will update the inspection procedure and other regulatory guidance as needed.

Improved Controller Training and Qualification

Controllers are a vital part of conducting safe and realistic FOF inspections. They are stationed with on-duty forces and with mock player forces, ensuring that live weapons carried by the on-

[6] Office of Public Affairs “Backgrounder” on Force-on-Force

duty forces are controlled during the exercise, that no live ammunition is brought into the exercise field, and that the proper engagement determinations are made in an event where the use of MILES may not be appropriate or situations when equipment malfunctions. In 2004, the Commission directed the staff to work with industry to voluntarily implement improved controller training and qualification. Since then, NRC staff has worked with the industry's Nuclear Security Working Group (NSWG) on the NRC's expectations for such improved training and qualification. As of the issuance of this report, industry has drafted a proposal for improved controller training and qualification for NRC endorsement.

Throughout the first year of inspections, staff has observed varying degrees of consistency among licensee controllers. At one site, insufficient controller qualification caused exercise results to be indeterminate. At other sites, NRC staff was able to validate the protective strategy, despite controller performance issues. NRC recognizes the importance of improved controller training and qualification, and is working to resolve recurrent issues with controllers. The Commission has directed staff to develop Orders to be issued to any licensee who does not voluntarily implement an improved training and qualification plan for controllers.

Beyond the DBT and Technical Approaches to Beyond DBT

One of the ongoing enhancements to the FOF program is the planned integration of beyond DBT exercises. In late 2005, the Commission directed the staff to begin formally integrating beyond-DBT testing into the FOF program on a voluntary basis for licensees, beginning with the Joint Conflict and Tactical Simulation (JCATS) system.

JCATS is a Department of Defense (DOD) tool, developed by the Lawrence Livermore National Laboratory, for simulating joint military exercises. It is also a useful tool for analyzing and improving physical security. With its ability to model individual buildings accurately, obstructed lines of sight, the time required to cut through walls or penetrate barriers, as well as its ability to model interactions of individual entities, JCATS is well suited for evaluation of NRC licensees.

Since the middle of CY 2005, the NRC has been working with a DOD contractor to build site models for each power reactor and CAT I fuel facility. The basic site models, which include terrain features and building shells, have been completed for all power reactor and CAT I facilities. In February 2006, staff demonstrated JCATS to the Commission, running scenarios with fully completed models, including security features, fencelines, building floorplans, target set components, and unique adversary and responder characteristics. At the time of this report, the staff has fully completed site models for one reactor and one CAT I facility. In FY 2006, staff will selectively enhance site models, and will begin to plan for the integration of JCATS into the FOF program.

The Commission has also directed the staff to explore beyond-DBT testing for training in FOF exercises by incrementally increasing numbers of adversaries and weaponry. This beyond-DBT testing could potentially be incorporated as an initiative completely separate from the inspection program, or by substituting a beyond-DBT scenario for the third exercise of the inspection. The licensee would only be given the option to substitute the third exercise with a beyond-DBT training exercise provided that the protective strategy was demonstrated successfully, with margin, in the first two exercises.

Indeterminate Exercise

During a FOF inspection, a minimum of three FOF exercises are scheduled. However, due to circumstances beyond the control of the on-site NRC inspection team, an exercise may have to be canceled. For example, severe weather may result in an exercise being canceled due to personnel safety considerations. There are occasions, when the NRC inspection team determines that an exercise may be deemed "indeterminate." An indeterminate exercise is one where the NRC inspectors are prevented from effectively gathering sufficient information to evaluate the licensee's protective strategy or to form a cogent conclusion. Examples of indeterminate exercises include, but are not limited to; excessive safety or administrative holds, insufficient exercise control, or extreme malfunctions of ESS equipment.

NRC management will make the determination when less than three exercises are acceptable. This determination will be contingent upon: (1) at least two exercises having been conducted; (2) both exercises having successfully demonstrated an effective protective strategy; and (3) no significant issues being identified. If those conditions are not met, the team may have to expand the schedule or schedule a subsequent visit. If an exercise is deemed indeterminate or is canceled due to severe weather, CAF management will wait for NRC confirmation before leaving the site. NRC management will make the determination if the CAF team and NRC inspection team will remain on site for any additional days to complete a third exercise. For a licensee to demonstrate an effective protective strategy successfully, there must be a sufficient number of armed responders, bearing the appropriate weapons, in protected positions, arriving in time to neutralize a potential threat. Furthermore, the security force must know what to protect, have a strategy for protecting those assets, and execute the strategy accordingly.

VII FOF Regulatory Program Activities

Between October 29, 2004 and December 31, 2005, FOF inspections were conducted at 21 sites. One site was revisited during that time period, 5 months after the original FOF inspection, because of performance issues. The first week of inspection activities was completed at one site in August 2005, but the exercise week was postponed due to the impact of Hurricane Katrina in the region. The inspection will be completed in the near future. An inspection at another NPP included an additional exercise being observed by NRC management and staff, after performance issues occurred during the FOF inspection. From all of the inspections in this reporting period of the redesigned FOF program, there were three findings. Table 2 below summarizes the first 23 inspections.

Table 2 - CY 2005 FOF Inspection Program Results

Findings	**Number of Facilities**	**Basis**
No findings	18	N/A
Green NCVs	3	Inadequate Target Set Development Controller issues Performance Deficiencies During Exercise 1
Greater than Green	0	N/A

SL IV	0	N/A
Greater than SL IV	0	N/A
Rescheduled	1	Hurricane Katrina
Inspection Open	1	Findings under review

VIII FOF 2006 Planned Activities

FOF inspections are scheduled for 24 sites in CY 2006, including two Category I fuel cycle facilities, one inspection at a site that was delayed due to Hurricane Katrina.

IX Disposition of Findings

Following the terrorist attacks of September 11, 2001, the NRC issued orders and confirmatory action letters (CAL) containing requirements for compensatory measures enhancing the security function. On September 11, 2003, the Compensatory Measures Management Review Panel (CMMRP) was created to review all security inspection findings and ensure consistent application and resolution of inspection findings. The panel membership includes NRC Management from various NRC offices and the regional offices. In 2005, the panel name was changed to the Security Findings Review Panel (SFRP) to reflect the current status of the panel's efforts to review and ensure NRC consistency for all security related findings, not just findings concerning Commission directed Orders.

As with all security-related findings, findings that result from FOF inspections are reviewed by NRC management in the SFRP. The panel consists of designated representatives from various offices within the NRC as voting members, and others as appropriate to the issue.

The purpose of the SFRP, like its predecessor, the CMMRP, is to ensure regulatory consistency by reviewing and dispositioning findings, URIs, and potential findings resulting from the inspection or observation of any licensees' implementation of 10 CFR regulations, Orders, physical security plans, technical specifications, and Confirmatory Action Letters. For NPPs, this includes any and all findings related to the security cornerstone. Although the panel will review and approve the approach to dispositioning an issue, applicable agency processes will be used prior to issuance of any enforcement action.

X Communications

As part of an effort to improve openness in communicating security information to the public, on April 4, 2006, the Commission approved the recommendation of the staff to increase the amount of public information released pursuant to the implementation of the Security Oversight Process. For security-related inspection reports issued after May 8, 2006, the inspection report cover letters will be released to the public with information of whether or not findings occurred. Guidelines are being developed to facilitate efficient staff assessments of making information available to the public and are expected to be completed by July 2006.

In an effort to improve public awareness and understanding, the NRC has held two public meetings specifically on nuclear security issues in August 2004 and September 2005. Additionally, security topics are presented at the NRC's Regulatory Information Conference, held annually in Rockville, Maryland.

After each inspection, NRC staff gathers lessons learned in a variety of categories, including: safety issues; protective strategy; MILES; CAF; controllers; qualification course of fire; target sets; and exercise functional issues. Through the NSWG, a consortium of security representatives from NRC licensed facilities, lessons learned are shared mutually between the NRC and industry. The NSWG assists in disseminating information to the industry for the combined goal of safe and realistic performance evaluations.
In most FOF inspections, representatives from local law enforcement agencies attend planning activities and observe the exercise to improve understanding of the licensee's response and coordination of integrated response activities. Other representatives from state emergency management agencies, state governments, the Government Accountability Office, Congress and Senate have also frequently observed FOF inspections.

XI Interagency Support

The NRC continues to support the U.S. Department of Homeland Security (DHS)/Homeland Security Council (HSC) initiative to enhance integrated response planning for power reactor facilities. In 2004, two Integrated Response tabletop exercises were completed. The staff is continuing to work with HSC, DHS, Federal Bureau of Investigation (FBI) and others to develop plans to address recommended actions. In addition, the staff is coordinating with other Federal agencies and State and local security partners in the development of Emergency Action Levels for all imminent threats.

XII Reference List

1. NRC, “Backgrounder on Force-on-Force Exercises at Nuclear Power Plants,” http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/force-on-force.html

2. NRC, “Protecting Our Nation,” NUREG/BR-0314, September 2004, http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0314/

3. NRC, “Weekly Information Report - Week Ending 12/2/05,” ADAMS accession number ML053500054

4. NRC, “Frequently Asked Questions on Force-on-Force Security Exercises at Nuclear Power Plants,” http://www.nrc.gov/what-we-do/safeguards/faq-force-on-force.html

5. Luis Reyes to Danielle Brian, Project on Government Oversight, regarding Composite Adversary Force for Security Drills at Nuclear Power Plants, 9/30/04, http://www.nrc.gov/reading-rm/doc-collections/for-the-record/2004/ltr-to-daniellebrian-pogo.pdf

6. NRC, “Response to Questions about Wackenhut and Public Access to Security Results” http://www.nrc.gov/reading-rm/doc-collections/for-the-record/2004/nsir-response.pdf

7. NRC, “Weekly Information Report - Week Ending 12/2/05,” ADAMS accession number ML053500054.

XIII Acronym List

CAF . . . . . Composite Adversary Force
CAL . . . . . Confirmatory Action Letter
CAT I . . . . . Category I
CFR . . . . . Code of Federal Regulations
CMMRP . . . . . Compensatory Measures Management Review Panel
CY . . . . . Calendar Year
DBT . . . . . Design Basis Threat
DOD . . . . . Department of Defense
DOE . . . . . Department of Energy
DPO . . . . . Differing Professional Opinion
EFOF . . . . . Expanded Force-on-Force
ESS . . . . . Exercise Simulation System
FOF . . . . . Force-on-Force
FY . . . . . Fiscal Year
ISFSI . . . . . Independent Spent Fuel Storage Installation
JCATS . . . . . Joint Conflict and Tactical Simulation
MC&A . . . . . Material Control and Accounting
MILES . . . . . Multiple Integrated Laser Engagement System
NCV . . . . . Non-Cited Violation
NEI . . . . . Nuclear Energy Institute
NNSA . . . . . National Nuclear Security Agency
NPP . . . . . Nuclear Power Plant
NRC . . . . . Nuclear Regulatory Commission
NSIR . . . . . Office of Nuclear Security and Incident Response
NSWG . . . . . Nuclear Security Working Group
PPSDP . . . . . Physical Protection Significance Determination Process
ROP . . . . . Reactor Oversight Process
SDP . . . . . Significance Determination Process
SFRP . . . . . Security Findings Review Panel
TFOF . . . . . Transitional Force-on-Force
TWC . . . . . The Wackenhut Corporation
URI . . . . . Unresolved Item