FOIA/PA NO: 2016-0365

RECORDS BEING RELEASED IN PART

The following types of information are being withheld:

Ex. 1: ☐ Records properly classified pursuant to Executive Order 13526
Ex. 2: ☐ Records regarding personnel rules and/or human capital administration
Ex. 3: ☐ Information about the design, manufacture, or utilization of nuclear weapons
☐ Information about the protection or security of reactors and nuclear materials
☐ Contractor proposals not incorporated into a final contract with the NRC
☐ Other _____
Ex. 4: ☐ Proprietary information provided by a submitter to the NRC
☐ Other _____
Ex. 5: ☐ Draft documents or other pre-decisional deliberative documents (D.P. Privilege)
☐ Records prepared by counsel in anticipation of litigation (A.W.P. Privilege)
☐ Privileged communications between counsel and a client (A.C. Privilege)
☐ Other _____
Ex. 6: ☐ Agency employee PII, including SSN, contact information, birthdates, etc.
☐ Third party PII, including names, phone numbers, or other personal information
Ex. 7(A): ☐ Copies of ongoing investigation case files, exhibits, notes, ROI's, etc.
☐ Records that reference or are related to a separate ongoing investigation(s)
Ex. 7(C): ☐ Special Agent or other law enforcement PII
☐ PII of third parties referenced in records compiled for law enforcement purposes
Ex. 7(D): ☐ Witnesses' and Allegers' PII in law enforcement records
☐ Confidential Informant or law enforcement information provided by other entity
Ex. 7(E): ☐ Law Enforcement Technique/Procedure used for criminal investigations
☐ Technique or procedure used for security or prevention of criminal activity
Ex. 7(F): ☒ Information that could aid a terrorist or compromise security

Other/Comments: _____

NRC INSPECTION MANUAL

INSPECTION PROCEDURE 71130.03

CONTINGENCY RESPONSE – FORCE-ON-FORCE TESTING

PROGRAM APPLICABILITY: 2201 Appendix A

71130.03-01 INSPECTION OBJECTIVES

01.01 To verify and assess the ability of licensees' physical security systems and security organization to meet the general performance objective of Title *10 Code of Federal Regulations* (10 CFR) 73.55(b).

01.02 To assess each licensee's physical protection program to ensure that it has been appropriately developed, designed, and implemented to protect target set equipment and prevent significant core damage and spent fuel sabotage from the design basis threat (DBT) of radiological sabotage in accordance with 10 CFR 73.1, "Purpose and Scope," 10 CFR 73.55; and 10 CFR 73.58," Safety/Security Interface Requirements for Nuclear Power Reactors."

01.03 To verify and assess the effectiveness of licensees' implementation of their protective strategies in accordance with security plans approved by the U.S Nuclear Regulatory Commission (NRC) and related implementing procedures, regulatory requirements, and any other applicable Commission requirements, such as orders or confirmatory action letters consistent with 10 CFR Part 73, Appendix C, Section II, "Nuclear Power Plant Safeguards Contingency Plans."

01.04 To verify and assess licensees' capabilities relative to conducting a Force-on-Force (FOF) exercise and the critique process used for the identification of program improvement consistent with 10 CFR Part 73, Appendix B, Section VI.C.3, and "General Criteria for Security Personnel."

71130.03-02 INSPECTION REQUIREMENTS

General Guidance.

The Office of Nuclear Security and Incident Response (NSIR) is the lead office for this inspection effort and, in consultation with the regional offices, will determine the schedule and agenda.

The NRC staff uses FOF exercises, which are performance-based inspection activities, to verify a licensee's ability to meet the general performance objective and requirements of 10 CFR 73.55. Inspector(s) are responsible for ensuring that each requirement in the inspection procedure is completed and evaluated to a level that provides assurance that licensees meet the NRC regulatory requirements within the security program that is being inspected and that the sample is complete. This guidance is being provided as a tool that: (1) recommends to inspector(s) certain methods and techniques for determining a licensee's security program compliance and effectiveness for an inspection requirement; and (2) clarifies certain aspects of a regulatory requirement for a particular inspection requirement. When minimum sampling numbers are indicated, inspector(s) should adhere as closely as possible to the numbers identified in the guidance. When compliance concerns arise, inspector(s) may expand the minimum number of samples to aid in determining the extent of the condition. Should questions arise regarding procedural requirements or guidance, inspector(s) should consult with NSIR management.

The inspector(s) should familiarize themselves with relevant documentation which may include, but is not limited to, the licensee's site schematics, target sets, protective strategy brief, blast analyses, barrier placement, security plans, any site-specific or corporate implementing procedures, security post orders, and security program reviews and audits. The inspector(s) should conduct a review of results from past security inspection reports for the facility.

The inspector(s) should coordinate the conduct of the inspection with the licensee's staff before the inspection. Key areas of coordination include scheduling the dates and times to conduct the protective strategy overview/briefing and tours of the Owner Controlled Area (OCA), Protected Area (PA) and Vital Areas (VAs) to include defensive positions, response ready rooms, and staging areas. Scheduled tours should include a walk down of the PA perimeter with possible testing of selected areas of the licensee's Intrusion Detection System (IDS) to assess areas of potential exploitable vulnerabilities. Scheduled tours with the licensee are considered basic information-gathering sessions and site familiarization and should not preclude the inspector(s) from conducting more detailed walk downs and assessments.

(b)(7)(F)

Licensees may provide insider information in any method agreed to by the NRC Team Lead including, but not limited to, the use of multiple personnel to provide information, the use of a knowledgeable individual, or the use of a point of contact who can expeditiously gather information for the CAF. Unless requested by the licensee, the Lead Controller and/or the Lead Adversary Controller will not be utilized as the individual insider, however, licensees may request that either, or both, controllers be utilized as the point of contact for all information requests.

The Atomic Energy Act of 1954 as Amended, Section 170D, "Security Evaluations", requires that the FOF exercises shall, to the maximum extent practicable, simulate security threats in accordance with any DBT applicable to a facility. The inspection process does not emulate the amount of time attributed to the collection of information under the DBT; therefore, the method of providing insider information is secondary to providing accurate information in an expedited manner. To achieve a level of realism commensurate with adversary characteristics, as described in 10 CFR 73.1, the CAF's interaction with the insider and their controllers should emulate data that could be gathered through several years of dedicated information and intelligence gathering. Although the insider will be expected to gain information within the bounds of his or her work assignments, if it is reasonable that he or she could gather particular intelligence over this period, then that information will be made available to the CAF by the most expeditious means possible. The CAF has approximately 8 hours to collect, understand, and incorporate information. Therefore, immediacy and clarity are essential to the planning process. The use of an individual who must routinely enter the plant to collect what should be immediately available information will delay the planning process and may require inspection team intervention. In addition, at no time will the collection of information be done under circumstances which could reasonably be construed as surreptitious testing of the licensee's Insider Mitigation Program. The objective of not announcing the identity of an individual insider is to prevent loss of control of information specific to mission planning, thereby compromising the inspection effort.

The NRC Inspection Team Lead will brief the insider(s) on the responsibilities of the position with particular attention paid to the potential for information spills related to the exercise scenarios to non-Trusted Agents. Additionally, the NRC Team Lead will inform the insider(s) of their responsibility to be a willing participant, forthright, with all information and to be readily available to the CAF during the scenario planning process.

02.01 Protective Strategy Assessment.

The inspector(s) should review the licensee's documented physical protection plan, safeguards contingency plan, protective strategy, and relevant implementing procedures. The inspector(s) should also request that the licensee provide a protective strategy overview/briefing that details its protective strategy and all supporting physical protection measures and security equipment that the licensee employs in support of its protective strategy from the outermost layer of defense working inward to identified target sets. The review and briefing will provide detailed insights pertaining to the design of the licensee's protective strategy and should support the completion of the inspection requirements as follows:

a. Verify that the licensee has documented the number of armed responders (ARs) it has determined are required to satisfy the design requirements of 10 CFR 73.55, and the number of armed security officers (ASOs) it has designated to strengthen the onsite response capabilities in security plans. [10 CFR 73.55(b); 10 CFR 73.55(k)(5)(i); 10 CFR 73.55(k)(6)(i); 10 CFR Part 73 Appendix C Section II B.3.c.(ii); Safeguards Contingency Plan and Security Plans]

Specific Guidance.

Preparatory reviews conducted by the inspector(s) and protective strategy overview/briefing provided by the licensee should provide the inspector(s) with an understanding of: (1) the basis for the licensee's protective strategy; (2) how the licensee has considered elements of the DBT within the design of its strategy; and (3) how the licensee implements its protective strategy to meet the general performance objective and requirements of 10 CFR 73.55. During the protective strategy overview/briefing, the inspector(s) should focus on ascertaining specific details and the conceptual validity of the aspects described by the licensee through inquiry. These questions should aid in determining how the licensee's protective strategy can protect the site based on the site's engineering specifics and the plant/site lay out.

(b)(7)(F)

b. Verify that there is at least one member of the security organization, onsite at all times, who has the authority to direct the activities of the security organization and who is assigned no other duties that would interfere with this individual's ability to perform these duties in accordance with the security plans, safeguards contingency plan and the licensee's protective strategy. [10 CFR 73.55(d)(2)(ii), Safeguards Contingency Plan, and Security Plans]

Specific Guidance.

The inspector(s) should review the licensee's security plans, safeguards contingency plan, training and qualification plan, and site protective strategy procedure to determine that the licensee has identified at least one member of the security organization whom it has provided with the authority to direct the activities of the licensee's security

organization. This individual must remain on site (within the boundary of the OCA), be available at all times, and may not be assigned other duties that would interfere with the individual's ability to direct the activities of the security organization. Routine assignments that would preclude this individual's ability to direct all activities of the security organization would include being permanently assigned any other security post or duty in conjunction with his or her duties during the work shift, such as the CAS operator or SAS operator. (b)(7)(F)

(b)(7)(F)

c. Verify that the licensee's protective strategy is designed to ensure that each alarm station is continuously staffed with at least one trained and qualified alarm station operator who is not assigned other duties and responsibilities that would interfere with the ability to execute the functions described in 10 CFR 73.55. [10 CFR 73.55(i)(4)(i), 10 CFR 73.55(i)(4)(ii)(B), Safeguards Contingency Plan, and Security Plans]

Specific Guidance.

The inspector(s) should review the licensee's security plans, safeguards contingency plan, training and qualification plan, and site protective strategy procedure to determine whether the licensee has identified that both alarm stations (CAS and SAS) are continuously staffed by at least one trained and qualified alarm station operator. The inspector(s) should also determine whether assigned alarm station operators are performing duties outside of the scope of: (1) the detection and assessment of alarms; (2) the initiation and coordination of an adequate response to alarms; (3) the summoning of offsite assistance; and (4) providing effective command and control. Assigned alarm station operators shall not be included in or respond as one of the minimum numbers of ARs and ASOs, as currently outlined in the NRC-approved security plans (b)(7)(F)

(b)(7)(F)

d. Verify that the licensee's protective strategy is designed to protect systems and components that have been identified as target set equipment against the DBT of radiological sabotage. [10 CFR 73.55(b)(4); 10 CFR Part 73 Appendix C, Section II B.3(c)(v); Safeguards Contingency Plan, and Security Plans]

Specific Guidance.

(b)(7)(F)

e. Verify that the licensee's protective strategy includes established response timelines that ensure the response force's ability to interdict and neutralize the threat in accordance with 10 CFR 73.55; 10 CFR Part 73, Appendix C, Section II; and the licensee's Safeguards Contingency Plan. [10 CFR 73.55(k)(8)(ii) and 10 CFR Part 73, Appendix C Section II.B.3(c)(v)(2)]

Specific Guidance.

(b)(7)(F)

(b)(7)(F)

f. Verify that the licensee's protective strategy, as implemented, is designed to protect against characteristics in accordance with the DBT of radiological sabotage. [10 CFR 73.1; 10 CFR 73.55(b)(1) through 73.55(b)(10); 10 CFR 73.55(e)(10)(i)(A); 10 CFR 73.55(e)(10)(ii)(A); 10 CFR 73.55 Appendix B Section VI; 10 CFR Part 73, Appendix C, Section II.B.3(c); 10 CFR Part 73, Appendix C, Section II.B.3(c)(i); NUREG 1959; Safeguards Contingency Plan, and Security Plans]

Specific Guidance.

The inspector(s) should review the licensee's security plans, safeguards contingency plan, training and qualification plan, site protective strategy procedure and blast analysis data to ensure that the licensee's strategy contains measures to defend and protect against the characteristics and tactics of the DBT as described in 10 CFR 73.1(a)(1) and RG 5.69. These characteristics include tactics, weapons, equipment, tools, incapacitating agents (which include chemical irritants), explosives, land and water vehicles for transporting personnel, land vehicles and waterborne vehicle bomb assault of the external attacking force, and an insider threat in accordance with the DBT of radiological sabotage. The inspector(s) should review the licensee's protective strategy to determine whether it is designed to include and implement measures, such as appropriate OCA surveillance and observation; physical barriers in the OCA for land and waterborne vehicle bomb assault; search measures at all access control points designed for authorized access (OCA and PA); channeling barriers for vehicles; PA perimeter barrier systems; isolation zones; PA perimeter IDS and assessment system; illumination and/or low-light technology used to enhance assessment; interdiction and neutralization; other physical barriers used for delay; response positions located throughout the PA that address all avenues of approach from the external perimeter, as well as leading to target sets; and command and control to ensure effective use of the response force. This inspection requirement is intended to verify the protective strategy design.

The inspector(s) should ensure that the licensee's strategy contains measures to counter or account for weapons used by the external attacking force as described in 10 CFR 73.1 and RG 5.69 to include licensee weapon systems. The inspector(s) should determine whether the licensee's protective strategy is designed to include the use of suitable weapon systems, as identified in RG 5.75, "Training and Qualification of Security Personnel at Nuclear Power Reactor Facilities," to counter the attacking force.

(b)(7)(F)

(b)(7)(F)

The inspector(s) should ensure that the licensee's physical protection program and protective strategy include the use of vehicle (land and water) control measures, such as physical barriers, in accordance with its site-specific analysis to protect against the use of vehicles, as identified in the DBT of radiological sabotage. The inspector(s) should determine whether the licensee has addressed the use of vehicles in the design of its physical protection program and protective strategy by employing physical barriers that deter, delay, and channel vehicles to areas such as access control points that enable the licensee to control these vehicles and the personnel they may carry.

The inspector(s) should ensure that the licensee's physical protection program and protective strategy is designed to incorporate measures that protect against insider activity outlined in the DBT of radiological sabotage. (b)(7)(F)

(b)(7)(F)

The inspector(s) should review the licensee's use of deadly force policy which may also include the force continuum and techniques used to implement the site's protective strategy. The inspector(s) should consider interviewing site security personnel during site walk downs.

g. Verify that the NRC-approved security plans describe the physical security equipment (e.g., access control devices, physical barriers, IDS, surveillance systems, locking devices, weapon systems, etc.) identified by the licensee as a component to support the implementation of the licensee's protective strategy in response to an event. [10 CFR 73.55(e); 10 CFR 73.55(n)(1); 10 CFR Part 73, Appendix C, Section II.B.3(c); Safeguards Contingency Plan; and Security Plans]

Specific Guidance.

The inspector(s) should verify through inquiry that the security equipment that the licensee uses to support its protective strategy is, and has consistently been, included in the licensee's maintenance, testing and calibration program, and is subject to periodic checks for functionality. Equipment used in support of the protective strategy must remain operable and must maintain its ability to perform its intended function. If a piece of equipment is not being maintained and is not being periodically checked for integrity and functionality, it cannot be considered functional and, therefore, cannot support the implementation of the protective strategy. (b)(7)(F)

(b)(7)(F)

h. Verify during tabletop drills that the licensee's protective strategy includes notification to law enforcement agencies (local, State, Federal) in accordance with site procedures. [10 CFR 73.55(k)(8)(iii), Safeguards Contingency Plan, and Security Plans]

Specific Guidance.

(b)(7)(F)

i. Verify during tabletop drills that both the licensee's plant operations staff and security organization participate in assessing and managing changes to plant configurations, facility conditions, or security before implementing changes such as physical modifications, procedural changes, changes to operator actions or security assignments, maintenance activities, system reconfigurations, access modifications or restrictions, and changes to the security plans and its implementation. [10 CFR 73.58(b), 10 CFR 73.58(c), and Security Plans]

Specific Guidance.

The inspector(s) should focus on recently implemented or planned changes and tabletop activities as a result of the inspection. The inspector(s) should review the licensee's

security plans, safeguards contingency plan and implementing procedures which demonstrate the licensee's practices for safety/security interface.
The inspector(s) should determine whether the licensee evaluated the impact of such changes on plant safety and security before implementation. For further information, see RG 5.74, "Managing the Safety/Security Interface.

j. Verify that both the CAS and SAS maintain continuous communication capabilities with each on-duty security force member, control room personnel, and local law enforcement authorities in accordance with regulations and NRC-approved security plans. [10 CFR 73.55(i)(4), 10 CFR 73.55(j)(3), 10 CFR 73.55(j)(4), and Security Plans]

Specific Guidance.

(b)(7)(F)

k. Verify that a single act, in accordance with the DBT of radiological sabotage, cannot remove the capabilities of both alarm stations to detect and assess alarms, initiate and coordinate an adequate response to an alarm, summon offsite assistance, and provide command and control. [10 CFR 73.55(i)(4)(i) and Security Plans]

Specific Guidance.

No inspection guidance.

l. Verify that individuals assigned to perform security program duties and responsibilities required to implement the Commission-approved security plans, licensee protective strategy, and the licensee implementing procedures, demonstrate the knowledge, skills, and abilities required to effectively perform their assigned duties and responsibilities. [10 CFR Part 73 Appendix B VI.A.4]

Specific Guidance.

The inspector(s) should, when needed, request security force members to demonstrate specific tasks that may have to be simulated during scenarios or to otherwise gain assurance that security personnel can actually perform the tasks they have been assigned. Examples could include, the donning of the response force members protective mask to determine donning time to simulate mask donning time during FOF exercises, weapons firing, etc.

02.02 OCA, PA, and VA Tours. Verify, through the conduct of walk downs in the OCA, PA and VA, that the licensee has, measures in place to detect, assess, interdict, and neutralize threats. [10 CFR 73.55(b)(3)(i), Safeguards Contingency Plan, and Security Plans]

Specific Guidance.

(b)(7)(F)

(b)(7)(F)

02.03 Protective Strategy Tabletop Evaluation. Verify, through the conduct of protective strategy tabletop drills, that the licensee's physical protection program maintains the capability to detect, assess, interdict, and neutralize threats up to and including the DBT of radiological sabotage. [10 CFR 73.55(b)(3)(i), Safeguards Contingency Plan, and Security Plans]

Specific Guidance.

The inspection team should conduct tabletop drills during the planning week of inspection activities to give the inspection team an understanding of the site's protective strategy, identify potential weaknesses in the protective strategy, and help ensure that the most attractive and potentially vulnerable target sets, points of entry, and adversary characteristics are combined to develop the most challenging scenarios for the FOF inspection exercises.

(b)(7)(F)

(b)(7)(F)

(b)(7)(F) The NRC Team Lead will brief participants that tabletop drills are not based on a win/lose paradigm and that the NRC may override the results of the simulated engagement so that the effectiveness of inner defenses can be more effectively evaluated. The adversary should indicate an entry point or entry points into the PA, movement toward simulated objectives, and tactics employed. A licensee contingency RTL should play the role of the responders. The licensee should indicate how responding armed security force members would be deployed to interdicting positions, as determined by the licensee's contingency response.

(b)(7)(F)

(b)(7)(F) The same RTL should not be used for all tabletop drills to allow the inspection team an opportunity to assess consistent application of the protective strategy.

(b)(7)(F)

Tabletop drills should be used as an analytical tool to identify those elements that are critical to the licensee's achieving successful results in an actual contingency event. However, if a potential vulnerability exists, the inspection team will review the potential vulnerability to ensure that the licensee complies with the applicable regulatory requirement. If the licensee is in compliance, the inspection team may exploit potential protective strategy weakness during the conduct of the FOF exercises.

(b)(7)(F)

02.04 IDS Testing. This section may apply to additional IDS systems, e.g., Early Warning Systems (EWS) and Security Owner Controlled Areas (SOCA), depending on the licensee's current licensing basis.

Specific Guidance.

This section may apply to additional IDS systems, e.g., EWS and SOCA, depending on the licensee's current licensing basis.

The inspector(s) should observe the perimeter IDS testing conducted by members of the security organization or NRC advisors and determine whether the IDS is operating as intended and is capable of detecting attempted or actual penetration of the PA barrier before completed penetration of the barrier. The inspection team should review areas with intrusion detection and assessment equipment covering the entire area of the wall or the roof of the building that is a portion of the PA barrier where there is no isolation zone.

Inspector(s) should determine how the licensee provides illumination that satisfies the isolation zone and external PA assessment requirements. The inspection team should ensure that the equipment used to augment isolation zone illumination (i.e., low-light technology) does not cause an excessive illumination flare that hinders assessment. Assessment equipment should be observed during daylight and hours of darkness to validate effectiveness.

a. Verify, through observation of testing activities, that the licensee's IDS detects attempted or actual penetration of the PA perimeter barrier before completed penetration and is tested in accordance with regulations and the licensee's testing procedures. [10 CFR 73.55(e)(7)(i), 10 CFR 73.55(e)(7)(i)(B), and Security Plans]

   Specific Guidance.

   During NRC-conducted FOF inspections, the inspector(s) should: (1) observe licensee-conducted operability and performance testing of licensee IDS systems; (2) observe NRC advisors testing of the licensee's IDS consistent with the characteristics of the DBT to ensure system effectiveness against those characteristics; and (3) communicate test results to licensees for information or action, as appropriate.

If a licensee includes any other type of early detection systems in its protective strategy and these systems will be used in the inspection, they should also be tested consistent with licensee procedures.

In the performance of DBT-attribute testing, NRC advisors should adhere to licensee safety procedures when practical, but they are not bound by those procedures when deviations are necessary to conduct a DBT-attribute test. In accordance with 29 CFR 1904.3(a), NRC employees and their advisors are not considered to be "covered employees" under the licensee's occupational safety and health administration program.

(b)(7)(F)

(b)(7)(F)

b. Verify (as applicable) that, where building walls or roofs comprise a portion of the PA perimeter barrier and the licensee has not established an isolation zone, the licensee has implemented detection and assessment methodologies and physical barriers that meet the requirements of 10 CFR 73.55 and that security plans describe this area. [10 CFR 73.55(e)(8)(iv) and Security Plans]

Specific Guidance.

The inspector(s) should physically observe areas equipped with intrusion detection and assessment equipment that cover the entire area of the wall of the building or roof that is a part of the PA barrier where there is no isolation zone. The inspector(s) should observe floors, walls, and ceilings to verify that a potential adversary is not capable of defeating a zone of detection by passing undetected through, under, or over a zone of detection. The inspector should also determine whether the equipment in these areas provides detection and assessment in accordance with the regulations and licensee security plans and implementation procedures.

c. Verify, through observation of testing activities, that video assessment at the PA perimeter provides a visual display from which assessment can be made and provides real-time and playback of recorded video images of detected activities before and after each alarm annunciation. [10 CFR 73.55(e)(7)(i)(C), 10 CFR 73.55(e)(7)(i)(C)(ii), and Security Plans]

Specific Guidance.

The inspection of PA perimeter assessment devices should be conducted in conjunction with and during the perimeter IDS testing. If the licensee employs surveillance devices in the OCA to prevent unauthorized entry into the PA (i.e., devices specifically used for the surveillance of unattended openings that intersect a security boundary), the inspector(s) should also observe testing of these devices and their functionality under this inspection requirement to ensure that these systems are tested in accordance with licensee testing procedures. (b)(7)(F)

(b)(7)(F)

d. Verify that all areas of the facility are provided with illumination necessary to satisfy the design requirements of 10 CFR 73.55(b) and facilitate implementation of the protective strategy. [10 CFR 73.55(i)(6) and Security Plans]

Specific Guidance.

The inspector(s) should review licensee security plans and implementing procedures to determine how the licensee provides the illumination necessary to satisfy isolation zone and external PA assessment requirements. The inspector(s) may consider observing the licensee testing of these assets during the hours of darkness to determine whether the equipment consistently enables members of the security organization to observe and assess activities in isolation zones and external areas of the PA. The inspector(s) should determine whether adequate illumination is provided in isolation zones and external areas of the PA during the hours of darkness. If the licensee uses other technology in conjunction with illumination to provide assessment capabilities during the hours of darkness, then the inspector(s) should determine whether this equipment, when used in conjunction with existing illumination, can conduct assessment of detected activities in accordance with 10 CFR 73.55(i), licensee security plans and implementation procedures. The inspector(s) should also determine that the equipment used to augment isolation zone illumination (i.e., low-light technology) is not hindered by excess illumination so that a clear assessment can be accomplished.

The inspector in the CAS or SAS, or other location (e.g., BREs), should observe the video monitors associated with the perimeter assessment assets during testing and

query the alarm station operators or member of the security organization about the images being provided to ensure assessment capabilities during test approaches.

(b)(7)(F)

e. Verify use of uninterruptable power supplies to maintain the IDS during loss of offsite power or similar event. [10 CFR 73.55(i)(3)(vii) and Security Plans]

Specific Guidance.

(b)(7)(F)

02.05 Licensee Performance Evaluation Program. Verify, through preparation and conduct of NRC-evaluated FOF exercises, that the licensee's evaluated FOF exercises (including controller training and qualification, safety analysis, previous licensee evaluated FOF exercises, DBT attributes considered, lessons learned and deficiencies entered into the CAP) demonstrate that the licensee's protective strategy is designed to interdict effectively and neutralize the threats up to and including the DBT of radiological sabotage, as defined in 10 CFR 73.1, to prevent significant core damage and radiological sabotage. [10 CFR 73.1; 10 CFR 73, Appendix B, Section VI; Safeguards Contingency Plan, and Security Plans]

Specific Guidance.

Inspector(s) should: (1) evaluate the effectiveness of the licensee's physical security program, protective strategy, and contingency event response by all individuals with responsibilities for implementing the safeguards contingency plan; (2) ensure that the program enables the security force to gain experience in tactics, protective strategy, and assigned duties within the contingency response plan; and (3) confirm that all exercise participants are properly trained and qualified.

The inspector(s) should review the licensee's security plans, implementing procedures, and training documentation to determine whether the licensee's exercise controllers are trained and qualified. Through this review, the inspector(s) should develop an understanding of the licensee's process for which personnel are trained and qualified to perform as controllers.

Once the training and qualification process is understood, the inspector(s) should then determine through inquiry that personnel who perform controller duties are trained and qualified in accordance with the licensee's processes and procedures. The licensee must ensure that drill and exercise controllers are trained and qualified to ensure that each controller has the requisite knowledge and experience to control and evaluate exercises. This sample may also be completed through the observation of a performance-based exercise.

The inspector(s) should review security plans, implementing procedures, and associated exercise activities to determine whether the licensee has established methods to ensure that exercises are conducted in accordance with site safety plans. In general, the exercise program should include provisions for weapons/ammunition safety, exercise participant safety, site personnel safety, and consider radiological safety. The licensee's implementing procedures should document safety measures.

For this requirement, the inspector(s) should evaluate whether the licensee designs and conducts exercises for this inspection procedure to meet the following requirements:

a. (b)(7)(F)

b. minimizes the number and effects of artificialities.

c. implements the use of systems or methodologies that simulate the realities of armed engagement through visual and audible means and that reflect the capabilities of armed personnel to neutralize a target through the use of firearms.

d. ensures each scenario used provides a credible, realistic challenge to the protective strategy and the capabilities of the security response organization.

02.06 FOF Exercises. Verify, through the conduct of NRC-evaluated FOF exercises, that the licensee can demonstrate the ability to implement its physical protection program to detect, assess, interdict, and neutralize threats up to and including the DBT of radiological sabotage. [10 CFR 73.55(b)(3)(i)]

Specific Guidance.

The NRC inspection team will evaluate the licensee's overall ability to demonstrate effectively that its protective strategy and the execution of that strategy meets the general performance objective of 10 CFR73.55.

Each of the exercises will be used to evaluate the protective strategy, the implementation of the strategy, the timeliness of the response capability, the weapons employed, the overall effectiveness of the security training provided, and the ability of the security organization to defend the site against the DBT adversary force and protect target set equipment necessary to prevent significant core damage and spent fuel sabotage.
Each exercise requires the licensee to demonstrate the capabilities of its physical protective systems and security organization. To successfully demonstrate an effective protective strategy, the licensee must demonstrate during each exercise that its security systems provide adequate defense in depth through the integration of systems, technologies, programs, equipment, supporting processes, and implementing procedures as needed to ensure that the physical protection program can protect against the DBT of radiological sabotage. Specifically, the licensee demonstrates its capabilities to detect, assess, interdict, and neutralize adversaries attempting to gain unauthorized access to the site's PA in accordance with the requirements of Appendix C, "Nuclear Power Plant Safeguards Contingency Plans"; to 10 CFR Part 73, "Physical Protection of Plants and Materials": the site's safeguards contingency plan; and the licensee's response strategy. Furthermore, the security force must know what to protect, have a strategy for protecting those assets, and execute the protective strategy.

Licensees are required to conduct two exercises to complete the inspection sample. However, the Director, Division of Security Operations, NSIR, or designee, may authorize the completion of the inspection based on a canceled exercise, if at least one exercise is conducted, the licensee has successfully demonstrated an effective protective strategy, and no significant issue is identified. In the case of a canceled exercise, a decision on whether the second exercise can be conducted within the inspection week should be made by the NRC Team Lead in coordination with NSIR management and the licensee.

(b)(7)(F)

02.07 Identification and Resolution of Problems. Verify that the licensee identifies issues related to the contingency response - FOF testing program at an appropriate threshold and enters them into the licensee's CAP. The inspection team may verify that the licensee has appropriately resolved the issues involving regulatory requirements associated with the contingency response - FOF testing program if necessary. [10 CFR 73.55(b)(10)]

Specific Guidance.

The licensee must handle deficiencies identified during the planning and conduct of exercises consistent with the site's CAP procedures, self- assessment, or training program. The training program may address some deficiencies (i.e., those related to training and human performance) as long as the licensee's evaluation demonstrates that the deficiencies do not adversely affect or decrease the effectiveness of the protective strategy and physical protection program. The licensee must enter into the site's CAP deficiencies that it determines to affect adversely or decrease the effectiveness of the protective strategy and physical protection program. For example, the licensee will enter into its CAP the failure of any of the following key performance evaluation program elements:

a. responding with sufficient numbers of security personnel. The licensee has the required number of response personnel to implement effectively the protective strategy and protect the target sets against the DBT.

b. responding within appropriate timelines. Response personnel have adequate time to reach their response positions in advance of adversary timelines.

c. responding to protected positions. Response personnel use appropriate protection and cover.

d. responding with appropriate armament. Response personnel are supplied with, or have readily available, the weapons and equipment necessary to execute their responsibilities and are appropriately trained and qualified in the use of the weapons and equipment.

e. providing target set protection. Response plan and response personnel prevent the DBT from completing sabotage of all components of any target set.

The inspector(s) should request from the licensee reports that document drill and exercise deficiencies. The inspector(s) should review the documentation pertaining to the licensee's evaluation of the deficiencies to understand fully whether or not the deficiencies adversely affect or decrease the effectiveness of the protective strategy and physical protection program. The inspector(s) should also query site personnel to determine how the licensee dispositions deficiencies. The inspector(s) should review the associated documentation indicating that the failure was entered into the site's CAP.

71130.03-03 RESOURCE ESTIMATE

The resource estimate for this section is approximately 435 hours of direct inspection effort on site every 3 years. This inspection will require a team of five inspectors with advisor support.

71130.03-04 REFERENCES

None.

71130.03-05 PROCEDURE COMPLETION

This procedure is considered complete when all of the inspection requirements listed in the procedure have been completed. This procedure contains one sample.

END

Addenda:

Addendum 1: U.S. Nuclear Regulatory Commission Office of Nuclear Security and Incident Response Memorandum of Understanding and Agreement Regarding Trusted Agent Responsibilities.

Addendum 2: U.S. Nuclear Regulatory Commission FOF Exercise Adversary Briefing Worksheet.

Addendum 3: Conduct, Agenda, and Rules of Engagement for Contingency Response Force-on-Force.

Addendum 4: Formal Disagreement with Adversary Characteristics, Attributes, or Tactics Employed or Prepared as Part of an NRC FOF Evaluated Exercise

Addendum 5: Guidance Related to Contingency Response – Force-on-Force Testing.

Attachment 1: Revision History for IP 71130.03.

ADDENDUM 1

U.S. NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE MEMORANDUM OF UNDERSTANDING AND AGREEMENT REGARDING TRUSTED AGENT RESPONSIBILITIES

This memorandum summarizes the purpose, duties, responsibilities, and relationships associated with the use of Trusted Agents in connection with the U.S. Nuclear Regulatory Commission's Office of Nuclear Security and Incident Response (NSIR) performance testing.

When conducting performance tests, NSIR typically employs one or more Trusted Agents - appointed by the tested facility/organization B that assists in planning and conducting the performance tests. NSIR places a great deal of reliance on Trusted Agents B with their intimate knowledge of site configuration, organizations, and procedures B to ensure that the necessary detailed planning, coordination, and local resource allocation are achieved on an expedited basis. Since the Trusted Agent both represents his/her facility/organization and is privy to sensitive performance test information (e.g., scenario details), it is important that the Trusted Agent has the necessary authority to make appropriate decisions and that he/she and his/her managers understand the confidentiality requirements of the position.

Trusted Agents have two main responsibilities. First, they represent their facilities/organization in agreeing to various details of performance test planning and conduct. Such details may include but are not limited to the identification and selection of appropriate insiders or "insider information," selection of realistic scenarios and scenario events, and the development of appropriate control measures and simulations. The Trusted Agent **must have the authority** to agree to such test details on behalf of the facility/organization. Sensitive scenario details or other planning details that could compromise scenario information cannot be referred for approval to higher managers or any other individuals who are not Trusted Agents. Second, Trusted Agents work closely with the NSIR planning team and site personnel to ensure that performance tests are rigorous, realistic, and safe. In this regard, they must willingly provide all information necessary to devise and conduct realistic, meaningful, and safe performance tests. Further, they must take the lead in working with other site personnel to assure that the necessary planning, coordination, and logistical requirements are accomplished; they must do this without divulging or compromising sensitive information that might affect the validity of test results.

Since these responsibilities place the Trusted Agent in a position that requires a high level of trust to be placed in him/her by both his/her own management and by NSIR, it is important that all parties involved understand the Trusted Agent's position and agree to bestow or accept the necessary trust. The signatures below formally acknowledge this understanding and agreement.

TRUSTED AGENT:	Position	Printed Name/Signature/Date
MANAGER:	Position	Printed Name/Signature/Date
NSIR REPRESENTATIVE:	Position	Printed Name/Signature/Date

ADDENDUM 2
FOF ADVERSARY BRIEFING WORKSHEET AND GUIDANCE

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ADDENDUM 2 STARTS ON THE FOLLOWING PAGE

FOF Adversary Briefing Worksheet					
A. Administrative and Exercise Conditions					
1.FOF #:		2.Exercise #:		3.Facility Name:	
4.Inspection #					
5. **Date:**		6. **Adversary Movement Start Time:**		7. **Mission:** (Check all that apply, and circle overall intent if all else fails)	☐ Core Damage ☐ Theft ☐ Spent Fuel Sabotage
8. **Approach Route(s):**	(Provide a detailed description of approach route)				
B. Mission Target(s)					

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FOF Adversary Briefing Worksheet

1. Primary Target Set: _____ a. Target Set Package Encl: _____

(In Accordance with 10 CFR 73.55(f)) (In Accordance with 10 CFR 73.1(a) and App C to Part 73)

b. Component Description	c. Location of Component	d. Attack Area	e. Method of Destruction

f. Target(s) of Opportunity: _____

(See Target Set Pack Encl for additional information)

2. Secondary Target Set: _____ a. Target Set Package Encl: _____

(In Accordance with 10 CFR 73.55(f)) (In Accordance with 10 CFR 73.1(a) and App C to Part 73)

b. Component Description	c. Location of Component	d. Attack Area	e. Method of Destruction

NRC INTERNAL USE ONLY

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FOF Adversary Briefing Worksheet

f. Target(s) of Opportunity: _____ (See Target Set Pack End for additional information)

Adversary Attributes, Additional Considerations, and Clarifying Notes On Reverse Side

C. 10 CFR 73.1 DBT Attributes (☑ box indicates required action(s)—an unchecked box is optional)

1.	☐ External Assault	9.	☐ Deception	17.	☐ Water VBIED
2.	☐ Active Insider	10.	☐ Diversion	18.	☐ Land VBIED
3.	☐ Passive Insider	11.	☐ Long Range Weapon(s)	19.	☐ Combination of Water and Land VBIED
4.	☐ Single Individual	12.	☐ Auto/Semi auto Weapon(s)	20.	☐ Water Transport Vehicle
5.	☐ Multiple Individuals	13.	☐ Suppressed Weapon(s)	21.	☐ Land Transport Vehicle
6.	☐ Coordinated Attack	14.	☐ Hand-carried Equipment	22.	☐ Combination of Water and Land Transport
7.	☐ Single Entry Point	15.	☐ Explosives		
8.	☐ Multiple Entry Points	16.	☐ Incapacitating Agents		

D. Additional Considerations (☑ box indicates required action(s)—an unchecked box is optional)

1	☐ OCA Patrol/Response	8	☐ PA Patrol/Response	15	☐ VA Patrol/Response
2	☐ OCA Barrier/VBS	9	☐ PA Barrier/VBS	16	☐ VA Barrier
3	☐ OCA Access Control	10	☐ PA Access Control	17	☐ VA Access Control
4	☐ OCA IDS/CCTV	11	☐ PA IDS/CCTV/Communication	18	☐ VA IDS/CCTV/Communication
5	☐ OCA Lighting	12	☐ PA Lighting	19	☐ VA Lighting
6	☐ OCA UPS/Power Supply	13	☐ PA UPS/Power Supply	20	☐ VA UPS/Power Supply
7	☐ OCA Communication	14	☐ PA DFPs/BREs	21	☐ VA DFPs/BREs

E. Clarifying Comments

1. *Administration and Exercise Conditions (Associate comments with section number)*
2. *Mission Target(s) (Associate comments with section number)*
3. *10 CFR 73.1 DBT Attributes (Associate comments with section number)*
4. *Additional Considerations (Associate comments with section number)*
NRC FOF Team Lead: _____ *NRC SRA:* _____ *Date:* _____ *Revision:* _____

Supplemental Data Sheet

Exercise # _____ Data			
Target Material	**Charge**	**Safe Standoff MSD (4 psi)**	**Neutralization (6 psi)**

NRC FORCE-ON-FORCE ADVERSARY BRIEFING WORKSHEET GUIDANCE

A. Administrative and Exercise Conditions.

1. **(Block A1) FOF #.** Enter the NRC FOF number found on the SPEB BC tracking worksheet found on the G: drive under G:\DSO\FoF\SPEB BC Tracking (e.g. 10.03).

2. **(Block A2) Exercise #.** Enter the exercise or scenario number in this block.

3. **(Block A3) Facility Name**. Enter the full NRC-licensed facility name.

4. **(Block A4) Inspection #.** Enter the docket number and associated inspection report number (e.g., 05000XXX/2010201)

5. **(Block A5) Date**. Enter the date of the exercise (e.g., May 1, 2010).

6. **(Block A6) Adversary Movement Start Time**. Enter the time when the CAF team will depart their assembly area. The licensee must ensure that the CAF start time is followed. Mission success depends on exact execution of timelines.

7. **(Block A7) Mission**. Enter the CAFs mission objective from the NRC's perspective and circle the overall intent. For example, if the CAF is tasked with a Core Damage, the NRC may check and circle Core Damage. Circling Core Damage informs the CAF that the primary focus is to cause Core Damage and all efforts should be focused on this target. The NRCs overall intent is critical to CAF planning.

8. **(Block A8) Approach Routes**. The NRC Team Lead, in coordination and consultation with the NRC FOF inspection team, should provide the CAF directors with a detailed description of potential approach routes. These routes should begin outside of the OCA and work up to the PA perimeter. At this location is the breach point. In this manner, the NRC requests the CAF to exploit this as a likely avenue of approach. It is important to note however that the likely use of the avenue inside of the PA must be considered as well. Hence, using the same methodology, validate the feasibility of the potential routes inside of the PA. Areas to consider when making this determination are:

    a) attractive target set equipment
    b) site protective measures
    c) key terrain
    d) observation and fields of fire
    e) cover and concealment
    f) obstacles
    g) avenues of approach

Once the CAF director has planned and briefed his route; the information you have obtained from approach route planning (through the OCA and within the PA), you can begin to assess the adequacy and accuracy of the insider's detail.

B. Mission Target(s).

1. **(Block B1) Primary and Secondary Target Set**. The NRC Team Lead will coordinate with the NRC FOF inspection team and identify the most attractive target set for exercise purpose. Considerations for attractiveness are: (1) location of target set, (2) route and time to target set, (3) physical protection of target set (e.g., delay features, observation and fields of fire, number of guards in proximity, etc.), (4) method of destruction, and (5) adversary task time. Operator actions should not preclude the use of an attractive target set. In addition, Secondary targets and targets of opportunity should be selected on the adversary's primary route of travel for simplicity of mission planning.

2. **(Block B1a) Target Set Package.** The NRC inspection Team Lead will ensure that the SRA has enclosed the target set data provided by the licensee for the target set selected.

3. **(Block B1b) Component Description and Design Composition.** The NRC Team Lead will ensure that the NRC SRA has listed each target set component (e.g. large 19", ¼ "carbon steel insulated/non-insulated pipe, etc.) that must be destroyed to achieve target set destruction. In addition, the NRC Team Lead will ensure that a member of the NRC FOF inspection team, to include an NRC advisor, conducts a walk down of each target set components listed to ensure the component is achievable and description is accurate. Care and consideration is given to validating targets of opportunity during this walk down.

4. **(Block B1c) Location of Component.** The NRC Team Lead will ensure that the NRC SRA has listed the exact location (e.g., building number, elevation, room, location within room, etc.) of each target set component that must be destroyed to achieve target set destruction.

5. **(Block B1d) Method of Destruction.** The NRC Team Lead, in consultation with the NRC advisors and inspectors, will ensure that CAF is provided with the method of destruction (e.g., mechanical, explosive, other), task time, and if explosives are used, the type, net explosive weight required, fuse type, charge placement, standoff (protected/unprotected), expected positive effects, and post blast conditions to ensure a 100% positive destruction of the target set selected.

6. **(Block B1f) Target(s) of Opportunity**. The NRC Team Lead will coordinate with the NRC FOF inspection team to identify potential target(s) of opportunity for the CAF while enroute to either the primary and or secondary target set.

Target(s) of opportunity are selected to: (1) cause diversions and or confuse responders, and/ or (2) create hazardous conditions to prevent or delay responding personnel, and/or (3) cause additional damage to the plant. When selecting target(s) of opportunity, the inspection Team Lead must ensure that the CAF is provided with the same type of information in Section B. In addition, the NRC Team Lead in coordination with the FOF inspection team will ensure that targets of opportunity selected are along the primary and or secondary route of travel to mission target sets.

C. 10 CFR 73.1 DBT Attributes.

1. *"In accordance with 10 CFR 73.55 (b)* General performance objective and requirements: *(1) The licensee shall establish and maintain a physical protection program, to include a security organization, which will have as its objective to provide high assurance that activities involving special nuclear material are not inimical to the common defense and security and do not constitute an unreasonable risk to the public health and safety. (2) To satisfy the general performance objective of paragraph (b)(1) of this section, the physical protection program must protect against the design basis threat of radiological sabotage as stated in 10 CFR 73.1. (3) The physical protection program must be designed to prevent significant core damage and spent fuel sabotage. Specifically, the program must: (i) Ensure that the capabilities to detect, assess, interdict, and neutralize threats up to and including the design basis threat of radiological sabotage as stated in § 73.1, are maintained at all times. (ii) Provide defense-in-depth through the integration of systems, technologies, programs, equipment, supporting processes, and implementing procedures as needed to ensure the effectiveness of the physical protection program." (10 CFR 73.55)*

2. **(Block C)** The NRC Team Lead will coordinate with the NRC FOF inspection team to identify adversary characteristics to be used during the conduct of the NRC –evaluated exercise. In identifying these attributes the NRC inspection team will use the attributes listed in 10 CFR 73.1 and RG 5.69. After identifying the attributes the NRC inspection Team Lead, in consultation with the NRC FOF inspection team, will review Addendum 5 to determine if there are any restrictions on the use of selected DBT attributes. Once the review has been completed the NRC Team Lead will check attributes in Section C, which the NRC requires the CAF to develop a plan. Items that are not checked are available at the CAFs discretion. However, in the CAFs brief to the NRC, the CAF must identify all adversary characteristics that will be used during the exercise using the guidance in the CAF Mission Brief Back Template located in Attachment C.

D. Additional Considerations.

1. **(Block D)** Additional considerations require the CAF to perform additional coordination with the insider. Addition considerations must be documented in enough detail to provide the CAF with the necessary information to be successful. For example, if box 6 in Section D is checked (OCA UPS/Power Supply) then the NRC must list the reason the box is checked, the location, description, and purpose the box is checked and anticipated effects.

E. Clarifying Comments. **(Block E)** The NRC Team Lead, in consultation and coordination of the NRC FOF inspection team, will use this section to clarify section A through D of the *FOF Adversary Briefing Worksheet (Attachment A)*.

F. Supplemental Data Sheet. **(Block E)** The NRC team in consultation and coordination of the NRC Advisor(s) should use the attached supplemental data sheet to document charges which are expected to be used during each exercise.

ADDENDUM 3

CONDUCT, AGENDA, AND RULES OF ENGAGEMENT FOR CONTINGENCY RESPONSE FORCE-ON-FORCE

As a means to evaluate licensees' protective strategy capabilities through a contingency response force-on-force (FOF) inspection program, the Office of Nuclear Security and Incident Response (NSIR) have developed the following guidelines for conducting these exercise activities. These guidelines supersede all previously issued guidelines.

Role of NRC Advisors: During the period of the inspection, the NSIR advisors are under the supervision of the NRC Team Lead and are representing the NRC. Advisors are expected to comply with team inspection procedures and protocols. Implied or actual conflict of interest or impropriety with licensee personnel is prohibited. Official communications with licensee personnel who are not safety related but impact inspection performance, policies, and procedures are prohibited unless previously cleared with the NRC Team Lead. The advisors are expected to know and comply with all licensee and NRC rules and regulations regarding industrial safety, radiological safety, and FOF exercise protocols. If a licensee employee approaches an advisor with an allegation, the advisor shall note the name and contact information of the alleger and report that information to the Team Lead so that follow-up action can be initiated.

The NRC Team Lead will brief the advisors during composite adversary force (CAF) planning, explaining that his or her role will be limited to that of a technical advisor and that information gleaned from other inspection activities will only be disclosed to the CAF by the Team Lead, as appropriate. The NRC advisors will not play an active role in the simulated attack.

The NRC advisors are expected to pay particular attention to the following:

1. Identify attractive target sets and potential adversary routes (to include alternate routes to the target sets) to these locations (identify "red-gun" and no play areas and the basis for these decisions).

2. Identify and develop explosive calculations or mechanical methods to disable target set components, barriers, or other materials.

3. Perform owner-controlled area (OCA), protected area (PA), and vital area (VA) tours to understand how the licensee is protecting target sets (specifically the more attractive target sets).

4. Perform OCA, PA, and VA tours to identify weaknesses in the licensee's physical protection measures.

5. Perform OCA, PA, and VA tours to identify weaknesses in the licensee's physical protection measures that may be advantageous to the adversary.

6. Perform tabletop drills to evaluate how the licensee is implementing its strategy in accordance with its license conditions and implementing procedures, and to test potential weaknesses that have been identified during the tours (coordinate with NRC Team Lead before execution of this activity).

7. Report any potential area of regulatory noncompliance, safety or security issues, or potential weaknesses in the licensee's physical protection systems to the NRC inspection Team Lead.

Adversary Characteristics: The CAF will meet the criteria of Title 10 of the *Code of Federal Regulations* (10 CFR) 73.1, "Purpose and Scope," and the adversary characteristics described in Regulatory Guide 5.69, "Guidance for the Application of the Radiological Sabotage Design Basis Threat in the Design, Development, and Implementation of a Physical Security Program that meets 10 CFR 73.55 Requirements." Questions regarding the Design Basis Threat DBT should be brought to the immediate attention of the Chief, Security Performance Evaluation Branch (SPEB), Division of Security Operations (DSO), NSIR.

CAF Physical Characteristics: Personnel selected to perform CAF duties must possess the physical attributes commensurate with a well-conditioned adversary. During the exercises, members of the CAF shall demonstrate speed, agility, and endurance. These personnel shall also demonstrate proficiency in weaponry and marksmanship, individual and team offensive tactics, and use of explosives commensurate with a highly trained and motivated attack force. Specific simulated types and utilization of explosive devices will be conducted under the direction of the NRC advisors, since the CAF is not, and will not be, specifically trained in this area. This may occur in the planning or execution of missions. In addition, to augment existing participant knowledge, the NRC advisors will provide technical advice on the use of weapons, and equipment to the CAF. If CAF performance is not within the expected NRC standard, the NRC advisor will brief the NRC Team Lead who will debrief the CAF on the specific deficiencies and document the deficiencies for briefing the Chief, SPEB, NSIR.

CAF Preparation: To achieve a level of realism commensurate with a team that has trained for several years on a scale model of the nuclear facility destined for attack, the CAF must be familiar with expeditious routes to the target sets and each target.

Due to the limited time available for CAF preparation during a regulatory exercise week, consideration should be given to an appropriate level of sophistication, resources, and the benefit of insider information. Therefore, the CAF will be given access to the insider and provided target sets, and OCA and PA entry points during the planning week (up to 3 weeks before the regulatory exercise week). Before the CAF gains access to the insider, all communications (e.g., CAF insider package), equipment, and materials requested by the CAF

for scenario development should be processed through the NRC Team Lead and the licensee being evaluated. The NRC Team Lead (or designee) must receive the requested information in time to review and transmit the information to the CAF before the exercise. This enables the CAF to do the following:

1. obtain (from the insider) and assimilate site information;
2. prepare an attack plan; and
3. conduct relevant site attack plan training (e.g., throwing mock hand grenades at distances and conditions similar to that envisioned in the scenarios).

Scenario Development: Identification of target sets, site tours, and tabletop drills are necessary precursors to the development and selection of an attack scenario. The NRC team will identify entry points into the OCA, PA, or VA as necessary, and will specify adversary characteristics to be exercised using the information gleaned during the site tours and tabletop drills.

The NRC will provide this information to the CAF, but will be attentive to requests from the CAF to modify these specifications. This information will be given to the adversary team and the insider, provided that they have signed the Trusted Agent (TA) form, during the preliminary visit to allow time for the following:

1. adversary scenario development with insider assistance; and
2. licensees are shall identify and address scenario artificialities before the finalization of the exercise scenarios and identify controller and observer assignments.

After final approval, the scenario sequence of events should not be changed unless necessary. The NRC Team Lead must determine whether proposed late changes to the sequence of the events would add significant value to the evaluation of the effectiveness of the site protective strategy. For any changes to be implemented they must meet the three following criteria: (1) the change must be within the scope of the DBT and rules of engagement, (2) the change must not have the potential to introduce an unfavorable safety condition, and (3) the change must be effectively controlled and simulated without the potential for causing indeterminate exercise results.

Escalation Process – For issues that cannot be resolved informally with the NRC Team Lead, the senior licensee TA may formally disagree with an aspect of the adversary characteristics or tactic proposed for use in an exercise. The Team Lead should contact NSIR to determine if the specific issue has been previously resolved and disseminated. However, the Team Lead should verify that there is no site specific issue that could have a direct bearing on the application of a previous decision. If the issue has been previously captured within the escalation process, the Team Lead should inform the TA of the previous decision and use the results of that decision to continue with the exercise (items captured and evaluated within the escalation process should subsequently be included into Addendum 5, "Guidance Related to the Contingency Response – Force-on-Force Testing.")

If the issue has not been previously identified, the NRC Team Lead will work with the licensee to attempt to resolve the specific issue. The Team Lead should gain agreement from the licensee on the wording of the disputed characteristic and how the licensee believes the disputed characteristic deviates from current guidance. Additionally, the Team Lead will ask the licensee to document the concern in writing using the form in Addendum 4 (Formal Disagreement with Adversary Characteristics, Attributes, or Tactics Employed or Prepared as Part of an NRC Force-on-Force Evaluated Exercise) of this IP. The Team Lead will use the completed form to present the information to the Chief, SPEB. (Note: the Team Lead is capturing the licensee concern, not agreeing or disagreeing with the specific concern.) After consultation with the Branch Chief, the Team Lead may provide additional site management and/or the Nuclear Energy Institutes (NEI) representative limited TA status in order to discuss the specific issue.

If the issue is resolved satisfactorily at the site, the Team Lead is responsible for providing this information to the Branch Chief as soon as reasonably possible.

If the issue cannot be satisfactorily resolved, the Team Lead will arrange for a conference call with the licensee TAs, Team Lead, and SPEB Branch Chief to discuss the issue and attempt to reach a satisfactory resolution.

If the issue cannot be satisfactorily resolved during this call, the SPEB Branch Chief will contact the Deputy Director, DSO for further guidance and resolution. A senior NEI representative should be contacted and informed of the issue with reference to the site and scenario being discussed to begin dialogue on resolution of the specific issue and discuss potential generic implications.

Exercise Termination: Exercises shall be terminated at any time that the safety of any person or plant equipment is in question. All personnel involved in the exercise have this responsibility.

The licensee with concurrence from the NRC Team Lead will normally terminate an exercise when either the CAF have reached or simulated sabotaging/eliminating all elements of a target set or when the CAF has been neutralized or otherwise rendered incapable of completing its mission. The NRC Team Lead has the authority to terminate an exercise, impose a restart or administrative hold, and override a controller's call at any time for reasons the Team Lead considers appropriate.

Interface with the Office of Nuclear Reactor Regulation

The NRC TL will be responsible for the following:

1. ensure that the Nuclear Reactor Regulation (NRR) Project Manager for the facility is informed of the impending FOF inspection.

2. determine the level of NRR's participation and coordinate with other offices and the Region.

3. ensure that concerns identified with the adequacy of the licensee's Multiple Integrated Laser Engagement System (MILES) analysis will be provided to the Electric Engineering Branch and the instrumentation and Control Branch, Division of Engineering, Office of Nuclear Reactor Regulation (NRR) for a comprehensive review.

4. Resolve potential issues before the week of FOF exercises.

Post Exercise Critique Process

After the conduct of two NRC-evaluated FOF exercises, the team will evaluate the licensee's ability to identify, capture, and enter findings into its Corrective Action Program (CAP). These findings must include all deficiencies and failures that adversely affect or decrease the effectiveness of the protective strategy and physical protection program during the planning or conduct of evaluated exercises. The licensee will provide all observations and items entered into its CAP during a formal critique held after the final exercise.

The team will capture observations - to include those of the CAF team - for all exercises; reference the guidance in Section 02.05; "Licensee Performance Evaluation Program," and Section 02.07; "Identification and Resolution of Problems" of this IP, and utilize these observations and guidance to assist in the evaluation during the course of the formal critique.

The Team Lead will ensure that the CAF Director and any applicable CAF team member are available as needed to assist with the critique. In addition, the team will ensure that NRC Advisors are also available to assist, as needed.

This formal exercise critique will be in addition to the "hot-wash" information exchange immediately held after each exercise completion.

Lessons Learned

The inspection team should categorically document all lessons learned in preparation for the follow-on Executive Lessons Learned meeting. Categories to be considered include, but are not limited to, safety, FOF process, command and control, MILES gear, communications, controllers, CAF team, armed responders, weapons demonstrations, and tabletop drills. Enforcement issues will not be captured by this process.

ADDENDUM 4

FORMAL DISAGREEMENT WITH ADVERSARY CHARACTERISTICS, ATTRIBUTES, OR TACTICS EMPLOYED OR PREPARED AS PART OF AN NRC FORCE-ON-FORCE EVALUATED EXERCISE

(Once filled out this form may contain sensitive or SGI information and should be marked and handled appropriately.)

In accordance with Addendum 1, "Trusted Agent Determination and Agreement", of NRC Force-on-Force IP 71130.03, licensee personnel who have read and signed TA forms may formally disagree with an aspect of the adversary characteristics or tactic proposed for use in an exercise through the site's security TA. The NRC Team Lead will attempt to resolve the disputed issue with licensee personnel at the lowest level. However, if the issue has not been previously identified, the NRC Team Lead will work with the site's security management representative to attempt to resolve the specific issue by asking the site to document the specific issue so that it may be processed through the escalation process.

This form is part of the escalation process and should include the disputed characteristic and how the licensee believes the disputed characteristic deviates from current guidance.

Issue Narrative:

LICENSEE REPRESENTATIVE: _____
Position — Printed Name/Signature/Date

MANAGER: _____
Position — Printed Name/Signature/Date

NSIR REPRESENTATIVE: _____
Position — Printed Name/Signature/Date

(Once filled out this form may contain sensitive or SGI information and should be handled appropriately.)