



Force on Force - Tactics, Techniques and Procedures Working Group (Background, Tasks, Actions & Products Update)

Dr. Ralph Way,
Senior Technical Advisor
Office of Nuclear Security and Incident Response
August 25, 2015



Force on Force - Tactics, Techniques and Procedures Working Group

Agenda

- Background of the NRC Force on Force (FOF) Performance Inspection Program Assessment
- Description of the FOF Tactics, Techniques and Procedures Working Group (TTP WG)
- FOF TTP WG Taskings and Commitments
- Status of FOF TTP WG and Products
- Next Steps



Background

Staff Requirements Memorandum (SRM) COMGEA/ COMWCO-14-0001 - FOF Lessons-Learned Review

- In Feb 2014 the Commission Directed the NRC staff to undertake a lessons learned review of its' Force on Force performance inspection program
- A Working group was formed and completed the review
- The review resulted in staff providing recommendations with options to the Commission as well as identifying a number of commitments
- The Commission gave staff direction regarding the recommendations and authorized the staff to proceed with identified commitments



Background

SRM SECY-14-0088 Commission Direction on Recommendations:

1. Establish an NRC working group to determine how to better integrate knowledge of adversary training methodologies and actual attacks with the tactics, techniques, and procedures used by the NRC composite adversary force, using a formal change control process with stakeholder input.
2. The staff should ensure that force-on-force exercises continue to be realistic and consistent with the design basis threat.
3. Provide to the Commission with recommendations regarding the need to continue its [FOF TTP WG] research and, if the study is complete, any revisions to be made to Composite Adversary Force tactics, techniques and procedures.
4. Coordinate through the Nuclear Security Working Group – to fully evaluate the pros and cons of implementing changes to the current configuration to the MILES used during NRC FPF performance inspections and if it would result in an overall enhancement to FOF exercises.
5. Evaluate the NRC requirements for unattended openings.



Background

SRM SECY-14-0001- Commission Direction on Staff Commitments:

1. Continue working with industry to review and reduce the number of extensive simulations used in developing and executing FOF scenarios by identifying, validating, and benchmarking mechanisms, such as the use of simulation software, to evaluate potential vulnerabilities that may be inappropriate for performance testing during an NRC-conducted FOF exercise;
2. Review and update the physical protection significance determination process (for evaluating the security significance of unattended openings);
3. Issue a generic communication to licensees to clarify the NRC's expectations regarding the implementation of compensatory measures; and
4. Enhance guidance, training, and inspection program documents in the effort to improve the realism and effectiveness of FOF exercises.



Description of the Force on Force Tactics, Techniques and Procedures Working Group

- **Purpose** - Determine how to better integrate knowledge of adversary training methodologies and actual attacks with the tactics, techniques, and procedures used by the NRC composite adversary force
- **Working Group Membership** - a multi-disciplinary group of NRC staff from NSIR, NRR, NMSS, OGC, OE, and Regions I, II, III, and IV
- **Steering Committee** - Composed of NRC management at the Deputy Office Director and Deputy Regional Administrator level
- **Duration** - Established for an initial period of 18 months



Action	Product
1. Identify guidance requiring enhancement or development.	1.a. For each guidance document requiring enhancement document objectives and specific deficiencies to be addressed.
	1.b. For each guidance document to be developed, document general requirements and objectives to be addressed.
2. Identify controller training program deficiencies.	2.a. Document specific deficiencies to be addressed.
	2.b. Identify deficiencies in inspection procedures or inspection procedure guidance.
3. Identify Mock Adversary and Mission Planner guidance deficiencies	3.a. Document specific deficiencies to be addressed.
	3.b. Identify deficiencies in inspection procedures or inspection procedure guidance.
4. Identify demonstrated Tactics, Techniques, and Procedures of actual adversaries.	
5. Identify demonstrated Tactics, Techniques, and Procedures of the Composite Adversary Force.	
6. Perform a gap analysis between 4. and 5.	6.a. Document gaps for resolution.
	6.b. Steering Committee briefing
	6.c. Document issues to be resolved in guidance.
7. Determine delta between MILES original programming and current programming	7.a. Direct contrast and comparison be conducted and reported on.
	7.b. Document recommendation on MILES in accordance with SRM.
8. Submit CA Note on Working Group Status.	8.a. Approved CA Note.
9. Review UAO SDP and UAO evaluation process.	9.a. Concurrence by WG.
10. Review Regulatory Issue Summary on Compensatory Measures	10.a. Concurrence by the WG.
11. Submit CA Note on staff commitments	11.a. Approved CA Note
12. Determine status of staff commitments	12.a. Document status of staff commitments
13. Develop input for Notation Vote Paper	13.a. Document actions and recommendations
14. Develop Tactics, Techniques, and Procedures evaluation method	14.a. Document process and guidance.



Status of the Force on Force Tactics, Techniques and Procedures Working Group Actions and Products

Tasking: Determine how to better integrate knowledge of adversary training methodologies and actual attacks with the tactics, techniques, and procedures used by the NRC composite adversary force

Status: Staff has completed analyses of adversary training and TTPs, CAF TTPs and is conducting a gap analysis. Next stakeholder input must be evaluated and recommendations formulated

Expected Completion: Staff will provide recommendations to NRC management by Dec 2015



Status of the Force on Force Tactics, Techniques and Procedures Working Group Actions and Products

Tasking: MILES configuration

Status: Staff is collecting information on MILES equipment being used by licensees. When completed an analysis will be conducted to determine the pros and cons on whether to restore MILES to its original configuration. The staff will develop proposals for industry engagement during the process.

Expected Completion: Staff will provide a recommendation to NRC management NLT June 2016



Status of the Force on Force Tactics, Techniques and Procedures Working Group Actions and Products

Commitment: Issue a generic communication to licensees to clarify the NRC's expectations regarding the implementation of compensatory measures following the identification of security vulnerabilities during FOF exercises.

Status: Staff is formulating a Regulatory Issue Summary (RIS) to communicate NRC expectations.

Expected Completion: RIS issued by Feb 2016.



Status of the Force on Force Tactics, Techniques and Procedures Working Group Actions and Products

Commitment: Enhance guidance, training, and inspection program documents in the effort to improve the realism and effectiveness of FOF exercises. There are currently no training requirements or guidelines in some performance evaluation program areas.

Status: Staff is conducting analyses of the FOF inspection process to determine the need for enhanced and/or the development of guidance or documentation. To date five potential areas have been identified for guidance development and/or training: Simulation Control, Controller Training and Guidance, Adversary Training Guidance, Mission Planning Guidance (for planners and evaluators) and Formal Self-Critique Guidance.

Expected Completion: Staff will provide recommendations to NRC management by Dec 2015



Status of the Force on Force Tactics, Techniques and Procedures Working Group Actions and Products

Guidance for Potential Enhancement or Development

1. Simulation Control

- a. Purpose: To provide a common set of simulations and/or controls for acceptable methods in performance based exercises (e.g., fence breaches).
- b. Current methods are highly variable from licensee to licensee.

Options:

1. Development of a new regulatory guide specific to simulations.
2. Development of a new regulatory guide on force-on-force implementation



Status of the Force on Force Tactics, Techniques and Procedures Working Group Actions and Products

Guidance for Potential Enhancement or Development

2. Controller Guidance

- a. Purpose: This should address knowledge and skills necessary to be a controller and/or evaluator for performance based exercises.
- b. Would consolidate NEI 05-05 and IP 71130.03 Addendum 5 guidance.

Options:

1. Could need to be coordinated closely with current revision to RG 5.75, Training and Qualification of Security Personnel at Nuclear Power Reactor Facilities.
2. Development of a new regulatory guide for controller training and guidance.
3. Development of a new regulatory guide on force-on-force implementation.



Status of the Force on Force Tactics, Techniques and Procedures Working Group Actions and Products

Guidance for Potential Enhancement or Development

3. Adversary Training Guidance

- a. Purpose: To provide clear expectations and consistency in the training and qualification of mock adversary forces.
- b. There are currently no clear specific guidelines on training and qualification of mock adversary forces which in some cases has led to large disparities between industry and NRC adversaries.

Options:

1. Preliminary work done in current revision to RG 5.75, Training and Qualification of Security Personnel at Nuclear Power Reactor Facilities.



Status of the Force on Force Tactics, Techniques and Procedures Working Group Actions and Products

Guidance for Potential Enhancement or Development

4. Mission Planning Guidance

- a. Purpose: To define the training and qualifications of mission planners as well as define how to plan missions (expectations).
- b. There are currently no training requirements or guidelines on mission planning for adversary forces.

Options:

1. Revise RG 5.75, Training and Qualification of Security Personnel at Nuclear Power Reactor Facilities.
2. Develop a new regulatory guide focused on mission planning by adversary forces.
3. Development of a new regulatory guide on force-on-force implementation.



Status of the Force on Force Tactics, Techniques and Procedures Working Group Actions and Products

Guidance for Potential Enhancement or Development

5. Formal Self-Critique Guidance

- a. Purpose: To provide guidance on the formal self-critique process and documentation expectations. This would also expand the process to include the licensee-conducted FOF exercises in accordance with staff commitments in SECY-14-0088.
- b. There is currently no guidance on how to perform this activity, when to perform this activity and what the NRC expectations are.

Options:

1. May be incorporated into a future revision of RG 5.75.
2. Development of a new regulatory guide on force-on-force implementation



Status of the Force on Force Tactics, Techniques and Procedures Working Group Actions and Products

Commitment: Continue working with industry to review and reduce the number of extensive simulations used in developing and executing FOF scenarios by identifying, validating, and benchmarking mechanisms, such as the use of simulation software, to evaluate potential vulnerabilities that may be inappropriate for performance testing during an NRC-conducted FOF exercise.

Status: The Division of Security Policy in the Office of Nuclear Security and Incident Response is reviewing the available simulation products and methodologies. This action is ongoing.

Expected Completion: Staff will provide a recommendation to NRC management NLT June 2016



Status of the Force on Force Tactics, Techniques and Procedures Working Group Actions and Products

Commitment : Review and update the physical protection significance determination process.

Status: NRC staff is conducting a review of the security baseline SDPs. Staff is in the final stages of completing a revision to the SDP to address unattended openings. Two areas remaining are (a) target sets and (b) physical protection.

Expected Completion: Staff expects to complete the revision by early 2016.



Next Steps

- Continue to work with stakeholders
- Evaluate stakeholder feedback
- Complete Analyses
- Formulate recommendations for response to SRM SECY-14-0088
- Present final recommendations NRC management NLT December 31, 2015



Questions