

Emergency Preparedness Performance and Initiatives

Developing the EP Security Drill Program

Scott McCain/Exelon Nuclear

January 18, 2006

EP/Security Integration to Date

- 9/11 established the question of REP preparedness for a security event.
- Federal interactions (NRP validation and other full scale drills) framed the scope.
- FoF drills established guidelines and provided initial lessons learned.
- The initiative was formally recognized in Bulletin 05-02.



Bulletin Specifics

- The bulletin asked licensees how their current EP drill and exercise programs prepare or evaluate responders for security-based events commensurate with established EP standards.
- It recognized that terrorist related acts would not create an accident that causes a larger or faster release than those already addressed. However, it also emphasized the condition of the plant after such an event could be very different from the usual nuclear power plant EP drills and exercises.

Bulletin Specifics

- It stated that in light of the existing threat environment, licensees should exercise and test security based EP abilities as an integral part of their emergency response capabilities.
- And finally, that the ERO is the primary organization trained to effectively mitigate damage caused by an event. As such, the NRC believes that the ERO should practice response to security-based events.

Bulletin Specifics

- In light of the post-9/11 potential for security-based licensee events, it is the staff's expectation that security-based EP activities will be demonstrated as major elements of the licensee's emergency plan within the frequency committed to by the licensee.
- Licensees should expect to conduct a NRC-observed off-year drill within 3 years of the completion of a pilot exercise program being developed by NRC [and coordinated through NEI].
- The long-term expectations are that each site will demonstrate an emergency response to a terrorist event at least once during the 6-year exercise cycle.

Main Objective

The end state of this initiative is for security event scenarios to be fully integrated into the drill and exercise program to the extent that one biennial exercise in each six-year cycle is an EP security exercise.

Main Differences

- EP security exercises differ from routine radiological exercises as follows:
 - Notifications, onsite protective actions and plant operations.
 - Integration of ERO, security and operations.
 - Coordination of offsite support and plant ingress.
 - Recovery from the aftermath of a terrorist attack.
- The focus is not on response to a radiological release nor on offsite protective action decision-making and implementation. Those aspects are adequately covered in routine biennial exercises and would be addressed twice during the six year evaluated exercise period.

Phases of the Initiative

- Phase I – conduct tabletop drills to develop and refine the the onsite and offsite guidance and objectives for a terrorist event related scenario.
- Phase II – conduct integrated drills to validate the new guidance and objectives under more traditional evaluated exercise conditions.
- Phase III –finalize the guidance documents, conduct an industry lessons learned workshop and obtain NRC/FEMA-DHS endorsement.
- Phase IV - incorporation of security drills into the evaluated exercise program.

Drill Design

Initial Event Response	Post Event Response
<u>Scope</u> Integrated EP and Offsite initial response to a security event (bounded by DBT).	<u>Scope</u> Large-scale post event response based on significant damage caused by a security event (not bounded by DBT).
<u>Main Objectives</u> <ol style="list-style-type: none">1. Classification2. Notification3. PARs (onsite and offsite)4. Initial plant control actions5. ERO augmentation6. Offsite initial response7. NRC incident response (optional)	<u>Main Objectives</u> <ol style="list-style-type: none">1. Mitigation2. Communications3. Public Information

Initial Event Response (Part 1)

- On-shift personnel (OPs and Security) and available ERO members perform their initial assessment and response actions to address the security event scenario.
 - Assess and Classify the Event
 - Notify offsite authorities
 - Provide initial Protective Actions (onsite and offsite)
 - Perform/discuss immediate actions in response to the hostile action
 - Provide augmented support to on-shift staff (ERO and offsite)
- Participating offsite responders (immediate notification points) perform their response actions, prioritize and allocate resources and support the site in the control of the initial security hostile action.

Initial Event Response (Part 1)

- Part 1 scenarios involve the coordinated response of both onsite and offsite organizations from the postulated after-effects of a hostile attack.
- This part is not intended to replicate the Force-on-Force (FoF) Evaluated Exercise Program with respect to the ongoing participation by Security and an opposing force. It is intended to replace the EP portion of the FoF Evaluated Exercises.
- All FoF EP related drill objectives and demonstration criteria are addressed within the new NEI guidance document.

Post Event Response (Part 2)

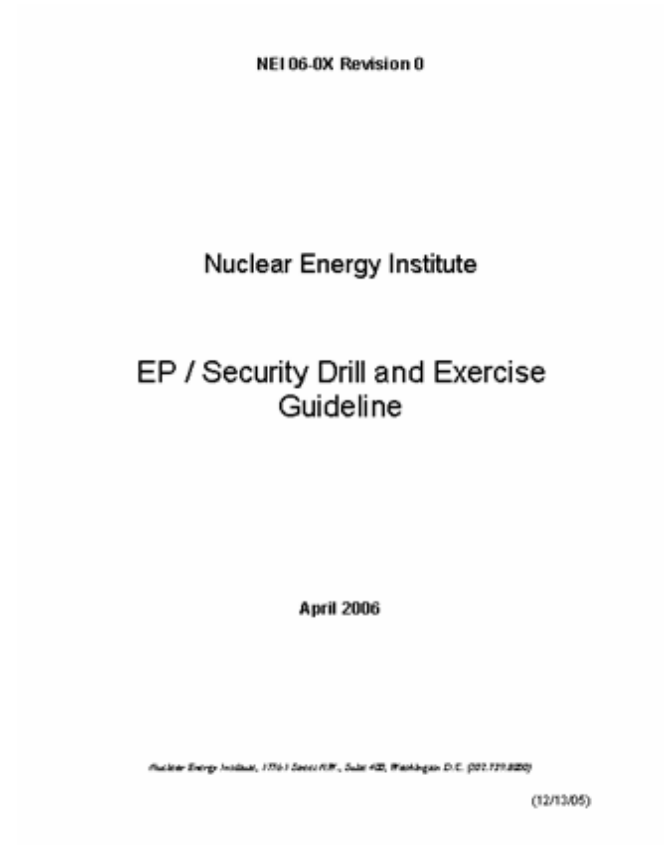
- A Part 2 drill is expected to start when the simulated hostile act is largely resolved. Postulated plant conditions may be unrelated to the results of Part 1 (in other words, a scenario adjustment can be used to reestablish conditions).
- A time break (or jump) will be made between the two parts to reset conditions and limit confusion of the responders. The ERO would be allowed to be staged in response centers and would be briefed that the site was attacked and that their centers had been declared safe for operation and activated (the EOF and the EOCs may have been in the process of activation during the initial exercise play).

Post Event Response (Part 2)

- Players would receive information that they could have been expected to earn. Briefings would provide:
 - Scenario conditions in the aftermath of the attack (e.g., casualties, loss of equipment, loss of indication, damage from large fires, explosions, civil structure damage, rubble areas, areas of the plant that are not yet secure, etc.).
 - A GE had been declared.
 - Initial protective actions had been implemented and are in progress or complete.
- Significant damage to the plant structures/equipment and/or electrical infrastructure would be simulated. The scenario must threaten core damage or other means for a potential radiological release (i.e. fuel pool event), although actions can be success oriented.

Remaining Tasks/End State

- Complete 4th tabletop (VY in February).
- Conduct drill (Callaway in March).
- Complete new NEI guidance document.
- Submit to NRC and FEMA for endorsement.
- Provide industry workshop at NEI EP Forum.



Industry Concerns

- Timely review and endorsement by NRC and FEMA.
- Defining the scope of an EP Security exercise such that it is considered a “meaningful event” per NEI 99-02 allowing participation credit for involved individuals.
- Scope limitations to ERO actions. Onsite and offsite security forces are specifically tested and evaluated under different venues (such as FoF).
- Single licensee inspection evaluation. Part 1 objectives fall under the exercise or FoF inspections, not both.

Discussion