

ATTACHMENT 71114.07

INSPECTABLE AREA: Force-On-Force (FOF) Exercise Evaluation

CORNERSTONE: Emergency Preparedness

INSPECTION BASES: Interim compensatory measures (ICM) were issued under Commission Order, dated February 25, 2002. The Commission endorsed implementation guidance provided by the Nuclear Energy Institute (NEI) on March 8, 2002. The guidance developed in support of ICM Nos. 5.a and 5.d is applicable to this inspection. The ICMs and supporting guidance are located in documents which contain safeguards information.

A security event may be a rapidly developing situation which requires the licensee to respond to multiple contingencies. Generally, the ICMs and supporting guidance required licensees to review procedures and staffing to ensure an adequate response to terrorist events. This inspection verifies that the licensee can conduct the Emergency Preparedness (EP) portion of FOF exercises, identify emergency response weaknesses via a formal critique process, and correct those weaknesses through the corrective action program. This inspection activity is associated with planning standard 10 CFR 50.47(b)(14).

This inspection verifies aspects of the Emergency Preparedness Cornerstone for which there are no indicators to measure performance.

LEVEL OF EFFORT: The inspector will perform the following:

Review EP weaknesses identified in the previous FOF exercise inspection report to use as a basis for evaluation.

Evaluate the licensee's ability to integrate security, plant operations, and emergency response actions during a terrorist event, through observation of the EP portion of the FOF exercise, and to assess its own performance via a formal critique in order to identify and correct EP weaknesses.

71114.07-01 INSPECTION OBJECTIVE

01.01 To evaluate the EP portion of the FOF exercise, including the adequacy of actions to integrate security, plant operations and emergency response, and the licensee's critique process to identify and correct EP weaknesses.

71114.07-02 INSPECTION REQUIREMENTS

The EP portion of FOF exercises are conducted as table-top drills with a limited Control Room staff (e.g., Shift Manager and a communicator) and limited simulation of the EP infrastructure that supports the staff. These limitations affect the realism of the response and limit the value of table-top drills for performance evaluation in that weaknesses noted may be attributable to the drill simulation rather than personnel performance. This should be taken into account by the inspector during the exercise evaluation. Overall, table-top drills are excellent training tools and the EP portion of FOF exercises has enhanced the integrated response to terrorist-based events.

Evaluation of licensee emergency response activities under this attachment will be performed concurrently with FOF exercises scheduled by the Division of Nuclear Security (DNS) under the Physical Protection Cornerstone.

02.01 Review any EP corrective actions identified during the previous FOF exercise that will be demonstrated during the current FOF exercise, to determine whether corrective actions have been completed and adequately address the causes.

02.02 Perform independent observations of licensee exercise performance based on the scope of demonstration identified. Emphasis is to be placed upon the adequacy of the operations-security interface and emergency response actions during a terrorist event. Also, observe whether corrective actions reviewed under Section 02.01 were effective in correcting the identified weaknesses.

02.03 Determine whether inspector-identified EP weaknesses were identified during the licensee's exercise critique and entered into the corrective action program.

02.04 If applicable, determine whether licensee assessment of EP performance with regard to activities contributing to the Drill and Exercise Performance (DEP) Performance Indicator (PI) is in accordance with the applicable criteria of NEI 99-02, "Regulatory Assessment Performance Indicator Guideline."

71114.07-03 INSPECTION GUIDANCE

Inspection Preparation

The primary focus of this inspection is to evaluate the licensee's critique of the operations-security interface and emergency response actions during a simulated terrorist

event. In preparation, review the licensee procedure for control room response to a terrorist attack, and the Emergency Plan and Implementing Procedures (EPIPs) that provide instructions for classification, notification, protective action recommendation (PAR) development, and contingencies for the response to a security event. Develop an understanding of the criteria for timely and accurate completion of these activities based on scenario events and EPIP guidance. Also, review NRC Bulletin 2005-02 (ML051740058), "Emergency Preparedness and Response Actions For Security-Based Events" and Regulatory Issue Summary (RIS) 2004-015 (ML041810037) and Supplements, for additional guidance on expected licensee response to a security-based event.

Activities will be controlled and assessed for EP weaknesses using the normal critique process. Exercise weaknesses must be entered into the corrective action process and corrected. EP inspection results will be reported in the FOF inspection report issued by NSIR/DNS and will not be publicly available.

The determination of whether the risk-significant activities of classification, notification and PAR development will be counted toward the DEP PI is reflected by the level of simulation and is left to the licensee's discretion. However, 10 CFR 50.47(b)(14) and Appendix E to Part 50 require that the licensee critique its exercise performance and correct EP weaknesses even if no DEP PI opportunities were identified.

Note: The FOF exercise schedule is Sensitive Unclassified Non-Safeguards Information and should be handled accordingly.

Discuss EP objectives and level of demonstration for EP activities with licensee EP personnel about 30 days prior to the FOF exercise, and inform the regional EP Branch Chief and the DNS Team Leader of the contact. Use the following guidelines to frame the discussion with the licensee:

- Actual performance (**P**) of actions is preferable to a walk-through (**W**) of activities. Walk-through (hands-on, walk-through up to the point of actual implementation) is preferable to discussion (**D**) of activities. A detailed discussion is appropriate where other efforts (P, W) cannot be completed.
- Controller(s) should be currently qualified in plant operations and knowledgeable of the scenario and expected plant and ERO response (i.e., able to provide earned information as the scenario flow dictates).
- The EP portion of the FOF exercise should be conducted in a designated facility other than the actual control room. Exercise conduct in a simulator would be desirable, but other alternatives are adequate to support the demonstration (i.e., Technical Support Center/Operations Support Center with communication methods that emulate those available in the control room and provide access to plant procedures).
- At a minimum, a qualified Shift Manager (SM) should be assigned to perform operations-security interface and emergency response activities from the

simulated control room.

The simulated staff should emulate the resources the SM would have on-shift. Generally, at least one person is assigned to implement emergency response actions, such as notifications (e.g., Shift Communicator). Unless that individual would not be available during a security event, the resource may be provided by a knowledgeable person rather than a person qualified in that position (i.e., an emergency planner rather than an operator). Consideration should also be given to designating additional individuals (i.e., Control Room Supervisor/Foreman) or otherwise simulating plant operations functions and interfaces which are expected to occur in the control room based on station-specific Emergency Plan staffing.

When necessary plant personnel or activities required by the licensee's Emergency Plan are simulated, controllers should be provided with a sufficiently detailed scenario and cues to realistically simulate those personnel or activities, including any challenges or failures which are part of the planned scenario.

The following tasks will be demonstrated during the NRC-observed FOF scenario.

a. Communications

Offsite notifications: Timely initial and follow-up contact with State and local agencies, and the NRC, per the EIPs for event classification, offsite protective action recommendations (PARs) and event status. This should include, at a minimum, the accurate completion of appropriate forms, demonstration of the ability to perform these actions, and knowledge of associated procedures. The level of simulation should at least be timed to simulate resource deployment. See NRC Bulletin 2005-02, Attachment 3, for additional information concerning NRC notification of a security event. **(P, W)**

Mobilization of emergency response organization (ERO): This should include the assessment of appropriate alternate assembly facility or location, completion of appropriate forms, and demonstration of ability to activate designated call out method(s) and means of directing ERO personnel to an alternate assembly facility or location. Actual calls need not be made, but should be timed to simulate resource deployment. See NRC Bulletin 2005-02, Attachment 5, for additional information concerning ERO augmentation during a security event. **(P, W)**

Onsite announcements: This includes communications made to site personnel from the control room per the EIPs and hostile threat procedure(s), dealing with event classification, onsite protective measures, etc., using designated site communications systems. Actual announcements, while encouraged to enhance performance during the FOF exercise, need not be made. However, the text of the message, at a minimum, needs to be communicated to the Controller. See NRC Bulletin 2005-02, Attachment 4, for additional information concerning onsite

protective measures during a security event. **(P, W)**

Security/Operations communications: The location of intruders and impact of intruder activities should be communicated promptly from station Security to the control room to allow for the timely implementation of appropriate plant hostile threat actions and the timely assessment of event classification. Communications to station Security from the control room should address equipment concerns/priorities, proposed movement of on-shift staff (equipment operators, fire brigade, etc.), operation of plant equipment that may impact security response (restricting access, etc.), onsite protective measures, and response by offsite responders (fire-fighting, ambulance, etc.) to the site. **(P)**

b. E-Plan Implementation

Initial and subsequent E-Plan classifications: Prompt and accurate classification of postulated events, based on station-specific emergency action levels. See NRC Bulletin 2005-02, Attachment 2, for additional information concerning acceptable emergency classification level definitions and emergency action levels for use during a security event. **(P)**

Note: The prepared scenario should clearly identify the expected event classifications and associated emergency action levels, as well as onsite protective actions and offsite protective action recommendations. Any deviations from the expected scenario may be credible, but should be reviewed for accuracy by the inspector.

Onsite protective actions: Decision-making for the implementation of onsite protective actions based on security threat (i.e., seek cover, assembly/accountability, site evacuation, search & rescue, etc.). See NRC Bulletin 2005-02, Attachment 4, for additional information concerning onsite protective measures during a security event. **(W, D)**

Assess radiological release: Identify whether any monitored or unmonitored release(s) is in progress, and assess the impact of the release(s) on the public. **(P, W)**

Offsite PARs: Prompt and accurate identification of the appropriate PARs using station-specific PAR methodology, based on event classification, plant conditions, and actual or projected offsite doses. **(P)**

c. Operational Response

Control Room response: Response to changing plant conditions, in-plant response to equipment issues, and consideration as to how plant actions are performed during a security event. Simulation of plant operational and radiological conditions, including system and equipment status, need only be realistic enough to drive demonstration. In the absence of a simulator, it is

sufficient to relate general system status information rather than by indicator name or reading. The SM is not expected to develop detailed accident mitigation strategies. However, the SM is expected to develop initial priorities and take actions consistent with the ERO capabilities postulated in the scenario (normal or off-normal hours) **(W, D)**

Remaining tasks, if applicable to the scenario, should be demonstrated as part of a table-top discussion led by the licensee Controller, which postulates adversaries achieving the target set. To achieve this, the EP demonstration may continue after the termination of security aspects of the exercise. However, this effort should not delay the post-exercise critique.

Medical emergency: Response to a medical emergency onsite, including first aid, emergency medical team (EMT), and ambulance response. This should include the need to provide responder protection or to delay deployment based on a security event in progress. **(W, D)**

Fire emergency: Response by station fire brigade to an onsite fire emergency and coordination of fire-fighting activities with the simulated control room. Notification and response of offsite fire-fighting assistance, including coordination of site access or assembly at a designated offsite area, as applicable. This should include the need to provide responder protection or to delay deployment based on a security event in progress. **(W, D)**

Control Room evacuation: Control room evacuation, including physical protective measures (i.e., from friendly or hostile fire) for personnel leaving the control room, based on an actual or perceived imminent physical loss of the control room. Demonstrate knowledge of contingencies for performing offsite notifications after evacuation and prior to the activation of emergency facilities, as applicable. **(W, D)**

Local law enforcement agency (LLEA) interface: Incorporation of LLEA support, including control room interface with Security/LLEA. **(W, D)**

ERO interface: Communication with the ERO at the alternate facility regarding the utilization of limited onsite resources, assessment of event conditions, and prioritization of control room support actions. **(W, D)**

Post security event activities: Coordination with the security shift supervisor on decisions to conduct site assembly/accountability and/or evacuation, the mobilization of onsite and offsite medical and fire-fighting resources, and the staffing of onsite emergency facilities, etc. **(W, D)**

03.01 Review the previous FOF exercise inspection report and EP critiques for any FOF exercises conducted by the licensee, and select a sample of EP corrective actions for inspection during the present exercise. Consider trends, repeat items and items that could represent a failure to meet an EP planning standard. Priority should be

given to critique items that were problems with the operations-security interface and emergency response to a security event, rather than classification, notification and PAR development, as is normal in other exercise evaluations. Determine whether corrective actions have been completed and adequately address the causes.

03.02 During the exercise, develop independent observations of the licensee's performance based on the EPIPs and security threat procedures using the scope of demonstration identified in Section 03.01. Identify any apparent EP performance weakness(es) in the operations-security interface and emergency response actions during the security event. Verify that corrective actions reviewed under Section 02.01 were effective in correcting the identified weaknesses.

Note: Inspectors must understand that security events may proceed rapidly resulting in EP activities occurring at a rapid pace. For example, an event could transition from an Unusual Event to a Site Area Emergency within a few minutes. The inspector must exercise judgement in the evaluation of licensee emergency response. Specifically, classification of lower level emergencies may be overcome by fast moving events and the successful classification of higher level emergencies.

Note: Prompting of exercise participants is not a finding under the assessment process because it represents no risk significance in itself. However, if applicable, prompting would render a DEP PI opportunity a failure and should be documented when observed.

03.03 Following the exercise, observe the licensee's evaluator meetings and critiques where exercise weaknesses are identified. Observe the licensee's presentation of exercise weaknesses to site management. Critique emphasis should be on the operations-security interface and emergency response actions in response to the security event.

Determine if the licensee critique identified the exercise weakness(es) observed by the inspector. If the inspector identified exercise weaknesses that the licensee did not, it may represent a failure to adequately assess exercise weaknesses, and a potential finding under 10 CFR 50.47(b)(14). Licensee critique failures shall be documented, assessed for significance, and addressed during the NRC exit meeting.

Note: Inspector-identified EP weaknesses must be held confidential until after the formal licensee critique.

Verify that licensee-identified exercise weaknesses are entered into the licensee corrective action system in a manner that will allow NRC review of the resolution in the future, (i.e., during subsequent EP exercises).

Note: Poor exercise performance is not a regulatory issue if the licensee identifies and corrects any exercise weaknesses. Refer to IP 71114.01,

Section 03.04 thru 03.06, for further guidance on the evaluation of licensee critiques, findings, and performance problems that may represent a trend or a repeat weakness.

03.04 Gather copies of completed forms and checklists that support or document classification, notification and PAR development activities and other areas selected for inspection.

If applicable, determine whether the licensee properly dispositioned the classification, notification and PAR development activities, with regard to PI statistics. The licensee's assessment of performance shall be in accordance with the criteria of NEI 99-02, Section 2.4, "Emergency Preparedness Cornerstone, Drill/Exercise Performance." Any discrepancies should be discussed with licensee management and documented.

Note: FOF exercises are only included in PI statistics at the discretion of the licensee and must be identified in advance. However, PI opportunities cannot be removed from the statistics due to poor performance.

71114.07-04 RESOURCE ESTIMATE

The direct inspection effort for this attachment is estimated to be, on average, 6-10 hours every three years, regardless of the number of reactor units at a site. This inspection effort does not require any additional resources from the inspection program since it utilizes hours already allotted in Inspection Procedure (IP) 71114.06 (see Section 05, "Procedure Completion").

71114.07-05 PROCEDURE COMPLETION

This procedure is considered complete when all the inspection requirements listed in the procedure have been satisfied. For the purpose of reporting completion in the Reactor Program System (RPS), the sample size is defined as one (1). A sample size of 1 will be reported in RPS when the procedure is completed in its entirety. The performance of this IP meets the requirements of observing an EP drill or simulator-based training evolution in IP 71114.06, and should be performed in place of that drill/training evolution every three years at each power reactor site.

Attachments:
Revision History Page

END

Attachment A

Revision History For IP 71114.07

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	12/30/05	New Procedure	Yes	12/13/05	ML053490213