

ATTACHMENT 71114.08

INSPECTABLE AREA: Exercise Evaluation - Hostile Action (HA) event

CORNERSTONE: Emergency Preparedness

INSPECTION BASES: The Emergency Preparedness (EP) Cornerstone licensee response band is established by the Performance Indicator (PI) system and the licensee's corrective action program. The efficacy of the Drill and Exercise Performance (DEP) PI data is dependent upon the adequacy of the drill and exercise critiques. If the critique program does not appropriately identify weaknesses (performance problems), the DEP PI licensee response band comes into question. The Emergency Response Organization (ERO) Drill Participation PI provides an indication of licensee efforts to develop and maintain key skills through the conduct of performance-enhancing experiences.

These two PIs in concert with an effective conduct of drills and exercises and an effective assessment of performance via a formal critique process coupled with an effective correction of weaknesses, defines the DEP part of the licensee response band. The DEP licensee response band includes: training quality and conduct, emergency plan implementing procedure quality, facility and equipment readiness, personnel performance in drills and exercises, organizational and management changes and communications equipment readiness.

This inspection evaluates the adequacy of the licensee's conduct of a formal critique of a hostile action (HA) event environment biennial exercise. A HA event is defined as an act directed toward a nuclear power plant or its personnel that include the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or devices used to deliver destructive force.

This inspection evaluates the adequacy of the licensee's conduct of the biennial exercise and assessment of performance via a formal critique process in order to identify and correct weaknesses. This inspection activity is associated with planning standard 10 CFR 50.47(b)(14) and 10 CFR 50 Appendix E IV.f.

Mitigative measures in hostile action-based scenarios should commence after the simulated active attack has ceased and has created some form of large area loss due to site damage or unknown security state, and before LLEAs have swept the

site for safe entry or declared the site secure. Securing the site may take days, and it is important that licensees train personnel to respond in the aftermath of hostile action events. Under the provisions of proposed 10 CFR Part 50, Appendix E, Sections IV.F.2.j and IV.I, licensees shall demonstrate planning for and prioritization of mitigative action teams and protection of team personnel. Mitigative actions may prevent or ameliorate core damage or containment failure.

The NRC staff will review and approve all biennial exercise scenarios. Scenarios are to be submitted at least 60 days prior to the exercise date.

The scenario is to test the coordination between licensee and offsite responders. The site damage inflicted is to be sufficient that offsite resources are required for the licensee to prevent or limit a core damage scenario

This inspection procedure is to evaluate the coordination of Security, Operations, ERO and the ORO required actions to successfully respond to and mitigate plant damage in a HA event environment.

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

LEVEL OF EFFORT: Review weaknesses identified in the previous HA event biennial exercise and subsequent integrated response facility drills to note those issues worthy of additional attention during the biennial exercise.

Evaluate the adequacy of the licensee's conduct of the biennial exercise and its assessment of performance via the formal critique process to identify and correct weaknesses.

71114.08-01 INSPECTION OBJECTIVE

To evaluate the adequacy of the licensee's capability to design and conduct of a hostile action scenario, to protect the health and safety of the public during hostile action conditions, and formally critique the conduct of the HA event biennial exercise. The critique is required to demonstrate the capability to assess performance, identify weaknesses and disposition those weakness to be corrected.

71114.08-02 INSPECTION REQUIREMENTS

02.01 Prepare for the HA event biennial exercise inspection. Verify the licensee has conducted a hostile action biennial exercise during the previous and current exercise cycles in accordance with NRC regulations and its Emergency Plan commitments. A HA event biennial exercise is required for each licensee site at least once in the exercise cycle, performance frequency not to exceed eight years, including each licensee at a co-located site.

Review the scenario submitted by the licensee in accordance with Appendix E to Part 50, IV(F)(2)(a). Approve scenarios that are adequate tests of the major elements of the licensee's Emergency Plan, and transmit the approval to the licensee prior to the scheduled exercise date.'

Review the scenarios for all biennial exercises conducted during the current exercise cycle to determine whether the licensee has adequately incorporated a range of scenario elements, including a variety of radiological releases (no release, limited release, significant release), as required by Appendix E to Part 50, IV(F)(2)(j).

02.02 Review corrective actions identified as a result of the previous drill and exercise critiques, beginning with the previous biennial exercise; also review the previous HA event biennial exercise critique to identify corrective actions unique to hostile action events. Develop a list of performance areas to be observed during the exercise. At a minimum, all previously identified risk-significant planning standard (RSPS) corrective actions shall be reviewed and noted for observation during the exercise.

02.03 Perform independent observations of licensee's capabilities in the HA event environment to perform classifications, notifications, develop PARs and perform dose assessment activities. Observe the licensee coordination of Security, Operations, ERO and ORO actions and as many other aspects of performance as resources allow. In the case of co-located licensees, verify licensee compliance with the requirements of 10 CFR 50, Appendix E, Paragraph IV.F.2.c concerning the continuance of certain activities in the period between biennial exercises.

02.04 Note if weakness (es) observed by the inspection team was/are appropriately identified by the licensee's formal critique and entered into the corrective action program.

02.05 Identify recurring weaknesses noted in similar activities from previous biennial exercise(s) to evaluate corrective action effectiveness.

02.06 Identify weaknesses that may reveal a failure to meet a planning standard or regulatory requirement.

02.07 Determine whether the licensee has demonstrated reasonable assurance of its capability to effectively implement the emergency Plan in a HA event environment and adequately protect public health and safety.

02.08 Represent the NRC at the FEMA public meeting.

02.09 Review the proposed offsite exercise deficiencies (if any) provided by FEMA and inform the licensee of those deficiencies.

71114.08-03 INSPECTION GUIDANCE

The focus of this inspection is to evaluate the adequacy of the licensee's ability to: conduct a biennial exercise in a HA event environment, assess performance via a formal critique process and identify and correct weaknesses. Emphasis should be placed on licensee assessment of classification, notification, PAR development, dose assessment activities, ability to adequately protect employees and emergency workers, and to coordinate with offsite officials located at the Incident Command Post in the HA event environment. Inspectors should evaluate as many other aspects of performance and the critique as resources allow.

03.01 Obtain a copy of the scenario and perform a technical review to determine whether the scenario is an adequate test of the emergency response organization in accordance with Appendix E, IV(F)(2)(a), and IV(F)(2)(j). The inspector may need to request from the licensee scenario summaries from previous biennial exercises conducted in the current exercise cycle to determine whether scenario elements in the proposed scenario satisfy the requirements of Appendix E, IV(F)(2)(j). This review should be performed in-office at least 30 days prior to the scheduled exercise date, and documented in the inspection report. The inspector should communicate the acceptability or lack of acceptability of the scenario to the licensee at least () days prior to the scheduled exercise date, followed within () days by a letter of acceptance or disapproval.

Identify the opportunities for classification, notification, PAR development and dose assessment activities.

If during this review, it is determined that the scenario is not a sufficient test of the Plan, notify NRC Regional Management and then the licensee of the concern. Additionally, perform a cursory review of all full-scale exercise scenarios (off-year exercise(s), integrated response facility drills) since and including the last biennial exercise. Determine if the present scenario is sufficiently varied to provide assurance that: 1) all program elements have been tested within a ()-year period, and 2) there is no scenario compromise for the present exercise.

The scenario shall be of sufficient challenge and depth to demonstrate the principal functional areas of the emergency response Plan and adequately exercise each facility (and their interfaces with each other) to maintain key skills and identify and correct weaknesses. Scenario events should allow the licensee to demonstrate emergency response activities in a HA environment such as:

- management and coordination of emergency response
 - accident assessment, onsite and offsite protective action decision-making,
- Conduct of operations and repair activities when site conditions prevent normal access due to:
 - fire,
 - locked doors
 - security measures
 - areas that have not yet been secured
 - Large area losses due to HA event damage or fire.

Hostile action-based scenarios should vary the radiological release from exercise to exercise. Mitigative measures should commence after the simulated active attack has ceased but before Local Law Enforcement Agencies (LLEA) have swept the site for safe entry or declared the site secure.

Ensure the inspectors' pre-exercise understanding is consistent with the licensee regarding expected DEP PI opportunities and extent of exercise demonstration/ simulation.

Develop a plan to deploy inspection resources in a manner to observe all classification, notification, PAR development and dose assessment activities. Consider the

prioritization guidance provided in section 02.03, "Inspection Guidance," and develop a plan to deploy inspection resources to observe other activities as practical. Select other areas for inspection based on resource availability, past history, previously identified weakness corrective actions and/or logistical limitations.

Review the Emergency Plan and Emergency Plan Implementing Procedures (EPIPs) that provide instructions for HA event environment classification, notification, PAR development and dose assessment activities, and other functional areas relevant to the exercise. Develop an understanding of the criteria for timely and accurate completion of these activities based on EPIPs, the scenario and NEI 99-02.

Ensure that the Plan and EPIPs contain criteria concerning protective actions for essential and non-essential onsite personnel, including site and owner-controlled area evacuations for Site Area Emergencies and General Emergencies.

It is appropriate to schedule a briefing with licensee personnel before the exercise to discuss exercise content/conduct and any late scenario revisions. This is an opportunity to ask questions regarding the scenario, licensee method of judging timely and accurate DEP PI opportunities, logistics, mentor arrangements, shift changes, etc.

Oversight of co-located licensees introduces unique inspection requirements. See Section 03.03 for additional details.

03.02 Review previously identified weaknesses and associated corrective actions from licensee drill/exercise critiques, QA audits, and NRC exercise inspection reports since the last biennial exercise. Request closure documentation for any HAB event specific issues captured in the corrective action program from the last HAB event exercise (i.e. communication between the control room and the incident command post did not work consistently) for review and potential specific issue to observe Identify trends, repeat items and items that could represent a failure to meet a planning standard. Select a sample of ERO performance and equipment-related weaknesses identified and a sample of weaknesses that were previously resolved, for inspection during the HA event biennial exercise. Inspection resources should be allocated to the risk-significant areas first, but if there are important weaknesses in other areas, an attempt should be made to allocate resources in a manner that will allow inspection of those areas also. Use the prioritization guidance provided in section 02.03 "Inspection Requirements" and 03.03 "Inspection Guidance," to identify other areas for inspection.

The sample of corrective actions identified for observation during the exercise may include equipment and facility items or other appropriate areas. Observe facilities and equipment for readiness while observing their use during the exercise.

03.03 During the exercise, ensure independent observations of licensee performance of classification, notification, PAR development, dose assessment activities in the HA event environment are developed and identify any apparent performance weakness (es). As resources permit the following elements are also of interest:

- Demonstration of the capabilities of site security to interface with the EOF, OSC, TSC and Control Room.
- The use of the alternative emergency response facilities for activation of the ERO
- Actions taken to shelter personnel from armed attack or aircraft attack

- Conduct of operations and repair activities during site conditions that prevent normal access due to fire, locked doors or security measures such as areas that have not yet been secured
- Conduct of operations and repair activities with large areas of the plant damaged or on fire
- Rescue of and medical attention for significant numbers of personnel
- Prioritization of efforts to protect plant equipment or to secure access to plant areas for repairs.
- Support of and interface with an Incident Command Post (ICP).
- Coordination of response among on-shift personnel and ORO first responders.
- Coordination and decision-making actions necessary for prompt mobilization or relocation of the ERO in a HA event environment.
- Coordination of site access with LLEA
- Protecting a minimum contingent of operations and maintenance personnel for recovery

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

Inspector-identified weaknesses must be held confidential until after the formal licensee critique. Ensure the licensee critique conclusions are complete, including management review, before discussing inspector observations and conclusions.

Prompting of exercise participants is not a finding under the assessment process because it represents no risk significance in itself. However, prompting related to a DEP PI opportunity is basis for failing a DEP PI opportunity and should be documented when observed. It is also possible that extensive prompting throughout an exercise could question the EROs ability to satisfactory execute the Plan. This determination would be made based on the extent of the prompting and involve Regional management. Failure of the critique to identify prompting may be a finding depending on the nature of the Plan commitments for conduct of drills and exercises and the extent of the prompting.

Evaluation of biennial exercises at sites with co-located licensees introduces additional inspection requirements. These requirements are found in 10 CFR 50, Appendix E, Paragraph IV.F.2.c and involve drills, training, and activities/interactions with offsite authorities (Regulatory Guide 1.101, "Emergency Response Planning and Preparedness for Nuclear Power Reactors," Revision 5, June, 2005, provides additional guidance). The inspection plan should provide for verifying that these activities are conducted, properly observed, and where appropriate, critiqued by licensee personnel. NRC inspectors do not evaluate offsite agency performance, but focus on the interface and coordination of licensee personnel with offsite agencies. However, any observed offsite performance weaknesses that impact the licensee's ability to implement the onsite Emergency Plan should be shared with the FEMA evaluation team for further assessment.

03.04 The inspectors should familiarize themselves with the licensee's critique process and discuss expectations with the licensee. This discussion should include the critique scheduling, content, participation and when the critique process is complete. The NRC considers the critique process to be complete when all draft conclusions related to RSPS performance deficiencies have been presented to licensee senior management, and management questions or comments have been documented. The licensee critique should not be delayed to address every minor problem identified.

The inspectors should conduct a pre-critique briefing with the EP staff/management prior to the formal critique to discuss non-exercise-related inspection observations/findings, and obtain the licensee's preliminary critique of the exercise performance. This meeting will aid the inspector in preparation for the formal exit meeting with licensee senior management (typically conducted following the formal critique), and allow the licensee to focus the formal critique on the RSPS. The inspectors cannot share the NRC exercise observations at this meeting, regardless of their consistency with the licensee's preliminary critique. The inspectors should stress at this meeting that for inspection purposes, the formal critique need only address performance deficiencies related to the RSPS, and any change in evaluation since the pre-critique discussion. The balance of the critique presentation is determined by the licensee's process.

Determine if the licensee critique identified the weaknesses observed by the inspection team. If the inspectors identified weaknesses that the licensee did not, it may represent a critique failure (i.e., an exercise critique problem), or the inspectors may have misinterpreted exercise participants' activities, or failed to observe a portion of those activities. It is appropriate to discuss such problems with licensee staff and management rather than with the full audience of the formal critique. Licensee critique failures shall be assessed for significance using MC0609, Appendix B, and documented in accordance with the requirements of MC0612. Failures of the licensee evaluation should be addressed during the NRC exit meeting. Verify that licensee-identified exercise weaknesses are entered into the licensee corrective action system in a manner to allow NRC review of the resolution in the future (i.e., during subsequent biennial exercises).

03.05 Using previous drill and exercise critiques, beginning with the previous biennial exercise, determine if performance problems identified by the inspectors and/or the licensee, represent a trend or repeat (i.e., recurring, with the same or similar cause) weakness. Determine if the licensee identified the trend or repeat weakness and entered it into the corrective action system. Identification of a failure to correct a drill or exercise weakness requires a detailed review of the weakness and associated corrective actions. A single repetition of a weakness should not automatically be deemed an ineffective corrective action. Conversely, a single successful demonstration of a previously identified weakness should not necessarily be considered an effective corrective action.

When an apparent failure to resolve a weakness is observed, review the specific corrective actions for that weakness and similar occurrences of that weakness in actual events, drills, exercises and training evolutions. Review relevant PIs, corrective actions, self-assessments, and inspection records for an entire inspection cycle with an emphasis on similar weaknesses. Review completed corrective actions for the weakness. Assess corrective action effectiveness based on the complete history of the issue. Obtain a reasonably complete picture of the current problem by reviewing previous corrective actions. The intent is to identify any patterns of recurring performance problems in similar activities that would identify other ineffective corrective actions.

03.06 During an exercise (or actual event) a failure to implement a planning standard does not necessarily indicate a failure to meet the planning standard. However, serious failures may indicate a programmatic problem worthy of additional review. Performance problems may reflect a deterioration of the EP program element to a point that the applicable planning standard is no longer met. Review the history of identified weaknesses to obtain relevant information and determine if the program no longer meets the given planning standard; if a determination cannot be accomplished immediately, confer with regional management for direction.

The Plan contains the licensee's commitments to NRC regulations. The EIPs are the licensee's methods of implementing those commitments and may be used to judge effective, timely, and accurate implementation. If either the Plan or procedures are inadequate, it is not a drill/exercise critique issue, it is a failure to comply with a planning standard and the significance planning standard would then be assessed. Licensee mistakes and mis-steps that only degrade implementation should not initially be considered a weakness. Mistakes are likely to happen in the course of an exercise and as long as the mistakes are corrected by the ERO, it indicates an organizational strength. Any concerns and additional review results should be communicated to the licensee, documented and assessed for significance through the EP SDP.

03.07 The baseline inspection program is predicated on the EP Cornerstone Performance Expectation. The inspectors should determine if the exercise, as conducted, demonstrates the EP baseline program does successfully meet the Performance Expectation and provides "Demonstration that reasonable assurance exists that the licensee can effectively implement its Emergency Plan to adequately protect the public health and safety in the event of a radiological emergency."

Section IV (F) (2) (f). of Appendix E to 10 CFR 50 provides the requirements for a remedial exercise. A remedial exercise is required if implementation of the Emergency Plan is not satisfactorily demonstrated during the biennial exercise. Not invoking this regulation implies that the inspection team concluded that the Plan was satisfactorily implemented. If the exercise is determined to not have demonstrated a satisfactory implementation of the Plan or problems were identified which could result in the need for a remedial exercise, the inspectors are to obtain management review and guidance for determination of required subsequent actions.

03.08 The lead inspector, or alternate, should represent NRC at the FEMA public meeting. A statement should be made as to the adequacy of exercise conduct from the NRC perspective. For a successful demonstration a statement such as "The preliminary observation of the inspection team is that conduct of the exercise was adequate and supports licensee compliance with the EP Performance Expectation Cornerstone and demonstrates that reasonable assurance exists of the licensee ability to effectively implement its Emergency Plan to adequately protect the public health and safety in the event of a radiological emergency" may be used. For an unsuccessful demonstration of support of the Performance Expectation a statement such as: "The NRC inspection team was not able to conclude its review of the exercise and will continue to review the available information before issuing an inspection report." NRC inspection reports are public information and will be released as soon as they are approved by management. Any potential findings identified against the licensee's program (i.e., against the exercise critique) during the inspection should not be announced at the public meeting.

03.09 Request NRC Headquarters to promptly inform the regional office of any potential deficiencies and remedial actions when notified by FEMA Headquarters per the "NRC/FEMA Memorandum of Understanding."

Upon receipt of the letter providing official notification of offsite exercise deficiencies, review the proposed deficiencies and their bases for understanding. FEMA reviews and findings are entitled to a presumption of adequacy and are to be taken at face value. If the basis for any deficiency is not clear or if the reviewer is aware of information to the contrary, obtain clarification from NRC Headquarters staff, Regional State Liaison Officers (RSLOs), or regional FEMA staff.

Inform the licensee of offsite deficiencies via formal letter.

71114-08-04 RESOURCE ESTIMATE

Direct inspection effort for this attachment is estimated to be, on average, between 78 hours and 98 hours, regardless of the number of reactor units at a site. If the resident inspector is participating as an evaluator, approximately 20 percent of the hours represent residents' effort and 80 percent of the hours represent EP specialists' effort. If the resident inspector is not participating as an evaluator no time is to be allotted.

When the inspection involves a co-located licensee biennial exercise, an additional 16 hours for an EP Specialist is estimated to be necessary, regardless of the number of reactor units at a site.

71114-08-05 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 1. A sample size of 1 will be reported in RPS when the procedure is completed in its entirety.

END

ATTACHMENT 1
Revision History For IP 71114-08

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number