

## ATTACHMENT 71114.01

INSPECTABLE AREA: Exercise Evaluation

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, complemented by effective conduct of drills and exercises, effective assessment of performance via a formal critique process and the effective correction of weaknesses, allows a licensee response band to be established that 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 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).

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 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 a formal critique process in order to identify and correct weaknesses.

## 71114.01-01 INSPECTION OBJECTIVE

- | 01.01 To evaluate the adequacy of the licensee's conduct of the biennial exercise and its capability to assess performance via a formal critique process in order to identify and correct weaknesses.

## 71114.01-02 INSPECTION REQUIREMENTS

- | 02.01 Prepare for the biennial exercise inspection. A biennial exercise is required for each licensee site, including each licensee at a co-located site.
- | 02.02 Review corrective actions identified as a result of previous drill and exercise critiques, beginning with the previous biennial exercise, and 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 performance in classification, notification, PAR development, dose assessment activities 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 Evaluate if a weakness(es) observed by the inspection team was appropriately identified by the licensee's formal critique and entered into the corrective action program.
- | 02.05 Identify recurring weaknesses in similar activities since the previous biennial exercise in order to evaluate the effectiveness of corrective actions.
- | 02.06 Identify any weaknesses that may reveal a failure to meet a planning standard or other regulatory requirement.
- | 02.07 Determine whether the licensee demonstrated reasonable assurance that it is capable of effectively implementing its emergency plan to adequately protect public health and safety in the event of a radiological emergency.
- | 02.08 Represent NRC at the Department of Homeland Security (DHS) public meeting.
- | 02.09 Review the proposed offsite exercise deficiencies provided by DHS and inform the licensee of those deficiencies. [C1]

## 71114.01-03 INSPECTION GUIDANCE

- | The focus of this inspection is to evaluate the adequacy of the licensee's conduct of the biennial exercise and its ability to assess performance via a formal critique process in order to identify and correct weaknesses. Emphasis should be placed on licensee assessment

of classification, notification, PAR development and dose assessment activities, but inspectors should evaluate as many other aspects of performance and the associated critique as resources allow.

03.01 Obtain a copy of the scenario and review for a summary understanding. The scenario may be obtained about 30 days before the exercise and may be reviewed in the regional office as inspection preparation. Identify the opportunities for classification, notification, PAR development and dose assessment activities. Ensure the inspectors' pre-exercise understanding is consistent with the licensee regarding expected decisions for DEP PI opportunities and extent of exercise demonstration/simulation.

If during this review, the inspector determines that the scenario may not be 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 (last biennial exercise, off-year exercise(s), integrated response facility drills) since the last biennial exercise, to determine if the present scenario is sufficiently varied to provide assurance that 1) all program elements have been tested within a six-year period, and 2) there is no scenario compromise for the present exercise.

The scenario shall be of sufficient challenge and depth such that the principal functional areas of emergency response are adequately exercised in each facility (and their interfaces with each other) in order to maintain skills and identify and correct weak areas. This includes emergency response activities such as management and coordination of emergency response, accident assessment, onsite and offsite protective action decision-making, and plant system repair and corrective actions.

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 71114-03, "Prioritization of Additional Areas for Inspection," and develop a plan to deploy inspection resources to observe other activities as practical. Selection of other areas for inspection should be based on resource availability, past history, efforts to correct weaknesses and/or logistical limitations.

Review the Emergency Plan and Emergency Plan Implementing Procedures (EIPs) that provide instructions for 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 EIPs, the scenario and NEI 99-02. *Ensure that the Plan and EIPs contain criteria concerning protective actions for non-essential onsite personnel, including evacuation for Site Area Emergencies and General Emergencies. [C2]*

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 expectations for 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 corrective actions from licensee drill/exercise critiques, QA audits, and NRC exercise inspection reports since the last biennial exercise. Consider 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 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 71114-03, "Prioritization of Additional Areas for Inspection," 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 areas thought to be appropriate. Additionally, facilities and equipment should be checked for readiness while observing their use during the exercise.

03.03 During the exercise, develop independent observations of licensee performance in classification, notification, PAR development, dose assessment activities and other areas selected. Identify any apparent performance weakness(es). Gather copies of completed forms and checklists that support or document 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. The inspector must ensure that 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 could negate the validity of a DEP PI opportunity and should be documented when observed. It is also possible that prompting throughout an exercise could be so extensive as to bring into question whether the exercise was a satisfactory test of the Plan. This determination would be made based on the extent of the prompting and involve Regional management. Finally, 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 generally 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 the verification that these activities are conducted, properly observed, and where appropriate, critiqued by licensee personnel. It should be noted that NRC inspectors do not evaluate offsite agency performance, but will rather focus on the interface 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 DHS 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, and participation, as well as the inspector's need to know when the critique process is complete. The NRC considers the critique process complete when all draft conclusions related to the RSPS performance deficiencies have been presented to licensee senior management, and any management questions or comments have been resolved. The licensee should understand that the critique should not be delayed in order 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 any non-exercise-related inspection observations/findings, and to obtain the licensee's preliminary critique of the exercise results. 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, even if they are consistent 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 may be appropriate to discuss such problems with cognizant licensee staff and management rather than with the full audience of the formal critique. Licensee critique failures shall be documented and assessed for significance. 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 that will 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) of a weakness. Determine if the licensee identified the trend or repeat weakness and entered it into the corrective action system. Determination of a failure to correct a drill or exercise weakness requires a detailed review of the weakness and the associated corrective actions. It is not intended that a single repetition of a weakness should automatically be deemed a failure of the corrective action system. Conversely, success in a drill or exercise (e.g., by one well-drilled team) should not necessarily be considered a demonstration of problem resolution.

When an apparent failure to resolve a problem is observed, review specific corrective actions, as well as similar occurrences in response to actual events, drills, exercises and training evolutions. Also, consider the status of relevant PIs and review corrective action, self-assessment, and inspection records for an entire inspection cycle with emphasis on similar problems. In addition, verify completion of corrective actions. Assessment of the effectiveness of the corrective actions should be 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 see a pattern of recurring performance problems in similar activities in order to identify 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. Additionally, performance problems may reflect a deterioration of the EP program element to the point that the applicable planning standard is no longer met. Review the history of identified weaknesses to obtain relevant information. Determine, immediately if possible, if the program no longer meets the applicable planning standard. If this 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 the procedures are inadequate, it is not a drill/exercise critique issue. Rather, it is a failure to comply with a planning standard, and the applicable planning standard should be used to assess significance. Licensee mistakes and mis-steps that only detract from implementation should not initially be considered weaknesses. Mistakes are likely to happen in the course of an exercise, and when such mistakes are corrected by the ERO, it reveals an organizational strength rather than a weakness. The concern and the results of the additional review 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 that the conduct of the exercise supports the finding that the EP program meets the Performance Expectation: "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. f. of Appendix E to 10 CFR 50, provides the requirements for a remedial exercise, required if the Emergency Plan is not satisfactorily tested during the biennial exercise. Not invoking this regulation implies that the inspection team came to the conclusion that the Plan was satisfactorily tested. If the exercise was not a satisfactory test of the Plan or problems have been identified which potentially could result in a remedial exercise, the inspectors will obtain management review, and any subsequent action would not be decided by the inspection team alone.

03.08 The lead inspector, or alternate, should represent NRC at the DHS public meeting. A statement should be made as to the adequacy of exercise conduct from the NRC perspective. 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 Cornerstone Performance Expectation: 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" is the preferred statement to be used at the DHS public meeting. Potential findings against the licensee's program (i.e., against the exercise critique) as a result of the inspection should not be announced at the public meeting.

For the case where exercise conduct did not demonstrate support of the Performance Expectation, a statement such as the following should be made at the public meeting: “The NRC inspection team was not able to conclude its review of the exercise. NRC 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.

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

*Upon receipt of the letter providing official notification of offsite exercise deficiencies, review the proposed deficiencies and their bases for understanding. DHS review 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 DHS staff.*

*Inform the licensee of offsite deficiencies via formal letter. [C1]*

#### 71114.01-04 RESOURCE ESTIMATE

Direct inspection effort for this attachment is estimated to be, on average, between 54 hours and 74 hours, regardless of the number of reactor units at a site. Approximately 20 percent of the hours represent residents’ effort and 80 percent of the hours represent EP specialists’ effort.

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.

#### 71114.01-05 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 71114.01

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
C1	06/29/06	Completed four-year historical CN search.	None	N/A	N/A
C2		Provide guidance for staff review and understanding of DHS deficiencies. (10/26/05, "SRM to SECY-05-0045.")	None	N/A	N/A
		Add previously deleted inspection requirement considered necessary for the baseline inspection program. (09/09/01, " Davis-Besse Lessons Learned Task Force Item No. 3.3.4.7."	None	N/A	N/A
		Complete rewrite of document structure to better align it with MC 0612 and SDP Appendix B, additions to meet two commitments, change in requirements for co-located sites, add revision history page. Completed four-year historical CN search.	None	N/A	ML061580338