

### MAINTENANCE OF EMERGENCY PREPAREDNESS

Effective Date: 10/01/2016

PROGRAM APPLICABILITY: 2515 A

#### 71114.05-01 INSPECTION OBJECTIVE

Evaluate the efficacy of licensee efforts to maintain their Emergency Preparedness (EP) programs by verifying accurate and appropriate identification of and correction of EP weaknesses during actual event critiques, drill and exercise critiques, program assessment activities (e.g., EP reviews performed in accordance with 10 CFR 50.54(t)) as well as review of Letters of Agreement and/or Memorandums of Understanding, 10 CFR 50.54(q) plan change process and practice, licensee maintenance of equipment important to emergency preparedness, record(s) of evacuation time estimate (ETE) population evaluation and emergency plan (E-plan) provisions for, and implementation of, primary, backup and alternate emergency response facility (ERF) maintenance (See 10 CFR Part 50 Appendix E §IV.E.8.b).

#### 71114.05-02 INSPECTION REQUIREMENTS

02.01 Review the licensee's corrective action program (CAP) for EP issues.

02.02 Review documentation for all actual events that resulted in the implementation of the E-plan since the last inspection.

02.03 Review all EP-related corrective actions identified in any actual event self-assessment for effectiveness and timeliness of completion.

02.04 Review a sample of drill critique documentation to determine if EP weaknesses are being properly identified and corrected.

02.05 Review a sample of EP corrective actions from drill critiques for effectiveness and timeliness of completion.

02.06 Review EP audit(s) performed in accordance with 10 CFR 50.54(t).

02.07 Review a sample of EP corrective actions from other EP self-assessment documents, such as quality assurance (QA) assessments of EP program elements, for effectiveness and timeliness of completion.

02.08 Review Letters of Agreement and/or Memorandums of Understanding (LOA/MOU) that support the E-plan for appropriate content and to verify they have not expired.

02.09 Review licensee maintenance of equipment important to emergency preparedness.

02.10 Review licensee record(s) of ETE population evaluation **and implementation of any updated values into protective action recommendation (PAR) procedure(s).**

02.11 Review licensee E-plan provisions for, and implementation of, primary, backup and alternate ERF maintenance (See 10 CFR Part 50 Appendix E §IV.E.8.b).

### 71114.05-03 INSPECTION GUIDANCE

The primary focus of this inspection is to evaluate the efficacy of a licensee's ability to identify and correct EP weaknesses. **Corrective action areas covered under other baseline inspection procedure attachments need not be included in this attachment.**

03.01 Review a Sample of the Licensee's CAP Documentation.

a. Review a sample of documentation from the following areas to ensure weaknesses are being captured and CAP inputs are being appropriately classified/prioritized.

1. EP CAP.
2. Identification of EP weaknesses and/or deficiencies during an actual event or during drills and exercises.
3. Audits.
4. EP program reviews.
5. Critique conduct - responsibility for conduct of critiques may be assigned to multiple departments, (e.g., QA for audits, Emergency Preparedness for EP exercises and drills, and Operations Training for simulator evolutions).

03.02 Determine the Adequacy of Licensee Actual Event Response.

a. Review related documentation for any actual event E-plan implementation since the last inspection for:

1. Documentation of notification forms.
2. Thoroughness and accuracy of logs.
3. Completeness of checklists.

b. Review actual event documentation to determine if:

1. The licensee effectively implemented the requirements of the E-plan.
2. Classifications, notifications and PAR development, if performed, were timely and accurate.

Note: Actual event E-plan implementation may be inspected under the event follow-up inspection.

- c. Compare the licensee self-assessment against the inspector's evaluation of records of the actual event(s) to determine if the licensee correctly identified all EP weaknesses and entered them into the CAP.
- d. Review any evaluation(s) documented by the resident inspector of the actual event response.

03.03 Review all EP-related Corrective Actions Identified as a Result of an Actual Event Self-Assessment. Determine if the Licensee's Corrective Actions were:

- a. Timely (i.e., was the amount of time reasonable based on safety significance (refer to Inspection Manual Chapter (IMC) 0609, Appendix B for further guidance)),
- b. Effective.

03.04 Review a Sample of Licensee Self-Assessments of Drill Performance (if available) to Verify:

- a. Degraded DEP PI individual inputs for classification, notification, and PARs are being appropriately documented in the CAP.
- b. Consistent and accurate use of EPIP forms and checklists used to support and document classification, notification, and PAR development.
- c. Consistent and accurate documentation summaries of the drill critique and scenario.
- d. The critique process properly identifies performance weakness (es) in **risk significant planning standard(s)**.

03.05 Review a Sample of Corrective Actions from Drill Critiques, Performance Indicator Issues, and Other Self-Assessments for Effectiveness and Timeliness of Completion.

Note: If corrective actions appear to be complete, but not yet fully effective, consideration may be given to allow more time for performance improvement. Future drills would be expected to show such improvement. Actions taken by the licensee to enhance or improve performance need not be evaluated for effectiveness.

- a. Review all corrective actions associated with classification, notification, PAR development and dose assessment and note any degraded performance in the three DEP input areas.

- b. Select a sample of corrective actions from other EP areas for review. The guidance provided in section 71114.01 Attachment 2, "Prioritization of Additional Areas for Inspection" may be used to select other areas for review.
- c. If repeat items or trends are noted:
  - 1. Determine whether corrective actions should have precluded recurrence. Determination of a failure to correct a drill or exercise weakness requires a detailed review of the weakness and the associated corrective actions.
  - 2. Determine if the licensee identified the trend or repeat weakness and entered it into the corrective action system. A single repetition of a weakness should not automatically be deemed an ineffective corrective action. Conversely, a single successful demonstration of a weakness should not necessarily be considered an effective corrective action.
- d. If an apparent failure to resolve a weakness is observed:
  - 1. Review the specific corrective actions for that weakness and similar occurrences of that weakness in actual events, drills, exercises, and training evolutions.
  - 2. Review relevant PI, corrective actions, self-assessments, and inspection records for the inspection cycle with an emphasis on similar weaknesses.
  - 3. Review completed corrective actions for the weakness.
  - 4. Assess corrective action effectiveness based on the complete history of the issue. Obtain a complete picture of the current problem by reviewing previous corrective actions to identify any pattern(s) of recurring performance problems in similar activities that would identify other ineffective corrective actions.
- e. Select a sample of corrective actions for equipment and facilities or other areas of EP as deemed appropriate. Perform a detailed review of:
  - 1. Closure documentation,
  - 2. Corrective actions taken, and
  - 3. Consistency of in-field completed corrective actions and the closure documentation.
- f. Should a particular area of the ERO program be noted as having no corrective action(s) (e.g., field monitoring team equipment or team member performance), the inspector may request to inspect that area for compliance with the E-plan commitments. Lack of corrective actions identified in a given area may indicate a weakness in the critique process.

03.06 Review Emergency Preparedness Audit(s) Performed in Accordance With 10 CFR 50.54(t).

- a. Evaluate adequacy of audits to comply with regulatory requirements.
- b. Determine if the scheduling of audits is consistent with regulatory requirements and licensee program changes.
  1. If the licensee is using the 10 CFR 50.54(t)(1)(ii) option, review the licensee's performance indicators, **these PIs are not those described in NEI 99-02.** (See statements of consideration at 64 FR 14814 dated March 29, 1999).
- c. **Select a sample of corrective** actions associated with classification, notification, PAR development and dose assessment activities **to review for effectiveness.**

03.07 Emergency Preparedness Self-Assessment Corrective Actions.

- a. Review a sample of corrective actions from other EP self-assessment documents, for example:
  1. QA assessments of drill performance
  2. ERO readiness
  3. EP facility readiness
- b. Review the disposition of a sample of the corrective actions identified.
- c. Determine if the licensee's corrective actions were timely and effective (refer to MC 0609, Appendix B, Sections 5.2 and 5.3 for further guidance).

03.08 Review licensee annual review / update of Letters of Agreement/Memorandum of Understanding

- a. **Verify** Letters of Agreement (**LOAs**)/Memorandum of Understanding (**MOUs**) described in the E-plan **are** in accordance with evaluation criterion P.4 of NUREG-0654, Section II.P, including hostile action.

Note: In general, LOAs/MOUs with Federal agencies with emergency planning responsibilities are not needed, since the Federal agencies are required by law to provide assistance. However, the inspector should be alert to instances in the E-plan where it may be appropriate for a letter of agreement with a local Federal office or representative of a Federal agency, such as a local Coast Guard station

- b. **Verify** arrangements for offsite response organization (ORO) resources remain in effect and have not expired.

- c. **Verify** the type and extent of ORO resources needed to support onsite response activities during an emergency, including hostile action have been identified and documented.
- d. **Verify** arrangements with State, local, and Federal agencies clearly identify and describe needed onsite support and response activities. Local agencies should include LLEA, firefighting, and medical assistance
- e. Existing arrangements are updated as needed to clarify the types of assistance to be provided by an agency or to address any shortfalls for support of onsite response activities identified.

**Note:** LOAs/MOUs may be provided in an appendix to the plan or, the plan itself may contain descriptions of these matters, and a signature page in the plan may serve to verify the agreements. The signature page format is appropriate for organizations where response functions are covered by laws, regulations, or executive orders where separate written agreements are not necessary.

**03.09** Licensee maintenance of equipment important to emergency preparedness.

- a. Sample instrumentation identified in the licensee's EAL scheme to ensure the instrumentation identified is correct for the intended application and adequate to support declaration of the effected EALs.
- b. Review EP equipment work control history to determine if:
  - 1. Compensatory measures taken for equipment out of service were adequate, and
  - 2. Any 10 CFR 50.72 reporting requirements were met.
- c. Required equipment (e.g., self-contained breathing apparatus, field monitoring team equipment, communication equipment, computers, etc.) is functioning and meets certification/calibration requirements.

**03.10** Review licensee ETE population record(s) of evaluation to ensure.

- a. The ETE is revised when new U.S. Census Bureau decennial census data is available.

**Note:** Population changes should be based on data from the U.S. Census Bureau, which annually produces resident population estimates and State/local government population data, if available.

- b. The licensee has annually reviewed for and/or evaluated changes in the emergency planning zone (EPZ) populations. **The licensee's documentation of the annual review must be sufficient for the inspector to arrive at the same conclusion.**

Note: Supplement 3, "Guidance for Protective Action Strategies," to NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," has replaced the previous version of Supplement 3, "Criteria for Protective Action Recommendations for Severe Accidents," issued July 1996. The July 1996 version of Supplement 3 does not support the regulatory requirement to incorporate ETEs into the licensee's PAR development and should no longer be used.

- c. Review PAR strategy procedure(s) for appropriate update(s) to reflect new ETE times.
- d. Review any PAR strategy procedure(s) change made to continue to comply with Supplement 3 or provide an acceptable method of compliance with 10 CFR Part 50.47(b)(10) and Appendix E IV.3 regarding the use of ETEs in the formulation of PARs.

03.11 Review licensee E-plan provisions for, and implementation of primary, backup, and alternate ERF maintenance in accordance with 10 CFR Part 50 Appendix E §IV.E.8.b and as follows:

- a. Records of ERF current and historical condition, support compliance with regulatory requirements and E-plan commitments for habitability.
- b. Equipment required to perform the facility's function is available and in sufficient quantity.
- c. ERF power supplies are in compliance with regulatory requirements and E-plan commitments.

#### 71114.05-04 RESOURCE ESTIMATE

The direct inspection effort is estimated to be, on average, between 9 hours and 15 hours biennially regardless of the number of reactor units at a site.

#### 71114.05-05 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.

#### 71114.05-06 REFERENCES

IN 05-19, "Effect of Plant Configuration Changes on the Emergency Plan" (ML051530520)

RG 1.219, "Guidance on Making Changes to Emergency Plans for Nuclear Power Reactors"

NUREG/CR-4831, "State of the Art in Evacuation Time Estimate Studies for Nuclear Power Plants," March 1992.

NUREG/CR-6863, "Development of Evacuation Time Estimates for Nuclear Power Plants," January 2005.

NUREG/CR-7002, "Criteria for Development of Evacuation Time Estimate Studies

EPFAQ Number: 2012-003, "Clarify the acceptable means for documenting discussions between licensees and OROs on the development of mutually acceptable PAR logic using Supplement 3 to NUREG-0654/FEMA-REP-1." (ML12171A567)

EPFAQ No. 2012-005, "What is the timeline for the implementation of protective action recommendations per the revised NUREG-0654, Supplement 3 following the ETE 180 day review period?" (ML12348A786)

EPFAQ No. 2013-004, "Eight questions concerning the implementation of NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies." (ML14007A652)

END

Attachment 1 - Revision History For IP 71114.05

| Commitment Tracking Number | Accession Number<br>Issue Date<br>Change Notice | Description of Change   | Description of Training Required and Completion Date                 | Comment and Feedback Resolution<br>Accession Number<br>(Pre-Decisional, Non-Public Information) |
|----------------------------|---|---|--|---|
| N/A                        | 10/25/06  | Completed four-year historical CN search.   | N/A  | N/A   |
| CN 06-029                  | 10/25/06  | Revised to clarify that this inspection is associated with Planning Standard 10 CFR 50.47(b)(14), to focus on the timeliness and effectiveness of corrective actions based on safety significance, and conform to the ROP emphasis on correction of EP weaknesses.  | No   | ML061790135   |
| N/A                        | ML12122A958<br>05/29/12<br>CN 12-008            | Changed Problem Identification & Resolution (PI&R) references to Corrective Action Program (CAP)<br>Removed "Inspection Bases" in accordance with IMC 0040 "Preparing, Revising and Issuing Documents for the NRC Inspection Manual" formatting expectations.<br>Added a "Reference" section.<br>Reformatted "Inspection Requirements" section to align with "Inspection Guidance" section of MC 0040 "Preparing, Revising, and Issuing Documents for the NRC Inspection Manual."<br>Deleted "Level of Effort" section; no longer in MC 0040. | Yes - Provided at EP Face to Face counter-part meeting<br>09/09/2011 | ML12122A943   |

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|----------------------------|---|---|--|---|
|                            |   | <p>Added inspection requirements and corresponding guidance sections:</p> <p>02.08 Review Letters of Agreement and/or Memorandums of Understanding (LOA/MOU) that support the E-plan</p> <p>02.09 Review 10 CFR 50.54(q) plan change process and practice.</p> <p>02.10 Review licensee maintenance of equipment important to emergency preparedness.</p> <p>02.11 Review licensee record(s) of ETE population evaluation.</p> <p>02.12 Review licensee E-plan provisions for, and implementation of, primary, backup and alternate emergency response facility</p> |  |   |

| Commitment Tracking Number | Accession Number<br>Issue Date<br>Change Notice | Description of Change   | Description of Training Required and Completion Date | Comment and Feedback Resolution<br>Accession Number<br>(Pre-Decisional, Non-Public Information) |
|----------------------------|---|---|--|---|
| N/A                        | ML15254A401<br>07/21/16<br>CN 16-017            | <p>Added note to step 03.10.b describing NUREG-0654 Sup 3 dated July 1996 is no longer acceptable guidance.</p> <p>Added inspection guidance for reviewing PAR strategy procedures and appropriate updates based on changes in ETE times.</p> <p>Editorial change – Align procedure with standard section numbering format of completion section under 711xx.xx-05 and the references under 711xx.xx-06 (see ROP Feedback Form 71114-1925). Added inspection requirement and corresponding guidance section to review implementation of ETE update values.</p> <p>Moved Review 10 CFR 50.54(q) plan change process and practice from IP 71114.05 to 71114.04. EPFAQs 2012-003, 2012-005 and 2013-004 to the “Reference” section.</p> <p>Added to section 71114.05-05 “Procedure Completion” the IP 71152 “Problem Identification and Resolution” expectation for routine PI&amp;R activity reviews to be approximately 10 to 15 percent of the baseline cornerstone inspection procedure resources estimates. The 10 to 15 percent approximation is based on the overall expected inspection effort and is a general estimate only.</p> | No   | <p>Comment Form - ML15084A214</p><br><p>Feedback Form – 71114.05-1925 ML15236A354</p>           |