
INSPECTION PROCEDURE 71114.05

MAINTENANCE OF EMERGENCY PREPAREDNESS

PROGRAM APPLICABILITY: 2515

71114.05-01 INSPECTION OBJECTIVE

Evaluate the efficacy of licensee efforts to maintain their Emergency Preparedness (EP) programs by verifying accurate and appropriate identification 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 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 and exercise critique documentation to determine if EP weaknesses are being properly identified and corrected.

| 02.05 Review a sample of EP corrective actions from drill and exercise 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 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 10 CFR 50.54(q) plan change process and practice.
- 02.10 Review licensee maintenance of equipment important to emergency preparedness.
- 02.11 Review licensee record(s) of evacuation time estimate (ETE) population evaluation.
- 02.12 Review licensee 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).

71114.05-03 INSPECTION GUIDANCE

The primary focus of this inspection is to evaluate the efficacy of a licensee's ability to identify and correct EP weaknesses.

The following inspection guidance section and attachments provide methods and examples of how the inspection requirements could be completed. Use of the following guidance is at the discretion of the inspector.

03.01 Review licensee procedures for the following areas to ensure there is an adequate level of guidance to meet the required area task.

- a. EP CAP
 - b. Identification of EP weaknesses and/or deficiencies during an actual event or during drills and exercises.
 - c. Audits
 - d. EP program reviews
 - e. Critique conduct - responsibility for conduct of critiques may be assigned to multiple departments, (e.g., Quality Assurance 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 MC 0609, Appendix B for further guidance)),
- b. Effective.

| 03.04 Review a sample of licensee self-assessments of **drill and exercise** 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 **emergency preparedness implementation procedure** forms and checklists used to support and document classification, notification, and PAR development.
- | c. Consistent and accurate documentation summaries of the **drill and exercise** critique and scenario.
- d. The critique process properly identifies performance weakness (es) in RSPS(s).

| 03.05 Review a sample of corrective actions from **drill and exercise** 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, dose assessment and PAR development and note any degraded performance.

- b. Select a sample of corrective actions from other EP areas for review. The guidance provided in section 71114.01 Attachment 1 "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 EP 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 (See statements of consideration at 64 FR 14814 dated March 29, 1999)
- c. Review the effectiveness of a sample of corrective actions identified. Prioritization should be given to problems associated with classification, notification, dose assessment and PAR development activities.
- d. Select a sample of corrective actions from other EP audit areas for review. The guidance provided in 71114.01 Attachment 2, "Prioritization of Additional Areas for Inspection" may be used to select other areas for review.

03.07 EP self-assessment corrective actions.

- a. Review a sample of corrective actions from other EP self-assessment documents, for example:
 - 1. QA assessments of **drill and exercise** 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 **sampled** 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's annual review/update of **letters of agreement/memorandums of understandings** (LOA/MOU) described in the E-plan to be in accordance with evaluation criterion P.4 of NUREG-0654, Section II.P, including hostile action. Verify that:

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

- a. Arrangements for ORO resources remain in effect and have not expired.
- b. The type and extent of ORO resources needed to support onsite response activities during an emergency, including hostile action have been identified and documented.

- c. 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
- d. 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.
- e. 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 Review 10 CFR 50.54(q) plan change process and practice. Verify that:

- a. Individuals responsible for performing the screenings and evaluation understand the intent and procedure steps (e.g., reviews are to be performed against the last E-plan with an SER).
- b. Screenings and evaluations contain a level of detail appropriate to support the change (e.g., does the screening block for a given planning standard describe more than just “yes” or “no”).
- c. If the licensee is cited for a violation under 10 CFR 50.54(q)(3), could it, or should it, have been prevented by an appropriate and accurate screening or evaluation.

03.10 Licensee maintenance of equipment important to emergency preparedness.

- a. Review a sample of 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 a sample of 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. Review a sample of required equipment (e.g., SCBAs, field monitoring team equipment, communication equipment, computers, etc.) to determine if it is functioning and meets certification/calibration requirements.

| 03.11 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.
- b. The licensee has annually reviewed for, and/or evaluated, changes in the emergency planning zone (EPZ) populations.

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.

03.12 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"

END

ATTACHMENT 1 - Revision History For IP 71114.05

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment and Feedback Resolution Accession Number
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 05/29/12 CN 12-008	Changed Problem Identification & Resolution (PI&R) references to Corrective Action Program (CAP) Removed "Inspection Bases" in accordance with IMC 0040 "Preparing, Revising and Issuing Documents for the NRC Inspection Manual" formatting expectations. Added a "Reference" section. Reformatted "Inspection Requirements" section to align with "Inspection Guidance" section of MC 0040 "Preparing, Revising, and Issuing Documents for the NRC Inspection Manual." Deleted "Level of Effort" section; no longer in MC 0040.	Yes - Provided at EP Face to Face counterpart meeting 09/09/2011	ML12122A943

		<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 evacuation time estimate (ETE) population evaluation.</p> <p>02.12 Review licensee E-plan provisions for, and implementation of, primary, backup and alternate emergency response facility</p>		
	ML14108A456	<p>Various Brach Chief editorial comments</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)</p>		