

## **Attachment 71114.03**

**INSPECTABLE AREA:** Emergency Response Organization Staffing and Augmentation System

**CORNERSTONES:** Emergency Preparedness

**INSPECTION BASES:** The licensee processes to staff and augment the Emergency Response Organization (ERO) are important because they support the “ERO Readiness” key attribute of the EP Cornerstone. ERO staffing and augmentation is critical to implementing the Emergency Plan in a timely manner and Emergency Plan commitments in this area are required to meet Planning Standards 10 CFR 50.47(b)(2) and 10 CFR 50.47(b)(8).

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

**LEVEL OF EFFORT:** Verify that the processes for maintaining the required on-shift ERO and for augmentation of the on-shift ERO are consistent with Emergency Plan commitments.

Verify that augmentation system design is adequate to meet ERO augmentation and emergency response facility activation commitments. (See Section 71114.03-03 introduction for subsequent inspections)

Initial implementation of this procedure requires verification of the augmentation system design.

### **71114.03-01 INSPECTION OBJECTIVE**

01.01 To evaluate the adequacy of the ERO on-shift and augmentation staffing levels and verify that the augmentation system is adequate to allow meeting ERO augmentation and facility activation commitments.

### **71114.03-02 INSPECTION REQUIREMENTS**

02.01 Review ERO On-shift and Augmentation Staffing

- a. Determine licensee commitments for ERO on-shift and augmentation staffing levels, and the ERO activation process.

- b. Determine that the processes for maintaining required on-shift and augmentation staffing levels, and for effective ERO activation, meet Emergency Plan commitments.
- c. Review the effectiveness of corrective actions related to ERO staffing levels.

## 02.02 Review Of ERO Augmentation System

- a. Review changes to the ERO augmentation system and process. Initial procedure implementation verified the adequacy of augmentation system design.
- b. Review the results of ERO augmentation drills and/or tests.
- c. Review a sample of ERO staffing/augmentation program elements.
- d. Review a sample of corrective actions related to ERO augmentation and assess their effectiveness.

## 71114.03-03 INSPECTION GUIDANCE

ERO augmentation tests that require personnel to report to their emergency response duty locations are not mandatory, but do provide a high level of assurance that activation goals can be met. Many sites have recognized the value of such “report-in” tests and have committed to perform them periodically. However, other combinations of testing and verification, if properly implemented, can provide a reasonable level of assurance. Commitments on this subject are contained in the licensee Emergency Plan and may vary between sites.

After initial inspection of augmentation system design, subsequent inspections need not repeat the entire review, but should focus on changes to system design, conduct of system drills and tests, and the effectiveness of corrective actions.

## 03.01 Review ERO On-shift Staffing and Augmentation

- a. Review the site Emergency Plan and its implementing procedures (EIPs) to determine the licensee’s commitments for ERO on-shift and augmentation staffing levels, ERO activation timeliness, and associated facility activation goals.

Regulatory Guide (RG) 1.101, “Emergency Planning and Preparedness for Nuclear Power Reactors,” states that the criteria and recommendations contained in Revision 1 of NUREG-0654/FEMA-REP-1 are considered to be acceptable methods for complying with the standards in 10 CFR 50.47 that must be met in onsite and offsite emergency response plans. Further, except in those cases in which the licensee proposes an acceptable alternative method for complying with specific portions of the Commission’s regulations, the methods described in RG 1.101 (e.g., NUREG-0654) will be used in evaluating Emergency Plans. Therefore, NUREG-0654, Table B-1 (Table B-1) should be used to assess ERO

on-shift and augmentation staffing levels unless an approved/acceptable alternative is contained within the licensee's Emergency Plan.

- b. Review the design of the ERO staffing augmentation system and processes against commitments in the licensee's Emergency Plan. Process details may be found in the EPIPs.

To be effective, ERO staffing augmentation processes should include a set of the following elements, sufficient to provide reasonable assurance that ERO activation, augmentation, and associated facility activation goals can be met:

- Current ERO duty roster that lists only qualified personnel to fill positions required by the Emergency Plan.
- A process to ensure augmentation staffing levels are met and a sufficient number of individuals are available to staff their assigned positions on a continuous basis (e.g., on-shift staffing processes ensure minimum staffing levels are maintained, sufficient depth of qualified individuals, formal rotational assignment schedule).
- Verification that ERO members are capable of ensuring timely augmentation of on-shift staffing and meeting facility activation goals in accordance with Emergency Plan commitments. **Review the augmentation staff roster and compare against Table B-1 commitments. The roster may be divided into ERO teams or the licensee may employ an "all-call" philosophy, for some or all positions, where all responders report to the site and the first to arrive assumes the augmentation position. For any methodology employed by the licensee, to augment plant staff during an emergency, verify that licensee's processes are adequate to ensure that all positions will be filled in the required time. The inspector should:**  
  
**Verify that sufficient numbers of ERO members live within the appropriate travel time from their duty locations, OR**  
  
**Review the performance of an actual drill where personnel reported to their duty locations and were timed**
- Equipment to notify individual ERO members is available and functional (e.g., pagers, cell phones, automated telephone systems).
- ERO members are trained in the proper response to the notification system.
- Procedures for ERO notification system activation support timely augmentation of on-shift staffing and facility activation goals.
- Personnel are qualified and capable to activate the ERO notification system.
- Backup processes and/or procedures are implemented in the event the normal ERO notification system is not available.

- Verification that ERO staffing augmentation processes are capable of ensuring timely augmentation of on-shift staffing and that facility activation goals can be met in accordance with Emergency Plan commitments (e.g., unannounced off-hour report-in drills, unannounced off-hour “call-in” drills, pager/communications tests, actual events, etc.).

Review a sample of on-shift staff rosters for routine days (normal business and after hours), as well as recent weekends and holidays. Focus on positions which are not part of the normal operations shift crew such as health physics technicians (HP Techs), chemistry technicians, and maintenance technicians. Verify that all the Table B-1 positions are staffed on a 24-hour basis in accordance with Emergency Plan commitments.

- c. Review a sample of items from the corrective action program related to ERO staffing inadequacies and verify that the licensee has implemented adequate corrective actions to correct the problems.

### 03.02 Review Of ERO Augmentation System

- a. Review changes made to the ERO augmentation system hardware, software and procedures since the previous inspection and determine the impact on the effectiveness of the process. Determine whether the system, as modified, is still capable of ensuring timely augmentation of on-shift staffing and meeting facility activation goals in accordance with Emergency Plan commitments. Hardware systems, (e.g., pagers, cell phones, automated telephone systems) may be vendor-owned and operated. Changes to these systems may not be apparent, but the licensee is expected to ensure the systems are maintained in proper working order through the conduct of system tests or other surveillance activities. Review the licensee’s process for keeping the automated phone system (or call out roster) current with ERO member names and telephone numbers. Determine whether system operation is verified by the licensee.
- b. Review the results of several ERO augmentation system drills e.g., call-in, report-in) since the last inspection. Include augmentation results from all actual Emergency Plan activations that have occurred since the last inspection. Determine whether the results have been evaluated accurately and whether the conclusions reached are valid. Determine whether tests of the system adequately verify ERO augmentation times (e.g., call-in drills are supplemented with travel time verification and/or report-in drills are conducted periodically).

Review backup ERO staffing augmentation processes. Review any tests, drills or implementations of the backup ERO staffing augmentation process to verify it is capable of ensuring timely augmentation of on-shift staffing and that facility activation goals can be met in accordance with Emergency Plan commitments.

If none have been performed, review the major elements of the backup system to evaluate its capabilities. Determine by interview and/or procedure review, whether ERO members know how to implement and respond to the backup system.

- c. A sample of program elements should be verified such as:
- Review a sample of training records of key ERO duty roster members to verify that qualifications are current, including respirator qualifications where appropriate. Verify that all requalification requirements have been performed in the required periodicity.
  - Review the procedures and training provided to augmentation staff concerning response during a security event to ensure adequate protective measures for staff safety, as well as clear reporting instructions when the plant is inaccessible.
  - Review a sample of training records, if appropriate, to verify that personnel expected to operate the ERO call out system are trained in its use.
- d. For weaknesses identified during ERO augmentation drills or system tests, verify that the licensee has initiated corrective actions to assure a functional augmentation process and that the weaknesses were entered into the licensee corrective action system.

Review a sample of the weaknesses identified from ERO augmentation drills or system tests performed since the last inspection and assess the effectiveness of corrective actions. Review identified weaknesses to identify trends and repeat failures.

For repeat items, review the associated problem resolution actions to assess the adequacy of corrective actions. Consider the disposition of personnel performance problems as well as equipment failures. A repeat item does not necessarily indicate a failure of the corrective action process in itself. However, a trend of repetition of failures that bring into question the licensee's ability to augment the ERO and activate facilities within committed goals may require additional effort to determine the adequacy of the resolution process. This effort may require interviews with management or other individuals and further review of licensee problem resolution.

Review all licensee self-assessments of ERO augmentation drills and system testing since the last inspection. Determine the coverage and depth of the assessments, knowledge level of the reviewers, and whether the disposition of problems was appropriate. Determine whether identified problems were placed in the corrective action program and resolved.

#### 71114.03-04 RESOURCE ESTIMATE

Direct inspection effort for this attachment is estimated to be, on average, between 6 hours and 10 hours biennially, regardless of the number of reactor units at a site.

## 71114.03-05      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 71114.03

| Commitment Tracking Number | Issue Date            | Description of Change   | Training Needed | Training Completion Date | Comment Resolution Accession Number |
|----------------------------|-----------------------|---|-----------------|--------------------------|-------------------------------------|
| N/A                        | 10/25/06              | Completed four-year historical CN search  | N/A             | N/A                      | N/A                                 |
| N/A                        | 10/25/06<br>CN 06-029 | Partial re-write of document structure to add objective for explicit review of ERO staffing levels for adequacy using NUREG-0654, Table B-1 as the standard. Added one Inspection Requirement (.02.02.c) sub-section to make one-to-one correlation with Inspection Guidance. Added clarification on the review of ERO responder training and qualifications. | No              | N/A                      | ML061790107                         |

| Commitment Tracking Number | Issue Date            | Description of Change  | Training Needed | Training Completion Date | Comment Resolution Accession Number |
|----------------------------|-----------------------|--|-----------------|--------------------------|-------------------------------------|
| N/A                        | 08/24/07<br>CN 07-026 | Clarification in guidance section, for inspector verification of timeliness, on ERO staff augmentation | No              | N/A                      | ML072250458                         |
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