



NEI White Paper, *Implementing a 24-Month Frequency for Emergency Preparedness Program Reviews*

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Purpose

- Provides guidance for adopting the voluntary option of conducting periodic emergency preparedness (EP) program reviews at a 24-month frequency as allowed by 10 CFR 50.54(t)(1)(ii)
 - Addresses the criteria and monitoring necessary to meet the regulatory requirements permitting a 24-month review period; not intended to provide methods or instructions for conducting an EP program review
- Use would be voluntary, and other approaches to meeting the 24-month review requirements may also be acceptable

Background

- 10 CFR 50.54(t) requires each licensee provide for a periodic independent review of their EP program
- A 1999 NRC rule amended the regulation to allow licensees to conduct reviews either at:
 - intervals not to exceed 12 months, or
 - as necessary, based on an assessment against performance indicators, and soon after a change occurs that potentially adversely affects the program, but no longer than 12 months after the change.
- In all cases, each program element must be reviewed at least every 24 months

General Approach

- Compliance with 10 CFR 50.54(t)(ii) achieved by:
 1. Monitoring performance indicators (PIs), and
 2. Assessing the adequacy of interfaces with State and local governments, and
 3. Identifying a change in personnel, procedures, equipment, or facilities that potentially could adversely affect emergency preparedness
- To promote efficient use of resources, activities are focused on risk-significant aspects of interfaces with State and local governments and of licensee drills, exercises, capabilities, and procedures

Performance Indicators

- 1999 rule states NRC position that, “. . . it will be the responsibility of the individual utilities to define their own performance indicators. Industry development of performance indicators is to be encouraged.”
 - Rule was published ~1 year prior to implementation of the three Reactor Oversight Process (ROP) EP PIs
- In line with the NRC position, the NEI methodology employs three PIs:
 1. ROP Drill/Exercise Performance (DEP),
 2. ROP Emergency Response Organization (ERO), and
 3. A new Emergency Response Facility and Equipment Readiness (ERFER) performance indicator

Mid-Cycle Reviews of Adequacy of State and Local Interface

- A PI is not optimum for evaluating adequacy of interfaces with State and local governments
 - Quantitative measure vs. a qualitative attribute
- In lieu of a PI, assess licensee interactions with Offsite Response Organizations (OROs) during a drill or exercise
 - OROs responsible for development of public protective actions
 - Drill or exercise should be identified (designated) in advance
 - Review effectiveness of communications and coordination that support OROs in the formulation of protective action decisions
- As an alternative, a licensee may elect to assess interface adequacy in a manner similar to that used during the 24-month review of this area

Change Adversely Affecting the EP Program

The following criterion identifies a change in personnel, procedures, equipment, or facilities that potentially adversely affects EP

- A change was implemented that precludes performance of a function associated with one or more of the following planning standards if an actual emergency were declared.
 - 10 CFR 50.47(b)(2) - Responsibilities, staffing and interfaces
 - 10 CFR 50.47(b)(4) - Emergency classification system
 - 10 CFR 50.47(b)(5) - Emergency notifications
 - 10 CFR 50.47(b)(8) - Facilities and equipment
 - 10 CFR 50.47(b)(9) - Emergency assessment capability
 - 10 CFR 50.47(b)(10) - Emergency protective actions for public

EP Program Performance Indicator #1

■ ROP Drill/Exercise Performance (DEP) Indicator

Purpose: Measures ability of key emergency response decision-makers to assess off-normal plant conditions, determine the appropriate emergency classification level and protective action recommendation, and direct communication of this information to an Offsite Response Organization (ORO). Reflects on status of EP program elements that underpin risk-significant response actions, including training, qualifications, equipment, procedures, and correction of weaknesses.

Assessment Frequency: Quarterly

Indicator Definition: Per guidance in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline"

Data Reporting Elements: Per guidance in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline"

Calculation: Per guidance in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline"

EP Review Trigger Threshold: <94%

EP Program Performance Indicator #2

- ROP Emergency Response Organization (ERO) Performance Indicator

Purpose: Measures ability to provide performance enhancing opportunities to personnel staffing key ERO positions. Reflects on ERO readiness through experience gained by participation in drills, exercises and other performance enhancing experiences. Broad participation supports identification and correction of weaknesses in important EP program elements, including damage control, worker protection, accident assessment, procedure quality, training program, and facility readiness.

Assessment Frequency: Quarterly

Indicator Definition: Per guidance in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline."

Data Reporting Elements: Per guidance in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline."

Calculation: Per guidance in NEI 99-02, "Regulatory Assessment Performance Indicator Guideline."

EP Review Trigger Threshold: <90%

EP Program Performance Indicator #3

■ Emergency Response Facility and Equipment Readiness (ERFER) Indicator

Purpose: Measures licensee performance in the maintenance of EP-related facilities and equipment. Reflects on ability of the licensee to perform the surveillance, testing, inventory, and preventative and corrective maintenance activities that contribute to the availability of emergency assessment and offsite communications capabilities.

Assessment Frequency: Quarterly

Indicator Definition: Number of reports made per 10 CFR 50.72 during the quarter for an unplanned loss of emergency assessment or offsite communications capability.

Data Reporting Elements: Number of reports made per 10 CFR 50.72 during the quarter for an unplanned loss of emergency assessment or offsite communications capability.

Calculation: Count number of reports made per 10 CFR 50.72(b)(3) during the quarter for an unplanned loss of emergency assessment or offsite communications capability.

EP Review Trigger Threshold: ≥ 2 reports made in one quarter

Questions/Discussion