

## DRAFT FOR PUBLIC COMMENT

### Near Term Task Force Recommendations 9.1, 9.2, 9.3, 9.4, 10, and 11

In SECY-11-0137, the staff informed the Commission that the focus of its initial efforts was on developing the schedules, milestones, and resources associated with Tier 1 and 2 activities; and once that was complete, the staff would be more able to accurately address the Tier 3 recommendations. The staff is providing, for Commission consideration, its proposal to address the remaining Tier 2 and Tier 3 Near Term Task Force (NTTF) recommendations regarding Emergency Preparedness (EP). Specifically:

- 9.1 Initiate rulemaking to require EP enhancements for multiunit events in the following areas:
- Personnel and staffing
  - Dose assessment capability
  - Training and exercises
  - Equipment and facilities
- 9.2 Initiate rulemaking to require EP enhancements for a prolonged Station Blackout (SBO) in the following areas:
- Communications
  - Emergency Response Data System (ERDS) capability
  - Training and exercises
  - Equipment and facilities
- 9.3 Order licensees to do the following until rulemaking is complete in the following areas:
- Add guidance to the emergency plan that documents how to perform a multiunit dose assessment (including releases from the spent fuel pool(s)) using the licensee's site-specific dose assessment software and approach).
  - Conduct periodic training and exercises for multiunit and prolonged SBO scenarios. Practice (simulate) the identification and acquisition of offsite resources, to the extent possible.
  - Ensure EP equipment and facilities are sufficient for dealing with multiunit and prolonged SBO scenarios.
  - Maintain ERDS capability throughout the accident.
- 10 Additional EP topics for prolonged SBO and multiunit events
- 11 EP topics for decision-making, radiation monitoring, and public education

In addition, there are two EP issues that were added to SECY-11-0137 that were not in the NTTF report: the basis of emergency planning zone (EPZ) size and the prestaging of potassium iodide (KI) beyond 10 miles. The staff had initially prioritized these items as Tier 3 issues. The staff's approach to addressing the size of the EPZ and the KI issue will be different and will be discussed in a separate enclosure.

Regulations and Guidance

1. 10 CFR 50.47, "Emergency Plans," includes 16 planning standards for EP. 10 CFR, Part 50, Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," describes information needed to demonstrate compliance with EP requirements.
2. NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 1, issued November 1980, provides guidance and an acceptable means for demonstrating compliance with the EP regulations.
3. NUREG-0696, "Functional Criteria for Emergency Response Facilities," issued February 1981, provides guidance that can be used to describe the facilities and systems that licensees should use for emergency response to accidents, such as the technical support system, operational support center, and emergency offsite facility.

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Staff Assessment and Basis for Prioritization

The staff considers the existing EP framework and regulations provide reasonable assurance of adequate protection of public health and safety in the event of a radiological emergency. The staff has conducted several studies that have informed the NRC evaluation of the adequacy of this approach. The results of these studies have been published as Nuclear Regulatory Commission (NRC) NUREG documents. They are: (1) NUREG/CR 6953, "Review of NUREG 0654, Supplement 3, 'Criteria for Protective Action Recommendations for Severe Accidents,'" which evaluated the efficacy of various protective action strategies within the EPZ; (2) NUREG/CR-6864, "Identification and Analysis of Factors Affecting Emergency Evacuations," examined large evacuations in the U.S. between 1990 and 2003 to more fully understand the dynamics involved; (3) Draft NUREG-1935, "State of the Art Reactor Consequence Analysis," evaluated hypothetical evacuations within EPZs and beyond in response to a series of accident scenarios. These studies have informed NRC's basis to conclude that the existing emergency preparedness framework and regulations provide reasonable assurance of adequate protection of public health and safety in the event of a radiological emergency at a U.S. power reactor facility.

As noted in SECY-11-0137, the staff proposed that the existing EP regulations and guidance be reviewed for enhancements to address for multiunit and SBO events, enhancements to ERDS capability; and enhancements to EP decision-making, radiation monitoring, and public education practices. In the Near Term Task Force Report, the NTTF concluded that continued operation and continued licensing activities do not pose an imminent risk to the public health and safety and are not inimical to the common defense and security. Therefore, the staff has concluded that given the above, the enhancements required by the revisions to the EP regulations, and the proposed enhancements to licensee staffing and communication, that these resulting Tier 2/3 issues do not require immediate attention. As a result, the staff proposes to include the following Tier 2/3 issues in a single Advanced Notice of Proposed Rulemaking (ANPR):

NTTF Recommendations 9.1 and 9.2 are similar in nature. The recommendations of the NTTF state that rulemaking is necessary to expand elements of emergency plans to ensure that licensees can respond effectively to SBO and multiunit events. The use of an ANPR will allow the staff to engage stakeholders and solicit input to inform the development of a technical basis to address EP enhancements pertaining to training, drills and exercises, equipment and facilities, and ERDS. In addition, the staff has requested that licensees respond to two 50.54(f) letters regarding staffing and communications and will utilize the licensee's responses to the 50.54(f) letters to inform the development of the ANPR.

NTTF Recommendation 9.3 generally aligns in terms of issues with 7 of the 16 existing EP planning standards including: staffing (§50.47(b)(2)); equipment/ facilities (§50.47(b)(8)); assessment, (§50.47(b)(9)); training, (§50.47(b)(15)); exercises (§50.47(b)(14)); offsite resources (§50.47(b)(3)); and communications (§50.47(b)(6)). However, the licensing basis was developed for a single unit. The staff will focus its efforts on how licenses address these seven planning standards given a SBO and multiunit accidents.

Recommendation 9.4 has been implemented by licensees. An ERDS modernization initiative was completed in [ ], and all licensees are transmitting ERDS information via a Virtual Private Network. The NRC now has the ability to receive and process ERDS data from all power reactor units. The staff will, request for stakeholder feedback on whether there is a need for a regulatory requirement to supply emergency power to the equipment and systems used to collect and transmit the ERDS data to the NRC.

NTTF Recommendations 9.2, 9.3, and 10.3 focus on several aspects of ERDS (i.e., alternate methods to transmit ERDS, data point sufficiency, and continuous ERDS transmission) and are similar in nature. The staff determined that these aspects of ERDS may need a more integrated and comprehensive set of requirements. The staff will include, request for stakeholder feedback on whether the need for a regulatory requirement is warranted. Specifically, the areas of focus will be: (1) to determine whether licensees need to evaluate existing parameters and provide the NRC additional data points and (2) to determine whether licensees need to make changes to the methods of transmitting ERDS sufficiently to address the issues identified in the NTTF report and in previous lessons-learned documents.

NTTF Recommendations 10.1, 10.2, and 11 are similar in nature. The NTTF recommended: (1) reanalyzing current protective equipment requirements for emergency responders; (2) evaluating the command and control structure and qualifications of decision-makers to ensure the proper level of authority and oversight exists at the correct facility for a long-term SBO and/or multiunit event; (3) conducting additional studies to determine whether enhanced onsite emergency response resources are necessary to support effective implementation of the licensee' emergency plans including delivery of equipment onsite under degraded conditions and competing priorities; (4) working with the Federal Emergency Management Agency (FEMA) to identify potential enhancements to the U.S. decision-making framework, including recovery and reentry to a site; (5) studying the efficacy of real-time radiation monitoring onsite and within the EPZs (including consideration of ac independence and real-time availability on the internet); and (6) conducting training, in coordination with Federal partners, on radiation safety and the appropriate use of KI.

#### Staff Recommendation

The staff recommends that the NRC use a single ANPR to collect further information regarding NTTF Recommendations 9.1, 9.2, 9.3, 9.4, 10, and 11. This includes the results of the licensees' responses to the 50.54(f) letters, the Tier 2 EP issues, and Tier 3 EP issues. The staff's planned approach includes:

1. Issuance of an ANPR to engage stakeholders on rulemaking activities associated with the methodology for integration of onsite emergency response processes, procedures, ERDS, and training and exercises. Interact with stakeholders to inform the modifications to EP guidelines and/or equipment capabilities that would include guidance for multiunit and SBO events in an integrated manner, and to clarify command and control issues, as appropriate.
2. Evaluation of licensee responses to the 50.54 letters on staffing and communications for EP, and taking regulatory action to require implementation, as appropriate.

#### Unique Implementation Challenges

The staff has not identified any unique challenges which would preclude moving forward.