

Emergency Preparedness Changes-Communications

PURPOSE

This serves as a Title 10 of the *Code of Federal Regulations* (10 CFR) 50.54(f) request for information from the addressees in response to the NRC Near-Term Task Force (NTTF) Report (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111861807). Specifically the NRC is requesting information regarding NTTF Recommendation 9.3 regarding the power supplies for communications systems. The NTTF recommended that facility emergency plans provide for a means to power communications equipment needed to communicate onsite (e.g., radios for response teams and between facilities) and offsite (e.g., cellular telephones and satellite telephones) during a prolonged station blackout.

REGULATORY REQUIREMENTS/GUIDANCE

Emergency plan communications requirements and detailed guidance on how to meet those requirements are contained in:

1. 10 CFR 50.47 (b) (6) states that provisions should be made for prompt communications among principal response organizations to emergency personnel and to the public.
2. Appendix E to 10 CFR 50, Section IV. E. 9. states that adequate provisions shall be made and described for emergency facilities and equipment, including at least one onsite and one offsite communications system; each system shall have a backup power source.
3. NUREG-0696, Functional Criteria for Emergency Response Facilities, offers guidance on how to meet the requirements of Appendix E to 10 CFR 50 and discusses the onsite and offsite communications requirements for the licensee's emergency operating facilities.

DISCUSSION

During the March 11, 2011 Great Eastern Japan Earthquake and Tsunami, the widespread destruction and loss of electrical power degraded communications capabilities onsite at Fukushima Daiichi and between the site and external stakeholders, such as local emergency response centers, the Japanese government, and corporate offices. Normal and emergency offsite communications systems lost power or were degraded by the earthquake and tsunami. Normal and emergency onsite communications were severely impacted by the loss of power to signal repeaters and depleted radio batteries. Accounts of the accident response refer to delays in repair activities caused by issues with the ability to effectively communicate between repair teams and the control rooms and/or the onsite emergency response center.

The NRC requests that the following assumptions be made in preparing responses to this request for information: the potential onsite and offsite damage is a result of a large scale natural event and there is a loss of all AC power..

NRC also requests that the licensees consider that a large scale natural event will cause extensive damage to normal and emergency communications systems both onsite and in the area surrounding the site. It has been recognized that following a large scale natural event that AC power may not be available to cell and other communications infrastructures.

REQUESTED ACTIONS

Addressees should assess their current communications systems and equipment used during an emergency event and determine what enhancements are necessary to maintain the emergency plan communications requirements of 10 CFR 50.47, Appendix E to 10 CFR 50, and the guidelines in NUREG-0696 in light of the assumptions stated above. Also consider the means necessary to power the new and existing communications equipment during a multiunit, prolonged station blackout.

REQUESTED INFORMATION

The NRC requests that each addressee provide information on their plans to respond to Recommendation 9.3 regarding communications systems power supplies. Include the following information in the response:

1. Provide an assessment of the current communications and equipment used during an emergency event to determine what enhancements are needed to ensure power is maintained to the communications systems during a large scale natural event meeting the conditions described above. The assessment should:
 - Identify the planned improvements that are to be made to existing onsite communications systems and their required normal and/or backup power supplies,
 - Identify the planned improvements that are to be made to existing offsite communications systems and their required normal and/or backup power supplies,
 - Provide a description of any new communications system(s) or technologies that will be deployed to meet the assumed conditions described stated above,
 - Provide a description of how the new and/or improved power supplies will be able to provide power to the communications equipment during a loss of all AC power,
2. Provide the interim actions that have already been or plan to be taken to enhance existing communications systems power supplies after the Fukushima event, and
3. Provide an implementation schedule of the time needed to conduct and implement the results of the communications assessment.

REQUIRED RESPONSE

The addressees should respond to this request for information no later than 90 days from issuance.

If an addressee cannot meet the requested response date, the addressee must provide a response within 60 days of the date of this letter and describe the alternative course of action that it proposes to take, including the basis of the acceptability of the proposed alternative course of action and estimated completion date.

The required written response should be addressed to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, 11555 Rockville Pike, Rockville, MD 20852, under oath or affirmation under the provisions of Sections 161.c, 103.b, and 182.a of the Atomic Energy Act of 1954, as amended and 10 CFR 50.54(f). In addition, addressees should submit a copy of the response to the appropriate Regional Administrator

DRAFT

Emergency Preparedness Changes-Staffing

PURPOSE

This serves as a 10 CFR 50.54(f) request for information from addressees to assist NRC staff's response to the NRC Near Term Task Force (NTTF) Report (ML111861807). Specifically, the NRC is requesting information regarding NTTF Recommendation 9.3 to determine and implement the required staff to fill all necessary positions for responding to a multiunit event.

REGULATORY REQUIREMENTS/GUIDANCE

- 10 CFR 50.47(b)(1) states, in part: "... and each principal response organization has staff to respond and to augment its initial response on a continuous basis."
- 10 CFR 50.47(b)(2) states, in part: "... adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and . . . "
- NUREG-0654/FEMA-REP-1, Revision 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Section B. Onsite Emergency Organization, states in part:

"5. Each licensee shall specify . . . functional areas of emergency activity. . . These assignments shall cover the emergency functions in Table B-1 entitled, 'Minimum Staffing Requirements for Nuclear Power Plant Emergencies.' The minimum on-shift staffing shall be as indicated in Table B-1. The licensee must be able to augment on-shift capabilities within a short period after declaration of an emergency. This capability shall be as indicated in Table B-1 . . .

DISCUSSION

The events in Japan have highlighted the importance of responders during all phases of emergency event response. The regulations require emergency response capabilities during a broad spectrum of postulated reactor accidents. A natural event on the scale of The 2011 Great East Japan Earthquake and resulting tsunami could present new challenges to personnel and their safety. Specifically, the event stressed the existing regulatory framework and impacted the operator's capability to implement adequate protective measures to protect the public and plant staff. In light of the experience from the event, the non-availability of a sufficient number of onsite staff during the initiation of the emergency condition, the availability of staff designated to augment the onsite staff, the ability for offsite support to reach the site, and the availability and ability of relief staff to reach the site, the NRC recognizes that these in total could pose challenges to licensee response efforts.

A large scale natural event may alter the planned emergency framework by changing access

routes (e.g., bridges washed out, debris blocking roadways, etc.). While several utilities have implemented a combined emergency operations facility (EOF) that is capable of handling multi-unit events, the onsite technical support center (TSC) and operational support center (OSC) at sites with multiple reactors have been designed to handle any emergency at one of the units.

In conjunction with the Emergency Preparedness regulations (ML112070125) published on November 10, 2011, the NRC published on December 5, 2011, in the Federal Register (Vol. 76 No. 233) Interim Staff Guidance in NSIR/DPR-ISG-01(ML1113010523). Section IV.C of that document provides guidance on performing an on-shift staffing analysis, and identified NEI-10-05, "Assessment of On-shift ERO staffing and Capabilities (ML111751698)," as an acceptable methodology for such an analysis. However, this methodology and guidance does not consider multiple unit events involving a large scale natural event with a prolonged SBO.

This letter requests addressees to assess and provide the NRC with information regarding the ability to implement their emergency plan due to a large scale natural event that results in the following assumptions:

- All units affected
- extended loss of all AC power
- impeded access to the units

Particularly impacted may be the capability for assessment activities, including repair team planning and preparation. Licensees should therefore ensure that there is sufficient onsite staff and other resources to perform critical tasks until augmentation staff arrives to provide assistance and until other offsite resources become available.

REQUESTED ACTIONS

The addressees should assess their current staffing levels and determine the required staff to fill all necessary positions for responding to a multiunit event during a beyond design basis natural event and determine what enhancements are necessary to meet Recommendation 9.3 in light of the assumptions stated above.

REQUESTED INFORMATION

1. Provide an assessment of the on-site and augmented staff needed to respond to a large scale nature event meeting the conditions described above. This assessment should include a discussion of the on-site and augmented staff available to implement the strategies as discussed in the emergency plan and/or described in plant operating procedures. At a minimum, the following functions should be assessed:
 - How onsite staff will move back-up equipment (e.g., pumps, generators) from alternate onsite storage facilities to repair locations at each reactor as described in the order regarding recommendation 4.2. The major functional areas of NUREG-0654, Table B-1, such as plant operations and assessment of operational aspects, emergency direction

and control, notification/communication, radiological accident assessment, and support of operational accident assessment, and others

- New staff/functions identified as a result of the assessment
 - Collateral duties (personnel not being prevented from timely performance of their assigned functions)
2. Provide an implementation schedule of the time needed to conduct and implement the results of the on-site and augmented staffing assessment.
 3. Identify how the augmented staff will be notified given degraded communications capabilities.
 4. Identify the methods of access (e.g., roadways, navigable bodies of water and dockage, airlift, etc.) to the site that are expected to be available after a widespread large scale natural event.
 5. Provide what interim actions have been taken or are planned to be taken based on the analysis of the onsite and augmented staff needed to respond to a large scale event meeting the conditions above.
 6. Identify changes that have been, or will be, made to your emergency plan regarding the on-shift or augmented staffing necessary to respond to a prolonged station blackout, multiunit event, including any new or revised agreements with offsite resource providers (e.g., staffing, equipment, transportation, etc.).

REQUIRED RESPONSE

In accordance with 10 CFR 50.54(f), each addressee is requested to submit a written response consistent with the requested information within 90 days of the date of this letter.

If an addressee cannot meet the requested response date, the addressee must provide a response within 60 days of the date of this letter and describe the alternative course of action that it proposes to take, including the basis of the acceptability of the proposed alternative course of action and estimated completion date.

The required written response should be addressed to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, 11555 Rockville Pike, Rockville, MD 20852, under oath or affirmation under the provisions of Sections 161.c, 103.b, and 182.a of the Atomic Energy Act of 1954, as amended and 10 CFR 50.54(f). In addition, addressees should submit a copy of the response to the appropriate Regional Administrator.