UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION
OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE
WASHINGTON, DC 20555-0001

March 25, 2024

NRC INFORMATION NOTICE 2024-02: IMPACT ON LICENSEE EMERGENCY PLANS FROM CHANGES MADE BY OFFSITE RESPONSE ORGANIZATIONS TO ALERT AND NOTIFICATION SYSTEMS

ADDRESSEES

All holders of an operating license for a nuclear power reactor under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities," except those that have permanently ceased operations and have certified that fuel has been permanently removed from the reactor vessel.

All holders of and applicants for a power reactor combined license, standard design approval, or manufacturing license under 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants."

PURPOSE

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice (IN) to inform addressees of the importance of properly evaluating changes made by offsite response organizations (OROs) for potential impacts on the licensee's ability to maintain an effective emergency plan, and in particular, the importance of ensuring that the Alert and Notification System (ANS) Design Report is evaluated and maintained, consistent with NRC-approved licensee emergency plans. In addition, licensees need to routinely communicate with OROs to learn of changes that necessitate revising the ANS Design Report. An accurate and properly maintained ANS Design Report ensures that the NRC and the Federal Emergency Management Agency (FEMA) have an opportunity to review the changes. Even though the ANS Design Report is reviewed and approved by FEMA, it is assessed by NRC as part of the licensing basis and is an integral part of the NRC's reasonable assurance finding that the emergency plan will provide adequate protection of public health and safety.

- Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.54(q)(2) requires that a licensee under this part, or a combined license under Part 52 with a Commission finding under Section 52.103(g), shall follow and maintain the effectiveness of an emergency plan that meets the requirements in Appendix E to this part and, for nuclear power reactor licensees, the planning standards of Section 50.47(b).

- 10 CFR 50.47(b)(5) requires, in part, that early notification and clear instruction plans have been established for the populace within the plume exposure pathway emergency planning zone (EPZ).

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- 10 CFR 50 Appendix E.IV.D.3 requires, in part, that the alerting and notification capability shall also include administrative and physical means for a backup method of public alert and notification.

It is expected that recipients will review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems. However, suggestions contained in this IN do not constitute NRC requirements; therefore, no specific action or written response is required.

DESCRIPTION OF CIRCUMSTANCES

The NRC has documented three circumstances where changes to the ANS Design Report have impacted the licensee's ability to maintain the effectiveness of the emergency plan.

Failure to Receive Prior Approval from FEMA for ANS Design Report Changes

At one facility, inspectors identified that over a 23-year timeframe, the licensee made significant changes to the ANS Design Report without obtaining FEMA approval for the changes, consistent with FEMA's regulations in 44 CFR Part 350, "Review and Approval of State and Local Radiological Emergency Plans and Preparedness." This finding affected a risk significant planning standard (RSPS 10 CFR 50.47(b)(5)) because the licensee failed to obtain FEMA approval of significant changes to the ANS.

Failure to Maintain Awareness of ORO Changes to ANS That Impact Licensee Regulatory Responsibilities

Several licensees were not aware that OROs made changes to the backup ANS method. As a result, the changes were not incorporated into ANS Design Reports, licensee emergency plans were not updated, and the NRC did not have an opportunity to review the changes prior to implementation, and the changes were not approved via an ANS Design Report. As a result, the licensee's emergency plan was inconsistent with the ORO emergency plans for the ANS backup method used if the primary method failed.

Failure to Establish Effective Means of Providing Early Notification (Inaccurate Tone Alert Radios Addresses)

At one facility, inspectors identified a licensee's failure to maintain the means to provide alert and notification, and clear instructions, to the population within the plume exposure pathway EPZ in accordance with 10 CFR 50.47(b)(5). Specifically, the licensee had not provided tone alert radios to a large number of addresses requiring radios and failed to ensure the ORO had established the capability for compensatory alerting measures. The licensee's failure to provide the means for notification and instruction to the public was caused in part by the failure to remain in compliance with the FEMA-approved ANS Design Report and supporting FEMA approval letter.

DISCUSSION

The NRC requires licensees to comply with 10 CFR 50.54(q)(2), which states, in part, that a licensee authorized to possess and operate a nuclear power reactor shall follow and maintain in effect emergency plans that meet the planning standards in 10 CFR 50.47(b) and the requirements in Appendix E of 10 CFR Part 50 (Appendix E). The NRC evaluates the acceptability of a licensee's emergency plan against the planning standards set forth in 10 CFR

50.47(b), the requirements of Appendix E to 10 CFR Part 50, and the guidance contained in NUREG-0654/FEMA-REP-1, “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.” In particular, Appendix E.IV.D.3 states, in part, “The licensee shall demonstrate that the appropriate governmental authorities have the capability to make a public alerting and notification decision promptly on being informed by the licensee of an emergency condition.”

The NRC is required to make a finding that there is reasonable assurance that adequate protective measures can and will be taken by the licensee in the event of a radiological emergency. This finding is made by reviewing and approving a licensee’s emergency plan for compliance with the regulations discussed above. As part of the finding, the NRC also reviews FEMA’s findings and determinations to assess whether there is reasonable assurance that ORO emergency plans are adequate and can be implemented. Once approved, power reactor licensees are required to follow and maintain the effectiveness of an emergency plan that meets the requirements in Appendix E and the planning standards of 10 CFR 50.47(b). The ANS Design Report contains ANS system design, system testing and maintenance requirements, and documentation for the primary and backup methods of alerting and informing the public. The ANS Design Report is part of ORO emergency plans and is approved by FEMA through 44 CFR Part 350, “Review and Approval of State and Local Radiological Emergency Plans and Preparedness.” The NRC reviews changes to the ANS Design Report to ensure that applicable regulatory requirements continue to be met and is considered part of the licensing basis. The NRC’s finding of reasonable assurance is reliant upon a licensee’s timely update of the ANS Design Report; therefore, it is imperative that a licensee maintain routine communication with OROs to be informed of changes that may impact the ANS Design Report.

PAPERWORK REDUCTION ACT STATEMENT

This IN does not contain new or amended information collection requirements that are subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 10 CFR 3501 et seq.). Existing requirements were approved by the Office of Management and Budget (OMB) under approval control numbers 3150-0011, 3150-0151, and 1660-0024.

PUBLIC PROTECTION NOTIFICATION

The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

CONTACT

This IN requires no specific action or written response. However, if you have any questions about the information in this notice, please notify the technical contact listed below. Licensees may also contact the NRC regional emergency preparedness inspectors or Office of Nuclear Security and Incident Response (NSIR), Policy and Oversite Branch staff, when issues or concerns arise.

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Note: NRC generic communications may be found on the NRC public Web site, http://www.nrc.gov, under NRC Library/Document Collections.

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