NRC INSPECTION MANUAL

NSIR/DPR

INSPECTION MANUAL CHAPTER 0612 APPENDIX G

EMERGENCY PLANNING CORNERSTONE - SPECIFIC SUPPLEMENTAL GUIDANCE FOR APPENDIX B SCREENING FIGURES 1 AND 2

Effective Date: 02/24/2021

0612G-01 PURPOSE

This appendix supplements, but does not supersede, the additional guidance provided in Appendix B, "Issue Screening," and the Enforcement Policy. This appendix provides cornerstone specific guidance for assessing typical issues of concern within the cognizance of the individual cornerstones so as to advance consistency in Reactor Oversight Process (ROP) outcomes.

0612G-02 EMERGENCY PREPAREDNESS CORNERSTONE¹

02.01 <u>Figure 1 – Issue Screening</u>

02.01.01 Block 1 – Issue of Concern Identified

Note: Use the information in this section to inform your decisions regarding Block 1 and the applicable additional guidance in IMC 0612 Appendix B.

Because a typical emergency program relies on equipment and resources maintained by other station groups, and by the actions of personnel in other station groups, what appears as an issue of concern under the Emergency Preparedness (EP) Cornerstone, may in fact, be an issue of concern under a different cornerstone (e.g., instrumentation and control personnel mis-calibrate a radiation monitor rendering ineffective an otherwise compliant emergency action level [EAL]).

- If the licensee's EP performance would have been compliant if the issue of concern in the other cornerstone had not occurred, the issue of concern should be screened under that cornerstone.
- However, if screening under the other cornerstone would not result in a finding or corrective action, or if the licensee's EP performance was not fully compliant, the issue of concern should be screened under the EP Cornerstone.

Identifying the proper cornerstone is necessary if the remaining decisions in the screening of inspection issues are to be made correctly (e.g., cornerstone attribute more-than-minor question, which severity level example set, etc.).

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Capitalized phrases in Section I of the appendix are defined in Appendix B, "Emergency Preparedness Significance Determination Process," of IMC 0609, "Significance Determination Process."

02.02.01 <u>Block TE2 – Does Traditional Enforcement or Enforcement Discretion Apply?</u>

Note: Use the information in this section to inform your decisions regarding Block TE2 and the applicable additional guidance in IMC 0612 Appendix B.

- a. Was there a violation that impacted the ability of the Nuclear Regulatory Commission (NRC) to perform its regulatory oversight? (See Tables 1 and 2 of the appendix for comparative examples.)
 - 1. A licensee's failure to obtain NRC approval for an EMERGENCY PLAN (E-plan) change when required by Title 10 of the *Code of Federal Regulations* (10CFR) Section 50.54(q)(4) is a violation that impacted the ability of the NRC to perform its regulatory oversight and would be processed under traditional enforcement. Based upon the language of 10 CFR 50.54(q)(4), a violation occurs only if:
 - (a) the license made a change to the content of the E-plan, and,
 - (b) any one or more of the following has occurred:
 - (1) The change was not analyzed for its impact on the effectiveness of the E-plan, or,
 - (2) The analysis was deficient, or
 - (3) Application was not made for prior approval when required.

Note: A change to resources, facilities, or equipment described in the E-plan does not constitute a change to the E-plan unless the E-plan was revised to reflect the change. Nonetheless, if the resources, facilities, and equipment were not maintained as described in the approved E-plan to the extent that the effectiveness of the plan is not maintained, a violation of 10 CFR 50.54(q)(2) is involved. Such a violation does not impact the ability of the NRC to perform its regulatory oversight. Absent another reason to treat the violation under traditional enforcement, the violation is treated under ROP.

A licensee's failure to notify the NRC of a declared emergency as required by 10 CFR 50.72(a) or to make follow up notifications during the course of the event as required by 10 CFR 50.72(c) is a violation that impacted the ability of the NRC to perform its regulatory oversight and would be processed under traditional enforcement.

Note: Licensees are required by NRC regulations at 10 CFR 50.47(b)(5) and Section IV.D of Appendix E to 10 CFR Part 50 to have the capability for notifying local, State, and Federal officials and agencies after declaring an emergency. Since the notification of the NRC is addressed in 10 CFR 50.72(a) and (c), "Federal" refers to those Federal agencies, other than the NRC, that the licensee may be required to notify (e.g., the commandant of a military base located within the emergency planning zone (EPZ), the Environmental Protection Agency, etc.). The failure of the licensee to make the required notifications during an actual emergency is a failure of the licensee to follow its emergency plan, a non-

- compliance with 10 CFR 50.54(q)(2). Absent another reason to treat the violation under traditional enforcement, the violation is treated under ROP.
- 3. A licensee's failure to make reports to the NRC of any event that results in a major loss of emergency assessment, offsite response, or offsite communications capabilities is a violation of 10 CFR 50.72(b)(3)(xiii) that impacted the ability of the NRC to perform its regulatory oversight and would be processed under traditional enforcement.

Note: The underlying condition that was not reported may be a separate issue of concern involving 10 CFR 50.54(q)(2) and would be processed under ROP.

- 4. A licensee's failure to make submittals to the NRC as required by the regulations identified below impacts the ability of the NRC to perform its regulatory oversight and would be processed under traditional enforcement.
 - (a) 10 CFR Part 50.54(q)(5) report of changes made under 10 CFR Part 50.54(q)(3)
 - (b) 10 CFR Part 50, Appendix E, §IV.B.2 change to entire emergency action level scheme
 - (c) 10 CFR Part 50, Appendix E, §IV.4, 5, 6, 7 evacuation time estimate submittal
 - (d) 10 CFR Part 50, Appendix E, §V changes to implementing procedures

Note: A licensee's failure to submit a biennial exercise scenario as required by 10 CFR Part 50, Appendix E, Section IV.F.2.a, b, does not impact the ability of the NRC to perform its regulatory oversight since the inspector will identify this failure when performing inspection preparation for the exercise. See IP 71114.01, "Exercise Evaluation," Sections 02.01 and 03.01.

b. Is there a violation that resulted in actual safety or security consequences? (See Table 3 of the appendix for comparative examples.)

Note: The objective of EP is to provide for reductions of the consequences of a radiological emergency through the implementation of protective actions. Accordingly, only if the licensee's non-compliance prevented adequate protective measures can there be actual safety consequences to the public in the form of increased radiation exposures that might have been prevented had the appropriate protective action been recommended in a timely manner. For EP cornerstone, this can only occur during an actual General Emergency.

1. The following establishes a threshold, based on the above, for violations that could result in actual safety or security consequences:

During an actual General Emergency, a licensee's inaccurate protective action recommendation, or lack thereof, directly results in OFFSITE RESPONSE ORGANIZATIONS (ORO's) implementing inappropriate protective actions which are ineffective in providing for the public health and safety.

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- 2. Inspectors must evaluate all EP violations identified during an actual General Emergency against the above threshold.
- 3. Relevant issues of concern could include:
 - (a) Failures to properly classify and declare a General Emergency,
 - (b) Failures to notify the OROs of General Emergency declaration,
 - (c) Failures to perform adequate accident assessment needed for protective action recommendation (PAR) decision making, and,
 - (d) Failures to provide an adequate PAR to the OROs, to the extent that the above threshold is exceeded.
- 4. All other violations identified during an actual emergency are treated under ROP absent another reason to treat the violation under traditional enforcement.

Note: An ORO's failure to properly act on an adequate and timely licensee's PAR is not a violation on the part of the licensee. The Federal Emergency Management Agency (FEMA) is responsible for pursuing such failures with the OROs. Although a State may implement anticipatory protective actions at a Site Area Emergency (e.g., closing parks and recreational facilities, early closure of schools, etc.), the licensee is not required to make PARs prior to a General Emergency.

02.02.02 Block 2 – Is There a Performance Deficiency

Note: Use the information in this section to inform your decisions regarding Block 2 and the applicable additional guidance in IMC 0612 Appendix B.

- a. Although NRC regulations require the execution of drills and exercises and require that WEAKNESSES be identified in a CRITIQUE and be corrected, the regulations do not require that the EMERGENCY RESPONSE ORGANIZATION (ERO) performance be free of error. Accordingly, an ERO performance WEAKNESS observed during a drill, exercise, or training does not violate any regulation or standard and, therefore, is not a performance deficiency (PD) or violation and does not require documentation in an inspection report. However, following are PDs because they involve a noncompliance that was within the licensee's ability to foresee and correct:
 - 1. The licensee failed to identify a WEAKNESS during a CRITIQUE, or complete corrective actions as required by 10 CFR Part 50, Appendix E, Section IV.F.2.g.
 - 2. The licensee or inspector determines that the WEAKNESS was due to a deficiency in the E-plan, the E-plan implementing procedures, ERO training, or emergency response facilities and equipment (i.e., licensee failed to maintain the E-plan as required by 10 CFR 50.54(q)(2)).
- b. The licensee is not required by NRC regulations to develop and maintain offsite preparedness. Offsite preparedness is a responsibility of State and local authorities and is evaluated by the FEMA. The licensee, as a private concern, has no control over

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the activities of those public entities. Accordingly, offsite EP issues are not PDs, even if the licensee developed the offsite response plans pursuant to 10 CFR 50.47(c).

- c. The following are requirements and self-imposed standards applicable to the EP Cornerstone:
 - 1. The approved E-plan,

Note: The submittal of an acceptable E-plan is a license application requirement. Once the license is issued, the licensee is required by license condition 10 CFR 50.54(q)(2) to follow and maintain the effectiveness of an E-plan that meets the requirements in 10 CFR Part 50 Appendix E and the planning standards of 10 CFR 50.47(b). Accordingly, the E-plan is a "requirement" as used in the definition of a PD.

- 2. 10 CFR 50.47(b),
- 3. 10 CFR Part 50, Appendix E, Sections IV, V, VI,
- 4. 10 CFR 50.54(q),
- 5. 10 CFR 50.54(t), and,
- 6. The FEMA approved final Alert and Notification System (ANS) design report, a self-imposed standard for licensees who have assumed responsibility for the maintenance and testing of the ANS on behalf of State or local officials.

Note: Licensees are required by 10 CFR Part 50, Appendix E, to demonstrate that administrative and physical means have been established for alerting and providing prompt instructions to the public. Many licensees have assumed responsibility, as agents of the States in their respective EPZs, for the performance of maintenance and testing of the public ANS identified in the site's FEMA Final ANS Design Report.

Note: Since FEMA evaluates and approves ANS designs, NRC will solicit input from FEMA regarding the significance of a licensee failure to maintain the ANS as described in the FEMA Final ANS Design Report.

- d. Licensees are required by 10 CFR Part 50, Appendix E, Section IV.D.3 to have the capability to make notifications to State and local government agencies within 15 minutes of an emergency declaration and to have established that capability in their E-plan. During an actual radiological emergency, a licensee may not be able to contact such an agency within 15 minutes for reasons that are not reasonably within the ability of the licensee to foresee or correct. This inability would not be a PD. However, if the reason for the delay was reasonably within the ability of the licensee to foresee and correct, the delay would be a PD.
- e. Licensees are required by 10 CFR Part 50, Appendix E, Section IV.C.2 to have the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators. However, the rule language does provide for a delay in classification during an actual event if doing so was necessary for

the implementation of response actions deemed by the licensee to be necessary to protect public health and safety. This provision was added to address unanticipated circum-stances that might arise. Such a delay would not be a PD. However, a delay in making a required declaration that was reasonably within the licensee's ability to foresee and correct (e.g., insufficient shift staffing), should be treated as a PD.

f. An unplanned outage of emergency facilities, systems, and equipment relied upon in the E-plan is not a PD unless it can be shown that the licensee could have foreseen and prevented the outage (e.g., missed or ineffective maintenance). However, the licensee's failure to take timely action to restore the capability or to implement COMPENSATORY ACTIONS necessary to maintain the effectiveness of the E-plan as required by 10 CFR 50.54(q)(2), is a PD.

<u>Table 1</u> <u>Improper E-Plan Change Examples</u>

Reduced the Effectiveness of the Licensee's E-plan	Impeded the NRC Oversight of the Licensee Performance	
Issue of concern involving 10 CFR 50.54(q)(2).	Issue of concern involving 10 CFR 50.54(q)(4).	
Seismic instrumentation relied upon in the EAL scheme was retired invalidating an EAL. No compensatory changes made to E-plan.	Licensee changed EAL scheme to use alternative method of assessing a seismic event that could not be performed 24/7, resulting in a reduction in effectiveness. Licensee did not obtain prior NRC approval of a license amendment.	
After implementing a change to its EAL scheme, it was determined that the calculation, upon which the threshold was based, was in error having the effect of rendering the EAL ineffective. It cannot be shown that the licensee knew or should have known, of the error.	Licensee implemented a revised EAL threshold for which the 10 CFR 50.54(q)(3) analysis did not recognize that the change would reduce the effectiveness of the E-plan. Licensee did not obtain prior NRC approval of a license amendment.	
An EAL threshold based on values in an EOP was rendered ineffective when the EOP was revised and the EAL was not.		
Offsite volunteer fire company identified in the E-plan for onsite response disbanded. No compensatory changes made to E-plan.	Offsite volunteer fire company identified in the E-plan for onsite response disbanded. Licensee changed the E-plan to refer to another fire company having a substantially longer response time, resulting in a reduction in effectiveness. Licensee did not obtain prior NRC approval of a license amendment.	

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<u>Table 2</u> <u>Failure to Notify Examples</u>

Failure to Follow the E-plan	Failure to Make a Required Report to the NRC	
Licensee fails to make an emergency notification to one or more State or local OROs as required by Section IV.D of Appendix E to 10 CFR Part 50.	Licensee fails to make a report of an emergency declaration to the NRC, as required by 10 CFR 50.72.	
Licensee fails to maintain the readiness of the Emergency Response Data System (ERDS).	Licensee fails to activate the ERDS within 1 hour after declaring an Alert or higher emergency.	
Licensee's E-plan does not provide for staffing of the emergency notification system (ENS) or health physics network (HPN) upon request.	Licensee fails to maintain an open, continuous communication channel with the NRC Operations Center when requested.	

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<u>Table 3</u> <u>Actual Safety Consequence Examples</u>

Failure to Follow the E-plan	Actual Safety Consequences	
During an actual General Emergency, licensee failed to dispatch field monitoring teams.	During an actual General Emergency, licensee fails to make an adequate and timely protective action recommendation to the OROs.	

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ATTACHMENT 1 Revision History for IMC 0612, Appendix G

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre- Decisional, Non- Public Information)
N/A	ML13112B000 09/09/13 CN 13-020	Initial issue. Commitments reviewed for the last four years and found none.	No	ML13225A070
N/A	ML20351A258 02/24/21 CN 21-010	Five-year periodic review. Reformat to current template per IMC 0040, "Preparing, Revising, and Issuing Documents for the NRC Inspection Manual", dated 07/23/2020.	No	N/A