

Staff Response to Takeaways From April 3 Public Meeting

ANS Reporting Criteria

As noted in §3.2.13 of NUREG-1022, the NRC staff has not previously specified a numeric threshold for reporting ANS outages because the threshold needed to be site-specific. The guidance also provides that the NRC expects licensee's to establish thresholds that reflect the EPZ-specific population density and distribution, location of alerting devices, and overlap in the coverage of adjacent sirens. A loss of 10% of the sirens in an area with high population density would likely be more significant than a loss of 50% of the sirens in a low population density area. The loss of 100% of the sirens in a low population density area may only impact a small percentage of the population, but a loss of 10% of the sirens in a high population density area could impact more than 25% of the EPZ population.

However, the staff is reconsidering its earlier stance. The staff has determined that establishing a numeric threshold would not be an extension of §3.2.13, because "...large segment of the population..." is currently not defined. Further, the staff could accept a numeric threshold that equated to 25% of the population of the EPZ, provided that NEI 13-01 provided for a viable, reliable, site-specific method to correlate the number or sirens (tone alert radios, or other approved alerting means) to 25% of the population. The correlation must reflect the site-specific population density and distribution. It would not be acceptable to simply divide the population in the entire EPZ by the number of alerting devices to arrive at this correlation, as it is unlikely that this approach would reflect the actual population density and distribution for the majority, if not all, sites.

The staff has been willing to accept alternate capabilities for performing emergency assessment and communications when those capabilities were part of the approved emergency plan. This is because the alternatives usually provide a reasonably comparable capability for completing the function. However, the backup alerting means at a majority of sites was not designed to meet the Appendix E §IV.D.3 performance objective of "having the capability to essentially complete the initial alerting and notification of the public... ..within about 15 minutes." This dichotomy was deemed acceptable given that the backup alerting means requirement was created to ensure that an alerting means was available during a radiological emergency should the primary system become unavailable during an emergency. This would not be acceptable for a longer term planned or unplanned outage of the primary system as the effectiveness of the emergency plan would be reduced.

The staff notes that the planned outages of the primary ANS are capped in NUREG-1022 at 24 hours, after which the condition must be reported. However, no such cap exists for an unplanned loss and the loss may never be reported as the licensee continues to rely on the backup alerting means for an indeterminate period. The NRC would need to discuss, with FEMA, the impact of the extended outage on their reasonable assurance finding. The NRC must be aware of longer term outages so that this communication and oversight can occur. Accordingly, the NRC believes that the unplanned outage of the primary ANS longer than one hour needs to be reported, regardless of the availability of a backup. Please address this in your guidance.

Time of Discovery for 10 CFR 50.72(b)(3)(xiii) Reports

The staff agrees with the discussion in NEI-13-01 regarding time of discovery.

Additional Comments

The following section provides comments that were received following the April 3 meeting.

1. With regard to the Executive Summary and elsewhere, words such as “*should*,” “*may*,” “*urged*,” and similar terms are used. Although the staff understands that such language is needed in a guidance document to provide for site-specific differences, the staff believes that a caveat is necessary in the document to make the developer aware that significant deviations from the endorsed document may expose the licensee to the risk of enforcement actions. In reviewing licensee EAL schemes, the NRC evaluates differences and deviations from the endorsed document prior to find the EAL scheme acceptable; the NRC has not proposed requiring prior staff review for RALs.
2. The NEI document includes phrases such as, “...*as described in NUREG-1022...*,” when the cross-reference may not provide the information that is suggested, i.e., a circular reference is created. It may be, in these cases, that the lacking information should be added to NEI 13-01. Please reconsider these references.
3. On Page 12, an “alternate ERF” is identified as an acceptable ERF. The staff suggests that this phrase warrants some clarification in the developers notes so everyone is on the same page. The staff is of the opinion that, as a minimum, the alternate TSC needs to meet the requirements in Appendix E, Section IV.E.8.a, and the alternative EOF needs to meet the requirements in Appendix E, Section IV.E.8.c, as a minimum. NEI 13-01 should be clear that alternative facilities established for hostile actions by Appendix E, Section IV.E.8.d will not likely satisfy these requirements.
4. In the developer’s note for RAL 3.3.(2) the reference to AOPs and EOPs is inconsistent with NUREG-1022, which limits this applicability to instruments that are relied upon in other station procedures that provide input to the E-plan. There may be procedures other than AOPs and EOPs that provide such input, and not all AOPs and EOPs may provide such input. For example, if the emergency plan relies upon a Core Damage Assessment Manual as providing data to dose assessments, then the instruments relied upon in that manual would be applicable. Please expand the discussion to reflect this.
5. The developer notes for RAL 3.2.(2), tend to imply that the developer should list the primary ANS components, or combination of components without regard to how this listing would reflect a criterion based on the population affected, rather than the number of devices out-of-service. If a correlation between population and alerting devices is developed, then RAL logic needs to reflect this.

6. In RAL 3.2.(1).b. 1, 2, 3, 4, The staff is uncomfortable with the language, “*An ORO has provided information...*,” “*Information has been received...*” as it could be interpreted that the licensee can passively wait on that information. The NRC expects that, once the licensee has learned of the significant natural hazard by whatever means, the licensee will initiate monitoring of the impacts of that hazard, including reaching out to ORO, and other parties, and that once the impacts have been identified, the 8-hour reporting period commences. The NRC believes that licensees typically have severe weather or flooding abnormal operating procedures that already provide for this monitoring for onsite equipment. This needs to be made clear.
7. Table C on Page 19, isn't this an unnecessary complication? The ERDS could never impact the licensee's program. Loss of ENS is already addressed in Table A.
8. On Page 1, the first numbered paragraph. While the staff agrees with credit for such alternative EALs, a consideration that we have not always raised should be evaluated. What indication or condition would trigger the sample to be taken? This is a lot easier to justify if, when the primary instrument does down, a periodic sampling regime started. In some cases, the accident monitor T/S call for implementation of a preplanned alternative. As the staff understands the process, the INPO “equipment important to EP” initiative has licensees identifying these alternatives in advance. Consider addressing this in the bases or developer notes.