

EPFAQ 2012-007 Draft Response

Question:

NSIR/DPR-ISG-01 section IV.G, Challenging Drills and Exercises, page 30 and 31 states: “All ERO teams (not necessarily each individual) shall be provided the opportunity to develop and maintain key emergency response skills within the scope of their duties during each exercise cycle. Additionally, the ERO (not necessarily each ERO team) shall be provided the opportunity to demonstrate key skills in response to the following scenario elements in drills or exercises during each exercise cycle. Drills are considered to be performance-enhancing experiences (exercises, drills, functional drills, tabletop drills, mini-drills, etc.) that reasonably simulate the interactions between appropriate ERFs and/or individuals that would be expected to occur during emergencies. Response to essentially 100 percent of initiating conditions identified in the site emergency plan implementing procedure for classification of emergencies.”

Licensees typically use a range of methods for developing proficiency and evaluating the performance of personnel. Methods such as Job Performance Measures (JPMs), Task Performance Evaluations (TPE), Out of the Box Evaluations (OBE), etc. are used routinely in accredited training programs to evaluate an individual’s ability to perform technical, complex and/or time critical tasks under conditions reasonably simulating the conditions normally experienced during performance of the actual task or job. These evaluations are administered, evaluated and critiqued with the rigor required of an accredited nuclear training program to include being used in the administration of NRC initial licensed operator exams. The guidance as written does not clearly include or exclude the use of these evaluation tools as performance enhancing experiences. Additionally, the guidance does not address whether the drills used to demonstrate “Response to essentially 100 percent of initiating conditions identified in the site emergency plan implementing procedure for classification of emergencies” must be included in the Drill and Exercise Performance (DEP) indicator.

Proposed Solution:

Any classification opportunity that counts for DEP performance indicator credit satisfies the cyclic demonstration provision of NSIR/DPR-ISG-01 section IV.G regarding “[r]esponse to essentially 100 percent of initiating conditions identified in the site emergency plan implementing procedure for classification of emergencies.” In addition, a performance evaluation tool such as a JPM, TPE, OBE, etc., which would not be credited for the DEP performance indicator, may be used to satisfy this cyclic demonstration provision as long as it is a performance-enhancing experience that reasonably simulate the interactions between individuals in an ERF that would be expected to occur during emergencies.

NRC Response:

NRC can accept the proposed solution in part.

The ISG identifies minimum program elements and methods necessary to maintain key skills in emergency plan implementation. Other methods may be used by licensees to maintain key skills but the basis for such methods should be documented and provided upon request to support compliance with 10 CFR 50.47(b)(14). The ISG recommends that performance opportunities for essentially all initiating conditions be provided to the ERO during an exercise planning cycle. The NRC expects that there will be many performance opportunities for classification in drills.

There are approximately 50 initiating conditions (IC) applicable to a plant. Specific opportunities for the Emergency Director judgment ICs are not expected to be included in scenario design, but these ICs may indeed be practiced over the course of a planning cycle. It is understood that routine drill scenarios may not easily provide opportunities for some of the ICs, e.g., cold shutdown. Opportunity for these ICs might be provided in mini drills or table top drills.

The intent of this portion of the guidance is that various segments of the ERO be provided opportunities to maintain the classification key skill. The NRC expects that over an 8 year planning cycle a typical drill and exercise program will have perhaps 100 or more classification opportunities. While JPM, TPE or OBE programs could contribute to the skill of the participant, they tend to be a one-on-one experience. Drills are accepted as performance enhancing experiences when they reasonably simulate the interactions between appropriate ERFs and/or individuals that would be expected to occur during emergencies. A one-on-one experience does not simulate the emergency response.

Clearly any performance enhancing experience that reasonably simulates the interactions between appropriate ERFs and/or individuals and contributes to the DEP performance indicator is an acceptable opportunity to maintain the key skill of classification.

Other performance enhancing experiences that reasonably simulate the interactions between appropriate ERFs and/or individuals may also contribute to maintenance of the key skill of classification if:

- Performance is critiqued in accordance with Appendix E to 10 CFR 50.47 Section IV.F.3.g and
- Records of the scenario, EAL tested, participants, performance results, critique and corrective actions, if any, are kept available for inspection until the first program inspection after close of the exercise planning cycle.

One-on-one experiences such as JPMs, would not be appropriate for maintaining the key skill of classification.