



**FEMA**

# **Radiological Emergency Preparedness**

## **Exercise Scenario Task Force**

### **Summary of Focus Group Stakeholder Comments**

**September 2008**

Prepared By:



This page is intentionally left blank.

## **Table of Contents**

<b>Table of Contents</b> .....	1
<b>Administrative Information</b> .....	3
<b>General Information</b> .....	5
<b>Schedule of Focus Group Meetings</b> .....	6
<b>Stakeholder Participation</b> .....	7
<b>Summary of Issues Identified</b> .....	8
<b>Participant Feedback on Focus Group Process</b> .....	31

This page is intentionally left blank.

## ***Administrative Information***

The title of this document is the Federal Emergency Management Agency (FEMA)/Nuclear Regulatory Commission (NRC) Exercise Scenario Task Force – Summary of Focus Group Stakeholder Comments.

Points of Contact (POC):

### ***FEMA***

#### **Craig Fiore**

Deputy Chief, Radiological Emergency Preparedness Branch,  
Federal Emergency Management Agency  
703-605-4218  
[craig.fiore@dhs.gov](mailto:craig.fiore@dhs.gov)

### ***NRC***

#### **Joseph D. Anderson**

Chief, Security Interface and Outreach Branch  
Division of Preparedness and Response,  
Office of Nuclear Security and Incident Response,  
Nuclear Regulatory Commission  
301-415-4114  
[joseph.anderson@nrc.gov](mailto:joseph.anderson@nrc.gov)

This page is intentionally left blank.

## **General Information**

### **Mission**

The Federal Emergency Management Agency (FEMA)/Nuclear Regulatory Commission (NRC) Exercise Scenario Task Force was tasked to recommend potential changes to enhance existing radiological emergency preparedness (REP) exercise scenarios and engaging REP program stakeholders. These scenarios are used in conducting training and evaluation of emergency response capabilities of commercial nuclear power plants and the communities located in the emergency planning zones (EPZs) surrounding these nuclear plants. A key aspect of the Task Force's activities dealt with then proposed introduction of hostile action-based scenarios into the REP exercise cycle.

The goal of FEMA and the NRC is to make REP exercises more realistic, more challenging, and less predictable. FEMA and NRC leadership created the Task Force to examine three potential areas for improvement. The Task Force has identified and focused its proposed changes to the REP Program in these areas:

1. Reducing response organizations' exercise pre-conditioning by identifying means of avoiding the predictability of exercise events and timing.
2. Enhancing REP response capabilities based on post 9/11 security initiatives by introducing hostile action-based (HAB) scenarios into the REP exercise cycle.
3. Providing for options to vary the amount and type of simulated radioactive releases during exercise play.

### **Scope**

The Task Force conducted focus groups in each FEMA Region, with the exception of Region VIII, to solicit stakeholder feedback on recommendations to enhance REP exercise scenarios to enhance realism, decrease predictability, and introduce HAB events into REP exercises. These enhancements were provided to stakeholders as part of recommended changes to the REP Program Manual to provide context and were not part of a formal revision. Task Force recommendations and focus group comments are intended only for consideration by FEMA and NRC staff in the development of proposed changes to REP exercise requirements and guidance, which would be published in the Federal Register for formal public comment.

This document serves to summarize stakeholder comments received as part of the Focus Groups and provide feedback to REP program stakeholders. Additionally, information is provided textually and graphically on the number of participants and the organizations represented throughout the process.

The Focus Group process was designed to allow for multiple periods of stakeholder comment. Regions were asked to identify one or more opportunities to gather the greatest number of stakeholders possible in one location and meetings were scheduled at these times. Some regions

required several meetings to allow for an appropriate level of input and this is reflected in the meeting schedule.

Focus groups were presented with a copy of the proposed exercise scenario enhancements, and comments and suggestions were solicited during the meetings. Following Focus Group meetings, the Task Force met to discuss comments from each group.

### ***Schedule of Focus Group Meetings***

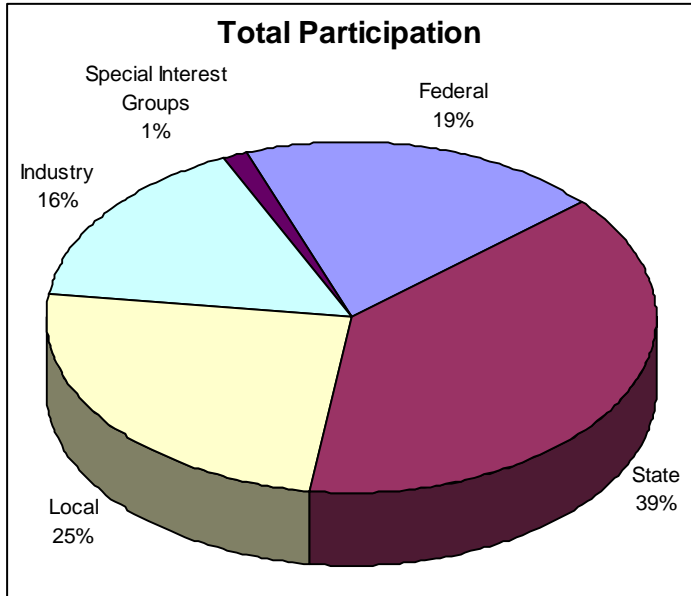
A total of twenty Focus Group meetings were held during this process. The table below indicates the FEMA region participating and the State within that region that hosted the meeting.

<b>FEMA Region</b>	<b>Date</b>
Region I: TriState Meeting (Fairlee, VT)	5/6
Region II: TF Focus Group (Albany, NY)	7/24
TF Focus Group (West Trenton, NJ)	8/5
Region III: TF Focus Group (Reisterstown, MD)	6/18
Region IV: FL REP Conference (Destin, FL)	6/17
TF Focus Group (Chattanooga, TN)	7/18
TF Focus Group (Forsyth, GA)	7/30
TF Focus Group (Charlotte, NC)	8/13
TF Focus Group (Pearl, MS)	8/19
Region V: Michigan REP Conference (Silver Lake, MI)	6/24
Ohio Quarterly REP Meeting (Mentor, OH)	7/10
WI REP Meeting (Madison, WI)	8/6
Illinois TF Meeting (Morris, IL)	8/12
MN REP Meeting (St. Paul, MN)	8/20
Region VI: Regional Meeting (Denton, TX)	5/28
Region VII: Regional RAC Meeting (Kansas City, MO)	8/7
Region IX: SONGS Meeting (Rosemead, CA)	5/14
Diablo Canyon Meeting (San Luis Obispo, CA)	5/15
Palo Verde Meeting (Phoenix, AZ)	7/30
Region X: Regional RAC Meeting (Pasco, WA)	5/21



## Stakeholder Participation

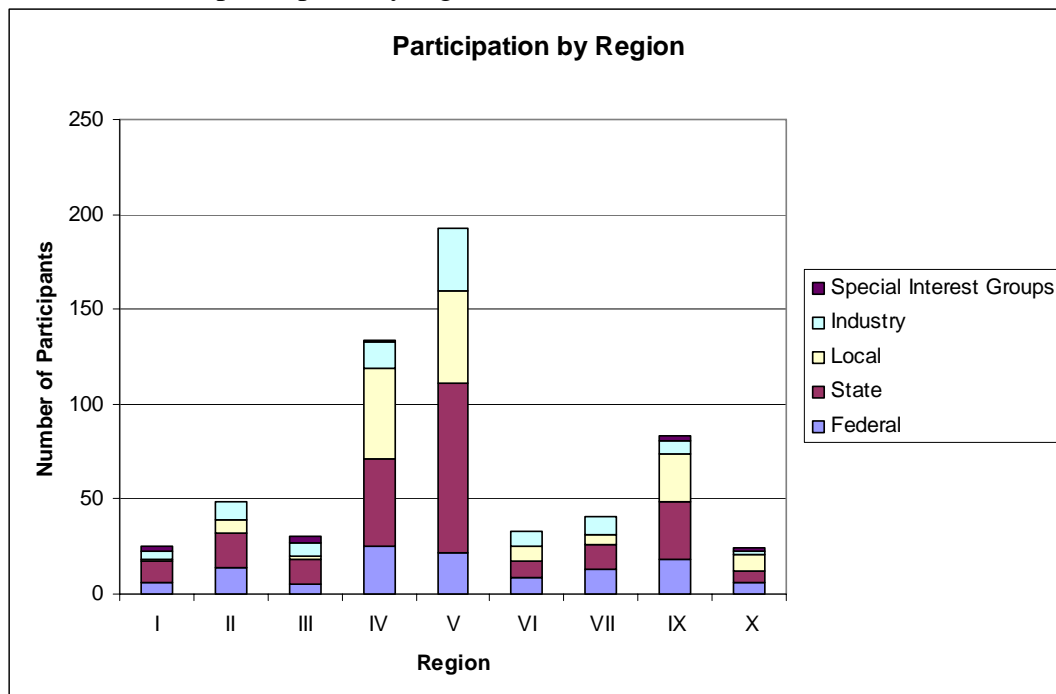
The Task Force encouraged participation of various stakeholders, including Federal, State, local, industry, and special interest groups (e.g., Nuclear Energy Institute, International Association of Emergency Managers, National Emergency Managers Association). The diversity of Focus Group attendees ensured that the Task Force proposed enhancements were thoroughly reviewed and considered.



In total there were 612 participants in 20 Focus Groups and participants consisted of 19% Federal, 39% State, 25% local, 16% industry, and 1% special interest group representation. Numbers of participants varied regionally and some regions held more than one session to accomplish the task at hand.

Stakeholders provided 1557 comments for the Task Force to consider.

A breakdown of participants by region is included below.



## *Summary of Issues Identified*

The following pages summarize feedback on the Task Force proposed enhancements from stakeholders that participated in the 20 Focus Groups conducted from May-August 2008. Focus Groups were convened in each FEMA Region (with the exception of Region VIII, as it has no operating nuclear reactors).

The Task Force has reviewed feedback received and incorporated suggestions into the changes it is proposing to the RPM. A brief description of how the Task Force has addressed issues raised in the Focus Group is included at the end of each issue.

The Task Force assigned comments received to one of the following categories, based on REP Program Manual contents:

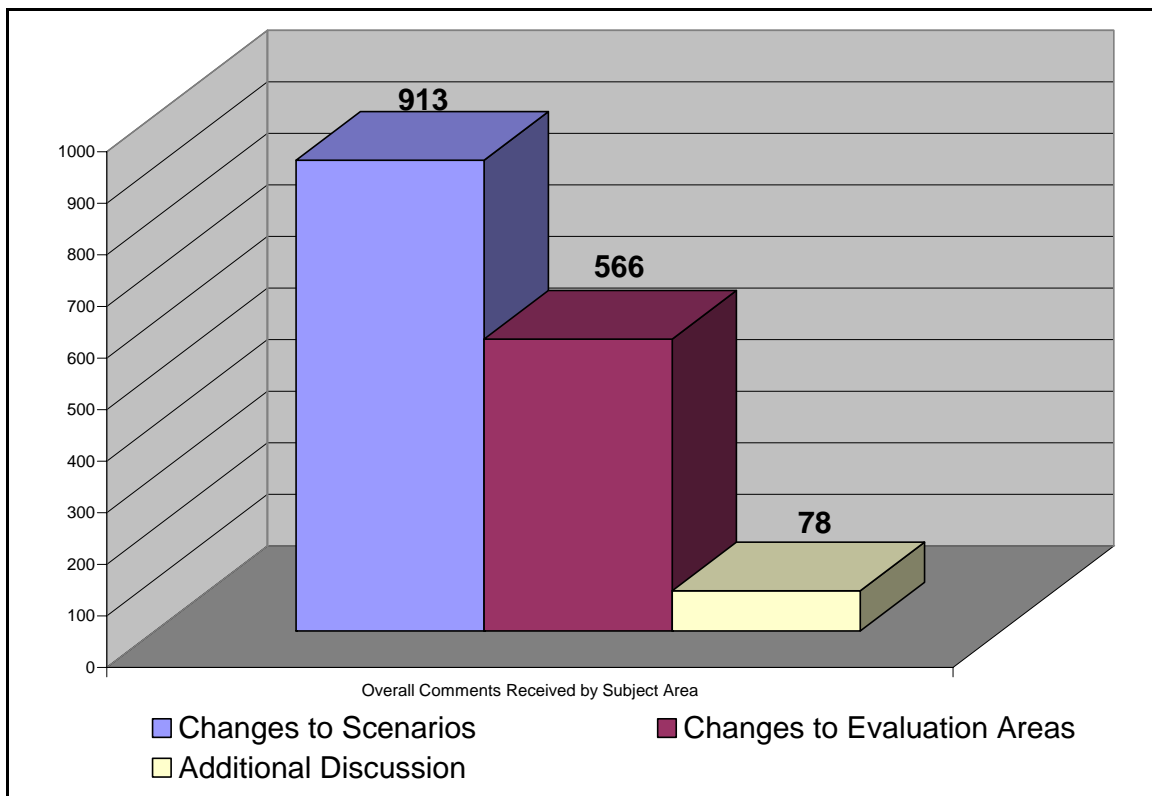
<b>Scenario Changes</b>		
	Rapid Escalation of ECLs and the GE Requirement	Page 11
	Requiring varying release options/Allowing no-release scenario	Page 13
	Allowing varying release and metrological conditions	Page 14
	Incorporating all-hazards into REP exercises	Page 15
	Requirements for HAB scenarios	Page 16
	Implementation of TF Changes	Page 17
<b>Evaluation Criteria Changes</b>		
1.a	Mobilization	Page 19
1.c	Direction & Control	Page 20
1.d	Communications Equipment	Page 21
1.e	Equipment and Supplies to Support Operations	Page 22
2.a	Emergency Worker Exposure Control	Page 23
2.b	Dose Assessment and Protective Action Recommendations and Decisions for the Emergency Phase	Page 24
2.c	Protective Action Decisions Consideration for the Protection of Special Populations	Page 26
3.d	Implementation of Traffic and Access Control	Page 27
4.a	Plume Phase Field Measurements and Analyses	Page 28
5.a	Activation of the Prompt Alert and Notification System	Page 29
5.b	Emergency Information and Instructions for the Public and the Media	Page 30

The following pages contain summaries of the comments received for each of these categories. These are intended to provide a snapshot of the types of issues that have been raised by REP stakeholders.

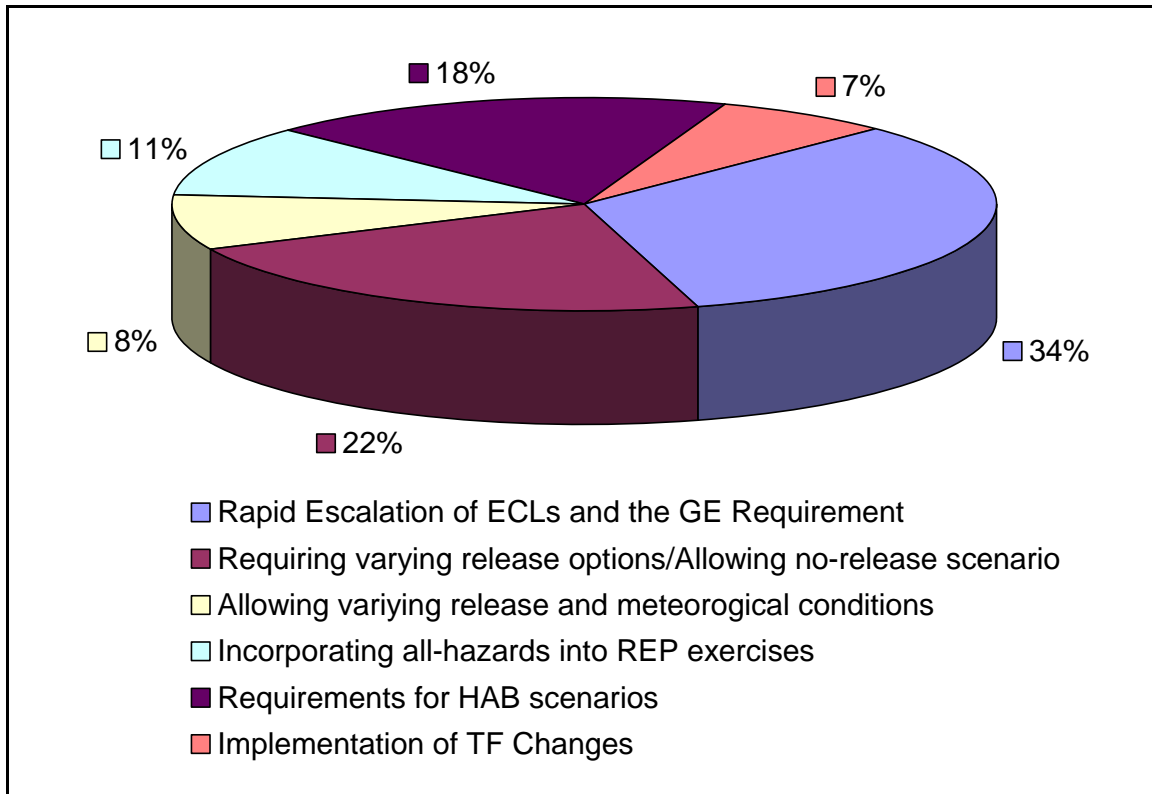
For additional information, contact Craig Fiore, Deputy Chief, Radiological Emergency Preparedness Branch, FEMA at 703-605-4218 or [craig.fiore@dhs.gov](mailto:craig.fiore@dhs.gov).

Overall, of the 1557 comments provided by stakeholders, the majority focused on proposed Task Force changes related to the scenario and evaluation areas.

- 913 comments addressed the proposed changes to scenario requirements. The Task Force has considerably altered the scenarios requirements based on stakeholder comments.
- 566 comments addressed changes to the evaluation areas. The Task Force carefully evaluated issues presented and has revised the RPM to focus on the coordination between onsite and offsite responders rather than the specific tactics.
- The majority of the 78 additional comments received focus on the introduction of the HAB scenario and the requirements for its use within the six-year exercise cycle. These issues were addressed in the appropriate sections within the RPM.



The majority of the comments received focused on rapid escalation of Emergency Classification Levels (ECLs), requirements for a General Emergency (GE) requirement, inclusion of HAB scenarios, and varying release options.



The next several pages provide summaries of the comments received on proposed changes to the REP scenario requirements.

## ***Recommended Enhancements (By Category)***

**Category**     Rapid Escalation of Emergency Classification Levels (ECLs) and the General Emergency Requirement

**Description**     Rapidly escalating scenario

**Number**     Comments Received on this Category of Scenario Changes: 303 (33%)

### **Primary Issues**

- Clarify whether it is required or optional that one exercise scenario per cycle should start at a Site Area Emergency (SAE) or rapidly escalate from Alert to an SAE.
- Define “rapid escalation.”
- Rapid escalation of ECLs decreases predictability and preconditioning in emergency response organizations.
- Some tasks may not be practiced/demonstrated when the scenario skips or quickly escalates through ECLs; this may require the use of more out-of-sequence (OOS) activities.
- Some tasks such as notification and mobilization may occur at locations other than an emergency operations center (EOC) when ECLs rapidly escalate; evaluators may need to use more interviews to obtain data on actions they did not observe.
- Existing RPM language already allows for rapid escalation of ECLs; requiring that rapid escalation be incorporated into the exercise cycle may cause greater exercise predictability.
- Predictability of scenarios is characterized by always reaching a level of GE, not the speed at which an event escalates ECLs.
- Rapid escalation may decrease opportunities for locals, States, and utilities to practice coordination at each of the ECLs.
- The proposed changes would require offsite response organizations (OROs) to develop and submit additional standard operating procedures (SOPs).
- “Rapid escalation of ECLs” scenarios may result in an increase in pre-positioned personnel or require demonstration of how quickly responders can get into position.
- Requiring a sustained response at any ECL would provide additional realism and challenges for the OROs.
- In some States there are legislatively required actions associated with ECLs; in these cases, skipping ECLs may further reduce opportunities to practice decision making.

**Category**      Rapid Escalation of ECLs and the General Emergency Requirement

**Description**    The Task Force recommended an enhancement that would allow scenario developers more flexibility in exercise design by allowing scenarios to not reach a General Emergency.

**Number**          Comments received on this category of scenario changes: 138 (15%)

**Primary Issues**

- Clarify the phrase “must generally reach a GE.”
- Benefits of not requiring scenarios to reach a GE:
  - Remaining at an SAE and not escalating to a GE is very realistic.
  - Counters preconditioning and negative training by removing the current expectation that all real world events will reach a GE.
  - Forces participants to respond to the scenario, rather than fulfill a predetermined sequence on a checklist.
  - Reassures the public that not every incident at a nuclear power plant will escalate to a GE.
- Drawbacks of not reaching a GE:
  - If a scenario does not reach a GE, some key elements of REP plans (e.g., decision making, evacuation, dose assessment, public information) might not be demonstrated without additional injects, out-of-sequence drills, and/or interviews.
  - Staff turnover in OROs is high; if the scenario does not progress to a GE, participants will not have the opportunity to practice the full range of their roles and responsibilities at each of the ECLs.
  - Participants who are responsible for tasks that mostly occur at a GE may be reluctant to participate in future exercises if the scenario does not escalate to a GE.

**Category**     Requiring varying release options and allowing a no-release scenario

**Description**     The Task Force recommended enhancements to vary radiological releases, with the intent of reducing scenario predictability. An option was also discussed to exercise a no-release scenario, in which licensees and OROs would not be required to simulate a radiological release to the environment, although the scenario would include the potential for a release, which would necessitate consideration of a protective action decision (PAD).

**Number**     Comments received on this category of scenario changes: 204 (22%)

**Primary Issues**

- Stakeholders expressed concern that scenario predictability may remain constant or perhaps even increase with three scenario variations required in a six-year exercise cycle:
  - The “once per cycle” requirement for a no-release scenario
  - The 2-5 mile radiological release requirement
  - The 5-10 mile radiological release requirement
- A requirement to vary releases may force the NRC and FEMA to extend the exercise cycle beyond six years. If the cycle is extended, gaps in training may occur as a result of “normal” levels of staff (player) turnover.
- Stakeholders expressed concern that, in order to achieve a release that exceeds Environmental Protection Agency (EPA)-400 Protective Action Guidelines (PAGs) between five and ten miles of the site, the scenario will have to assume an unrealistic catastrophic failure of the nuclear power plant.
- Verification of a no-release is equally as important as verifying an actual release.
- Generally speaking, stakeholders advocated for more flexibility in developing scenarios; they perceive the proposed scenario requirements to be even more prescriptive than the current requirements.
- Stakeholders disagree as to whether or not Field Monitoring Teams would actually perform their prescribed functions and evaluation criteria under a no-release scenario.

**Category**     Allowing varying release and meteorological conditions

**Description**     The Task Force recommended enhancements to vary release and meteorological conditions between exercises to decrease scenario predictability and add realism.

**Number**     Comments received on this category of scenario changes: 76 (8%)

**Primary Issues**

- Clarify whether each of the named release and meteorological conditions are required or optional within the exercise cycle.
- Not all release or meteorological conditions are realistic at each site.
- Varying release conditions (e.g., puff vs. continuous) would test field monitoring teams' ability to verify a release or confirm the absence of a release.
- Use of real-time weather data would create more realistic and less predictable exercises; however, using only predominant wind conditions as a baseline to run exercises could leave some jurisdictions unprepared and un-exercised.
- Use of real-time weather data is not feasible. Scenarios must be developed and vetted months in advance of the exercise.



**Category**     Incorporating all-hazards into REP exercises

**Description**     The Task Force recommended enhancements to incorporate local hazards, natural events, and seasonal conditions to increase scenario realism and be consistent with other national preparedness initiatives (e.g., the National Incident Management System (NIMS), the National Response Framework (NRF), and the Homeland Security Exercise and Evaluation Program (HSEEP)).

**Number**     Comments received on this category of scenario changes: 99 (11%)

**Primary Issues**

- Clarify whether use of all-hazard events as initiating events is optional or a requirement.
- Incorporating seasonal conditions into the scenario, provided that they do not detract from the demonstration of REP functions, to add realism to exercise.
- All-hazard events variations would strengthen onsite and offsite capabilities; many sites already incorporate some natural phenomenon into exercise scenarios.
- All-hazard events should not overshadow traditional REP functions.
- OROs' top priority in a natural disaster (e.g., tornados, earthquake) would be protection of the public from the disaster rather than solely on the nuclear power plant.
- Evaluating ORO REP capabilities during all-hazards scenarios is unfair; mutual aid resources to implement REP functions may not be available under these circumstances.
- Clarify the policy on allowing OROs to incorporate additional exercise mandates into the REP Program.
- OROs should participate in scenario design to ensure all-hazards elements are realistic and consequences are appropriately projected to ensure all exercise criteria are met.

**Category**     Requirements for hostile action-based scenarios

**Description**   The Task Force recommended an enhancement to incorporate a HAB scenario into the REP exercise cycle to address the post 9/11 threat environment

**Number**        Comments received on this category of scenario changes: 168 (19%)

**Primary Issues**

- Clarify if a HAB scenario is required once every six years per site or per State.
- Clarify the difference between HAB exercises, force-on-force drills, and other proposed tactical law enforcement scenarios.
- Participants will be able to predict that an exercise will use a HAB scenario based on:
  - The significant increase of law enforcement participants for a HAB exercise
  - The other scenarios that have already been done within the cycle.
- During a HAB event, the nuclear power plant is likely to coordinate directly with local law enforcement; traditional REP response organizations may not get notified until after the event is resolved.
  - Plant lock-down during a HAB event may prevent the utility from sharing information with the OROs in a timely manner.
  - HAB scenarios may not provide enough opportunity for all EPZ OROs to demonstrate required criteria.
  - HAB scenarios would most likely involve just the immediate surrounding jurisdictions; some EPZ or host counties may not get exercised.
- During HAB events, incident command should be included in PAD-making; traditional REP protective actions (e.g., precautionary transfer of students) may not be appropriate, based on threat conditions.
- Onsite responders may not be familiar with how to coordinate and/or integrate with offsite incident command.
- Players will need training on responding to HAB scenarios before HAB scenarios are evaluated.
  - Additional responders (e.g., mutual aid, State, Federal) may not have radiological training.
  - Onsite and offsite coordination needs to be practiced before it is evaluated.
- Guidelines for releasing information to the public during HAB events need to be developed.
  - Incident command needs to be included in the information release process.
  - Minimum standards must be established for information to be released during HAB events.
- Additional participants (e.g., FBI, DHS) are needed to make HAB exercises realistic; these entities have not been very active in traditional REP exercises.
  - Plans and procedures for integrating these additional resources into HAB REP exercises have not been developed.
  - It is not realistic for Federal responders to arrive on-scene until 12-36 hours into an event; does the HAB scenario requirement imply longer exercises?
- The inclusion of additional participants will increase the costs associated with conducting exercises.

**Category**     Implementation of Task Force Changes

**Description**   The Task Force examined the use of injects in REP exercises based upon HAB and/or no-release scenarios. Particular attention was paid to identifying needs to drive exercise play for traditional REP functions during HAB and/or no-release scenarios. The Task Force also solicited and facilitated comments on the types of guidance, planning, and training that will be needed to effectively implement proposed changes to the REP Program Manual.

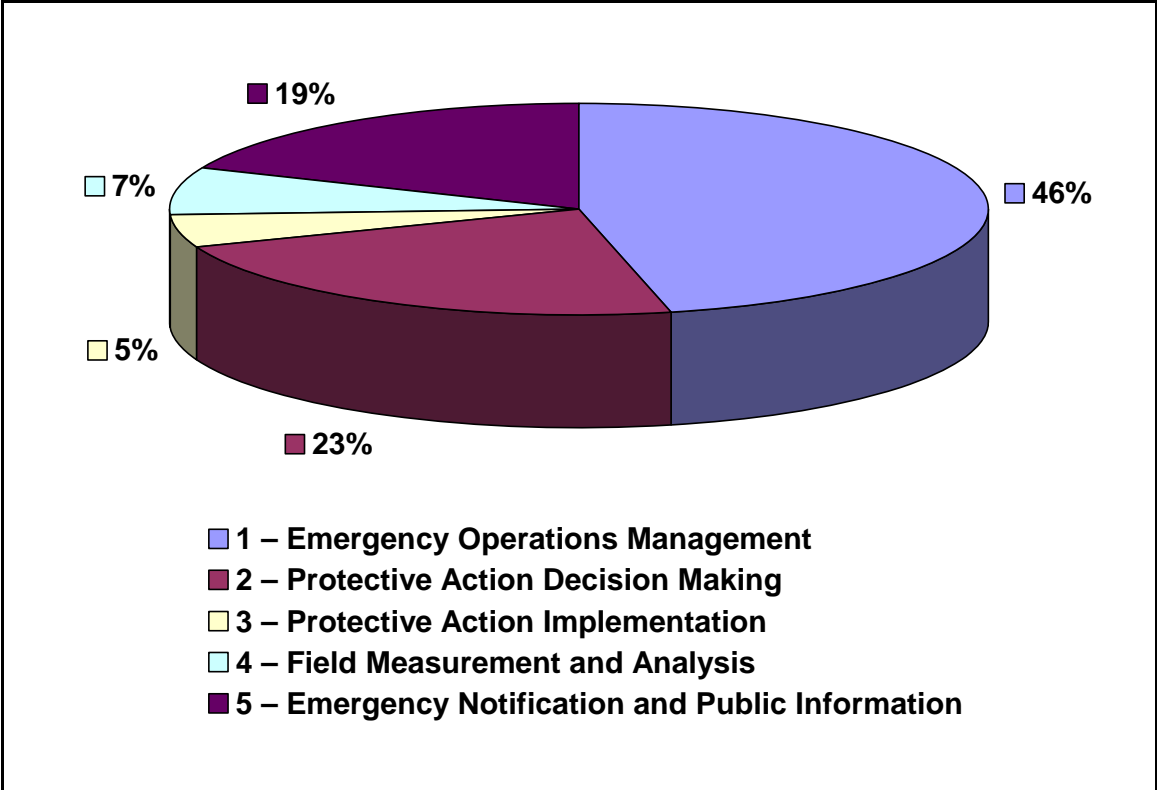
**Number**        Comments received on this category of scenario changes: 63 (7%)

**Primary Issues**

- The incorporation of NIMS and HSEEP concepts into REP is generally accepted as a near-term reality by the stakeholder community. Stakeholders feel that the integration of these concepts/programs is appropriate and will benefit the existing REP program and REP exercises.
- An increased use of injects during HAB or no-release scenarios may create significant confusion among players.
- Out-of-sequence (OOS) activities may be required to demonstrate and evaluate some traditional REP requirements.
- Introducing an increased number of injects for a HAB scenario will necessitate the incorporation of additional simulation and control capability.
- The introduction of HAB or no-release scenarios will require an increased presence of law enforcement at all levels as participants in REP exercises. This will require careful planning, training, and integration.
- The necessary skill sets and competencies for REP evaluators are becoming more diverse. The REP evaluator community will have to adapt and diversify as well to ensure that these are appropriately addressed.
- Stakeholders generally support the adoption of HAB and no-release scenarios into REP. However, they also advocate for time to reasonably incorporate the necessary elements of these scenario realities into all facets of their programs, primarily in planning and training, prior to any required demonstration or evaluation.
- Security requirements may preclude emergency responders, other than law enforcement and other security-related disciplines, from responding under a HAB scenario, until the site and surrounding area is determined to be secure.
- Planning guidance and NRC Emergency Planning (EP) rulemaking efforts must be coordinated with any changes to the REP Program Manual.

# Recommended Enhancements to FEMA Evaluation Areas

The majority of stakeholders were concerned with how incident command would be evaluated and its role in protective action decisions and public information.



The next several pages provide summaries of the comments received on proposed enhancements to exercise evaluation criteria, based on the REP Program Manual.

**Category**     1.a - Mobilization

*This sub-element is derived from NUREG-0654, which provides that Offsite Response Organizations (OROs) should have the capability to alert, notify, and mobilize emergency personnel and to activate and staff emergency facilities.*

**Description**   The Task Force proposed changes to the REP Evaluation Areas where necessitated by the incorporation of HAB scenarios. The focus of these changes is concentrated on three areas: 1) facilities unique to a HAB scenario; 2) traditional REP functions that might be short-staffed during a HAB scenario; and 3) whether OROs have plans or procedures in place to identify and request additional resources to backfill any potentially short-staffed REP functions during a HAB scenario.

**Number**        Comments Received on this Category of Evaluation Criteria: 121 (21%)

**Primary Issues**

- The impact and subsequent evaluation of an expanded and more complex incident command post (ICP) during HAB scenarios merits thorough analysis and consideration.
- The ICP would not necessarily be located at an EOC.
- Notification of HAB events may come from someplace other than the nuclear power plant.
- REP evaluators will need additional training to recognize and understand the full scope of incident command in terms of its integration into REP.
- Stakeholders identified a number of new facilities that may require evaluation components during a HAB event. These include incident command posts (ICPs) (in addition to and independent of more traditional EOCs), mobile ICPs, and resource staging areas.
- Stakeholders question how the REP program will approach evaluation of NIMS/ICS-specific components within a REP exercise.
- The activation of additional resources or mutual aid for backfill during a HAB scenario may be controlled by different agencies responsible for protective action decision-making.

**Category**     1.c – Direction & Control

*This sub-element is derived from NUREG-0654, which provides that Offsite Response Organizations (OROs) have the capability to control their overall response to an emergency.*

**Description**   The Task Force focused on how FEMA should evaluate the integration of offsite and onsite responders as part of the incident command structure. The Task Force also offered an opportunity for discussion of who is responsible for the direction and control of offsite responders once they arrive onsite at a nuclear power plant.

**Number**        Comments Received on this Category of Evaluation Criteria: 95 (17%)

**Primary Issues**

- Stakeholders identified a significant planning gap in that local, regional and site-specific plans do not currently include coordination of licensee actions with ORO incident command activities for non-traditional REP scenarios. If there is cause to suspect the potential of a concurrent radiological release or HAB incident, there is currently no mechanism in place to ensure the coordination of the HAB incident command with radiological incident command.
- During a HAB scenario, law enforcement will likely be the first response agency called or notified. A HAB scenario will also place law enforcement – and possibly military units – in the initial lead role, rather than emergency management. This will necessitate a major change in approach and evaluation criteria for REP exercise evaluation.
- Direction and control of ORO resources during a HAB scenario requires bi-directional communication between the ORO (including incident command) and the licensee. This bi-directional communication will also necessitate that OROs have the ability to initiate the communication and coordination process from outside of the nuclear power plant site.
- Stakeholders overwhelmingly agreed that evaluation of direction and control during a HAB scenario should focus on demonstration of coordination rather than on demonstration of specific actions or tactics.
- A HAB scenario will result in an increase in the number of required resources for a REP exercise. Within the REP Program, FEMA does not currently have the ability to evaluate these additional resources (tactical law enforcement actions, bomb squads, etc.). This will require further discussion and examination in terms of the agency’s authorization and qualifications to evaluate non-traditional REP players during a HAB scenario.

**Category**     1.d – Communications Equipment

*This sub-element is derived from NUREG 0654, which provides that Offsite Response Organizations (OROs) should establish and operate reliable primary and backup communication systems to ensure communications with key emergency personnel at locations such as the following: appropriate contiguous governments within the emergency planning zone (EPZ), federal emergency response organizations, the licensee and its facilities, emergency operations centers (EOCs), incident command posts (ICPs), and field teams.*

**Description**   The Task Force explored whether OROs have sufficient communications capabilities to coordinate with onsite responders and if there is a straightforward way to demonstrate communications protocols.

**Number**        Comments Received on this Category of Evaluation Criteria: 29 (5%)

**Primary Issues**

- Interoperability between law enforcement and traditional REP responders is an area that needs to be addressed for evaluation of HAB scenarios.
- EOCs have the capability to communicate with near-site and/or onsite ICPs, although these capabilities have not been readily trained to or exercised.
- Communications equipment is less of a concern than the communications links and pathways required to support a HAB scenario or event.
- Plans, processes, and protocols exist for the communications capabilities required to support a HAB scenario; however, these policies remain largely untested in exercise or real-world environments.

**Category**     1.e –Equipment and Supplies to Support Operations

*This sub-element is derived from NUREG-0654, which provides that Offsite Response Organizations (OROs) have emergency equipment and supplies adequate to support the emergency response.*

**Description**   The Task Force explored the challenges of providing dosimetry and KI to specialized response teams (e.g. SWAT, bomb squads, USAR) that may be needed during HAB scenarios, but are not currently identified within regional and site-specific plans and procedures. The Task Force also focused on how OROs should demonstrate radiological exposure control for non-traditional REP responders during exercises or OOS drills.

**Number**        Comments Received on this Category of Evaluation Criteria: 17 (3%)

**Primary Issues**

- Clarify who is responsible for providing dosimetry to additional resources that may be needed to respond to a HAB scenario.
- Passive dosimetry exists, although it is not calibrated to occupational exposure limits.
- OROs will likely have to utilize active dosimetry to appropriately monitor and follow occupational exposure limits.



**Category**     2.a – Emergency Worker Exposure Control

*This sub-element is derived from NUREG-0654, which provides that Offsite Response Organizations (OROs) have the capability to assess and control the radiation exposure received by emergency workers and have a decision chain in place, as specified in the ORO's plans and/or procedures, to authorize emergency worker exposure limits to be exceeded for specific missions.*

*Radiation exposure limits for emergency workers are the recommended accumulated dose limits or exposure rates that emergency workers may be permitted to incur during an emergency. These limits include any pre-established administrative reporting limits (that take into consideration Total Effective Dose Equivalent [TEDE] or organ-specific limits) identified in the ORO's plans and/or procedures.*

**Description**     The Task Force examined whether current ORO emergency worker exposure control processes are agile enough to allow for authorization (onsite or offsite) to exceed pre-authorized dose levels to support lifesaving and/or protection of valuable property associated with a HAB scenario.

**Number**            Comments Received on this Category of Evaluation Criteria: 57 (10%)

**Primary Issues**

- Training and integration of onsite and offsite responders with regard to emergency worker dose control is needed.
- Balancing and prioritization of the necessity for exposure control, when weighed against the immediacy of addressing a HAB event.
- Stakeholders expressed concerns over who retains authority to make command decisions and PADs during a HAB scenario for onsite and offsite resources.
- The difference between plant exposure limits and ORO responder exposure limits during a HAB scenario needs to be reviewed and addressed.
- Stakeholders expressed concern that the discussion of ORO exposure limits while onsite presumes a radiological release has actually occurred.
- Joint planning is required to identify whether OROs train and exercise for onsite exposure control or whether there is a requirement for just in time training of ORO response personnel when they arrive at the scene of an onsite emergency.

**Category**     2.b – Dose Assessment and Protective Action Recommendations and Decisions for the Emergency Event

*This sub-element is derived from NUREG 0654, which provides that Offsite Response Organizations (OROs) have the capability to use all available data to independently project integrated dose from exposure rates or other information and compare the estimated dose savings with the PAGs. OROs have the capability to choose, among a range of protective actions, those most appropriate in a given emergency situation. OROs base these choices on PAGs from the ORO's plans and/or procedures or the Environmental Protection Agency (EPA) guidance manual, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, EPA-400-R-92-001 (May 1992), and other criteria, such as, plant conditions, licensee protective action recommendations, coordination of protective action decisions with other political jurisdictions (e.g., other affected OROs, incident command), availability of appropriate in-place shelter, weather conditions, and situations (to include hostile action-based events, the threat posed by the specific hostile action, the affiliated response, and the effect of an evacuation on the threat response effort) that create higher than normal risk from evacuation.*

**Description**   The Task Force recognized that HAB scenarios may introduce challenges and additional risks associated with implementation of pre-designated precautionary actions and evacuation plans. The Task Force examined the factors that should be incorporated into the precautionary or PAD-making process for HAB scenarios including:

- Who is responsible for PADs?
- How the PAD process should be coordinated with the Incident Command Structure during HAB scenarios.
- Should personnel, in addition to officials with traditional REP responsibilities, be included in the PAD process for HAB scenarios?

**Number**       Comments Received on this Category of Evaluation Criteria: 56 (10%)

**Primary Issues**

- Traditional REP PADs are prescribed and objective whereas HAB PADS are more subjective in nature, dependent upon the scenario.
- Stakeholders noted a disparity between traditional REP PADs and PADs made during a HAB scenario. Traditional REP PADs are typically associated with a possible accidental radiological release, while HAB PADs would be made to protect the public from hostile actions not necessarily associated with a release.
- During a HAB scenario there will likely be reduced or limited essential information coming from the plant. This may impact the OROs' ability to make PADs.
- There will be more advisors, input, and advice involved in the PAD-making process for a HAB scenario than for a traditional REP scenario.
- Offsite evaluation criteria are being adapted for onsite response.

- Traditional REP response agencies have different statutory authority and decision-making processes for evacuations than incident command. This may create a situation where incident command decides to initiate an evacuation due to a hostile threat or action, rather than due to specific conditions within the traditional REP decision-making process.
- The REP Program will have to address the gaps and overlapping issues that exist between the licensee plans that are required under the Critical Infrastructure (CI) Program and those that are required under the REP program.

**Category**      2.c – Protective Action Decisions Considerations for the Protection of Special Populations

*This sub-element is derived from NUREG-0654, which provides that Offsite Response Organizations (OROs) should have the capability to determine protective action recommendations, including evacuation, sheltering and use of potassium iodide (KI), if applicable, for special population groups (e.g., hospitals, nursing homes, correctional facilities, schools, licensed day care centers, mobility impaired individuals, and transportation dependent individuals). Focus is on those special population groups that are (or potentially will be) affected by a radiological release from a nuclear power plant.*

**Description**      The Task Force recognized that HAB scenarios may introduce challenges and additional risks associated with implementation of pre-designated precautionary actions and evacuation plans for special populations.

**Number**            Comments Received on this Category of Evaluation Criteria: 16 (3%)

**Primary Issues**

- Traditional REP response agencies have different statutory authority and decision-making processes for evacuations than incident command. This may create a situation where incident command decides to initiate an evacuation for special populations due to a hostile threat or action, rather than due to specific conditions within the traditional REP decision-making process.

**Category**     3.d. – Implementation of Traffic and Access Control

*This sub-element is derived from NUREG-0654, which provides that Offsite Response Organizations (OROs) have the capability to implement protective action plans and/or procedures, including relocation and restriction of access to evacuated/sheltered areas. This sub-element focuses on selecting, establishing, and staffing of traffic and access control points and removal of impediments to the flow of evacuation traffic.*

**Description**   The Task Force focused on whether there should be any additional responsibilities for traffic and access control point (TCP/ACP) staff during a HAB scenario. They also discussed what additional impediments, if any, may exist inbound or outbound to the EPZ during a HAB scenario.

**Number**        Comments Received on this Category of Evaluation Criteria: 27 (5%)

**Primary Issues**

- Stakeholders indicated substantive differences in mindset, resources, and capabilities needed during a HAB scenario versus a traditional REP scenario.
- Law enforcement investigation of criminal activity may introduce new challenges such as short staffing and delays at TCPs due to the need to search suspicious vehicles or persons of interest.
- Stakeholders were concerned about the potential role credentialing will play in the traffic and access control process, particularly from the perspective of development and implementation.
- With law enforcement resources allocated to the criminal and investigative aspects of a HAB scenario, mutual aid or even non-traditional personnel may be used to staff TCPs and ACPs. This will make it difficult for players to meet the time and effectiveness requirements of back-up route alerting notification.

**Category**     4.a – Plume Phase Field Measurements and Analyses

*This sub-element is derived from NUREG-0654, which provides that Offsite Response Organizations (OROs) should have the capability to deploy field teams with the equipment, methods, and expertise necessary to determine the location of airborne radiation and particulate deposition on the ground from an airborne plume. In addition, NUREG-0654 indicates that OROs should have the capability to use field teams within the plume exposure pathway emergency planning zone to detect airborne radioiodine in the presence of noble gases and to detect radioactive particulate material in the airborne plume. In the event of an incident at a nuclear power plant, the possible release of radioactive material may pose a risk to the nearby population and environment. Although incident assessment methods are available to project the extent and magnitude of a release, these methods are subject to large uncertainties. During an incident, it is important to collect field radiological data in order to help characterize any radiological release. Adequate equipment and procedures are essential to such field measurement efforts.*

**Description**     The Task Force explored the measures necessary to protect the safety of field teams during a HAB event.

**Number**            Comments Received on this Category of Evaluation Criteria: 42 (7%)

**Primary Issues**

- Communication with and coordination of field teams is the greatest challenge brought about by a HAB scenario. Notifications and requests will possibly come from multiple non-traditional sources.
- HAB scenarios introduce the real possibility of non-traditional deployment scenarios such as no-release scenarios. Under a HAB scenario, the emergency operations facility (EOF) may not be activated. There is a need to identify where requests for field teams would come from and to develop evaluation plans that cover these contingencies.
- Field teams will need to have greater flexibility and heightened situational awareness of their operating environment for HAB scenarios.
- OOS activities should be used to accomplish demonstration and evaluation of field teams.

**Category**     5.a – Activation of the Prompt Alert and Notification System

*This sub-element is derived from NUREG-0654, which provides that Offsite Response Organizations (OROs) should have the capability to provide prompt instructions to the public within the plume exposure pathway Emergency Planning Zone (EPZ). Specific provisions addressed in this sub-element are derived from the Nuclear Regulatory Commission (NRC) regulations (10 CFR § 50, Appendix E.IV.D), and the Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants, FEMA–REP–10 (November 1985).*

**Description**   The Task Force discussed how OROs would complete public alert and notification during HAB exercises assuming a failure of electronic notification systems (e.g., tone alert radios, sirens, reverse 911). The Task Force was specifically asked to consider additional methods for promptly alerting and notifying the public (besides backup route alerting) and to review the 45-minute timeframe requirement for backup route alerting.

**Number**        Comments Received on this Category of Evaluation Criteria: 37 (7%)

**Primary Issues**

- A communications failure should not be presumed as a scenario element, simply because an HAB event has occurred. Communications may remain intact, in spite of the HAB event.
- Stakeholders felt that there were a number of non-traditional methods and technologies available that should be explored to facilitate backup alerting during a HAB scenario.
- During a HAB scenario, fire and law enforcement will likely be committed to other higher priority tasks. This will effectively reduce their capability to complete public alert and notification. The use of mutual aid resources or other response disciplines will be required to complete this task.
- The 45-minute requirement may be too tight of a timeframe to complete the alerting requirement during a HAB scenario.

**Category**     5.b – Emergency Information and Instructions for the Public and the Media

*This sub-element is derived from NUREG-0654, which provides that Offsite Response Organizations (OROs) should have the capability to disseminate to the public appropriate emergency information and instructions, including any recommended protective actions. In addition, NUREG-0654 provides that OROs should ensure that the capability exists for providing information to the media. This includes the availability of a physical location for use by the media during an emergency. NUREG-0654 also provides that a system should be available for dealing with rumors. This system will hereafter be known as the “public inquiry hotline”.*

**Description**    The Task Force explored what would be needed to guide the release of public information during a HAB scenario. The issue was framed by the assumption that certain information may need to be withheld from release due to the nature of the law enforcement and investigative response to a HAB event. The Task Force was also asked to develop guidance on minimal content for EAS messages, the type of information that can be released, and the appropriate authorities to release it during HAB events.

**Number**         Comments Received on this Category of Evaluation Criteria: 68 (12%)

**Primary Issues**

- Traditional REP processes for releasing information will need to be adapted to accommodate the review for potential law enforcement sensitive information that may need to be withheld during HAB scenarios.
- Successfully exercising the release of public information during a HAB scenario will require the participation of additional law enforcement and investigative players with critical roles in public information dissemination in the exercise (e.g., FBI, DHS, etc.).
- The accurate release of public information remains an imperative even during a HAB event. The additional players, structures, and processes should not impede the flow of public information.
- While the nature and composition of public information will change during a HAB event, the structures and processes, such as public information entities, joint information centers (JICs), and local/regional plans and procedures remain a sound foundation to build from.
- In some cases, HAB events may take the responsibility for public release of radiological release-specific information out of the hands of EOCs, as they may not be activated at the onset and early stages of a HAB event.



## ***Participant Feedback on Focus Group Process***

Participants in the Focus Group meetings were also asked to provide feedback on their satisfaction with the process. This step was critical in ensuring that stakeholders felt that their input was considered carefully when reviewing the proposed changes. The participant feedback was aggregated in the chart below. The data reported is percentage of total respondents (i.e., across all Focus Groups) selecting each level of agreement for a given assessment factor.

<b>Assessment Factor</b>		Strongly Disagree				Strongly Agree
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
a	The Focus Group was well structured and organized.	0.1%	4.2%	17.6%	46.7%	26.4%
b	The facilitator(s) was knowledgeable about the subject matter and kept the discussion on target.	0.1%	4.0%	14.5%	47.1%	29.5%
c	The materials provided to assist in participating in the Focus Group were useful.	0.1%	3.5%	20.2%	45.3%	26.0%

Participants were also encouraged to submit a secondary feedback form with written comments on the proposed changes and the Focus Group process.