Federal Register

Monday,
June 11, 2001

Part IV

Federal Emergency Management Agency

Radiological Emergency Preparedness: Exercise Evaluation Methodology; Alert and Notification; Notices

FEDERAL EMERGENCY MANAGEMENT AGENCY

Radiological Emergency Preparedness: Exercise Evaluation Methodology

AGENCY: Federal Emergency Management Agency.

ACTION: Notice.

SUMMARY: The Federal Emergency Management Agency (FEMA) proposes to revise the Radiological Emergency Preparedness Exercise Manual (REP–14) dated September 1991 by adopting the six Exercise Evaluation Areas described in this notice in place of the 33 REP–14 Objectives that are set out in Section D of REP–14. If the Exercise Evaluation Areas described in this notice are adopted, Radiological Emergency Preparedness exercises conducted pursuant to 44 CFR 350.9 will be evaluated against the criteria set out in this notice. The proposed frequency with which each of the proposed Exercise Evaluation Areas will be evaluated is also contained in this notice. Adoption of the proposed changes to REP–14 will render a companion manual entitled Radiological Emergency Preparedness Exercise Evaluation Methodology (REP–15) dated September 1991 obsolete. If the proposed changes to REP–14 are adopted, FEMA plans to rescind REP–15 and utilize a new form entitled ''Evaluation Module'' to document evaluations. We invite comments on the Exercise Evaluation Areas and the proposed frequency for exercising each area and the Evaluation Module form.

DATES: FEMA must receive comments on or before August 10, 2001.

ADDRESSES: You may submit your comments to the Rules Docket Clerk, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street, SW., room 840, Washington, DC 20472, or send them by e-mail to *rules@fema.gov.* Please reference ''REP Exercise Evaluation Areas'' in the subject line of your e-mail or comment letter.

FOR FURTHER INFORMATION CONTACT: Vanessa Quinn, Chief, Radiological Emergency Preparedness Branch, Chemical and Radiological Preparedness Division, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472; telephone: (202) 646–3664, or e-mail: *vanessa.quinn@fema.gov*, or Nathan S. Bergerbest, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, telephone: (202) 646–2685, or (e-mail) *nathan.bergerbest@fema.gov.*

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA) proposes to revise the Radiological Emergency Preparedness Exercise Manual (REP–14) [1] dated September 1991 by adopting the six Exercise Evaluation Areas described in this notice and deleting the thirty-three REP–14 Objectives that are set out in Section D of REP–14. If the Exercise Evaluation Areas described in this notice are adopted, Radiological Emergency Preparedness exercises conducted pursuant to 44 CFR 350.9 will be evaluated against the criteria set out in this notice.[2]

Adoption of the proposed changes to REP–14 will render a companion manual entitled Radiological Emergency Preparedness Exercise Evaluation Methodology (REP–15) dated September 1991 obsolete. If the proposed changes to REP–14 are adopted, FEMA plans to rescind REP–15 and utilize a new form entitled ''Evaluation Module'' to document evaluation activities. The rescission will be effective on the same date upon which the changes to REP–14 are effective and the Evaluation Module form will be effective on the same date. We invite comments on the Exercise Evaluation Areas and the proposed frequency for exercising each area and the Evaluation Module form.

Background on Exercise Evaluation

FEMA, through its Radiological Emergency Preparedness Program (REP) conducts exercises to evaluate the ability of Offsite Response Organizations (OROs) to respond to an emergency involving a commercial nuclear power plant. These exercises are conducted in accordance with FEMA regulations, which appear in 44 CFR part 350.[3] Although § 350.9 is the portion of Part 350 that primarily speaks to exercises, it does not specifically address the standards under which exercises are to be conducted and performance is to be evaluated. These standards are addressed in 44 CFR 350.5(a) which states:

> Section 50.47 of [the Nuclear Regulatory Commission's] Emergency Planning Rule [10 CFR Parts 50 [Appendix E] and 70 as amended and the joint FEMA-Nuclear Regulatory Commission *Criteria for Preparation and Evaluation of Radiological Response Plants and Preparedness In Support of Nuclear Power Plants* (NUREG–0654/FEMA REP–1, Rev 1 November, 1980) * * * are to be used in reviewing, evaluating and approving State and local radiological emergency plans and preparedness and in making any findings and determinations with respect to the adequacy of the plans and the capabilities of state and local government to implement them. Both the planning and preparedness standards and related criteria contained in NUREG–0654/FEMA REP–1, Rev. 1 are to be used by FEMA and the [Nuclear Regulatory Commission] in reviewing and evaluating State and local government radiological emergency plans and preparedness.[4]

Planning Standard N of NUREG–0654/FEMA REP 1, Rev. 1 addresses the conduct of exercises. The Planning Standard states that ''Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities * * * and deficiencies identified as a result of exercises * * * are (will be) corrected.'' Evaluation criterion 1.a defines an exercise as ''an event that tests the integrated capability and a major portion of the basic elements existing within emergency preparedness plans and organizations.''

The Planning Standard N criteria contain several requirements for exercises. All exercises must simulate an emergency that results in offsite radiological emergency releases, which would require response by offsite authorities. Scenarios should be varied from year to year and conducted under various weather conditions; some exercises or drills should be unannounced.[5] In other respects, the Planning Standard N criteria contemplate that exercises will be conducted as set forth in Nuclear Regulatory Commission and FEMA rules and in exercise evaluation guidance.[6]

In September 1991, FEMA published the current exercise evaluation guidance, which is REP–14. REP–14

[1] FEMA is planning to consolidate REP–14 into a new reference book. The contents of REP–14, including any changes resulting from final action on the issues discussed in this notice, will be incorporated into this new reference book. At this time, we are proposing to revise not withdraw REP–14. We expect to formally withdraw REP–14 when the new reference book is available.

[2] Adoption of the proposed Evaluation Criteria will also render much of § C.2 of REP–14 obsolete. Pages C.2–3 and C.2–4 of REP–14 speak to the frequency with which particular REP–14 objectives will be exercised. FEMA proposes to adopt the Federal Exercise Evaluation Matrix, which appears later in this document as Table 2 in place of the exercise objective groupings which appear on Pages C.2–3 and C–2.4 of REP–14.

[3] The preamble to 44 CFR part 350 is published at 48 FR 44332 (September 28, 1983).

[4] *See also*, 44 CFR 350.13(a) which states in relevant part ''The basis upon which [FEMA] makes the determination for withdrawal of approval [of a State or local radiological emergency plan] is the same basis used in reviewing plans and exercises, i.e. the planning standards and related criteria in NUREG 0654/FEMA REP–1, Rev. 1.''

[5] *See,* Planning Standard N, evaluation criteria 1.a and 1.b

[6] *See*, Planning Standard N, evaluation criteria 1.a (rules) and 3 (exercise evaluation guidance).

established a series of 33 objectives (REP–14 Objectives) that interpret and apply the guidance contained in NUREG–0654/FEMA REP–1, Rev. 1. A companion document, REP–15 contained a series of forms and checklists keyed to the 33 REP–14 Objectives for use by exercise evaluators in documenting performance. FEMA circulated both documents for public comment.[7]

REP–14 also established the frequency with which each of the objectives would be demonstrated in exercises. The 33 REP–14 Objectives were divided into three groups. Thirteen objectives in the first group would need to be demonstrated in every exercise. Nine objectives in the second group should be demonstrated in every exercise by some but not all responding organizations as the scenario dictates, provided that all responding organizations must demonstrate the objective once every six years. Another eleven objectives must be demonstrated once every six years.[8]

Strategic Review Process

In June 1996, the Director of the Federal Emergency Management Agency initiated a strategic review of the REP Program. This review was announced in the **Federal Register** in June 1996 and suggestions for improvement in the REP Program were solicited from the public. The respondents raised 180 issues. Seventy comments specifically addressed the conduct of exercises. Many commenters suggested that FEMA make exercise evaluation criteria outcome-based and less prescriptive. These commenters, representing States, local governments, and industry, suggested that evaluations should stress successful completion of basic health and safety objectives, with the specifics of accomplishing this left up to the OROs.

The comments were turned over to a Strategic Review Steering Committee for review.[9] Due to the large number of comments received on the conduct of exercises, the Strategic Review Steering Committee commissioned a concept paper on exercise streamlining. The concept paper was released to the public[10] and comments were received at stakeholder meetings in St. Louis, San Francisco and Washington DC in 1997.[11]

The concept paper identified several key issues for further consideration.

- REP–14 and REP–15 should be revised to support a ''results oriented'' exercise evaluation process.
- REP exercises should concentrate on radiological issues.
- REP–14 and REP–15 could be streamlined by combining similar objectives and points of review without harming the evaluation process.
- REP–14 and REP–15 are out of date due to changes in federal regulations, guidance and terminology.
- The required demonstration frequency of objectives should be reevaluated. Some objectives should be demonstrated more frequently and others less frequently.[12]

On September 9, 1998, FEMA published the draft final recommendations of the Strategic Review Steering Committee for public comment. Recommendation 1.1 addressed the 33 REP–14 Objectives. The Strategic Review Steering Committee noted:

> Exercises are currently evaluated in an ''objective based format.'' * * * This system is very structured and leaves little latitude for satisfying the objective by alternate means. Stakeholders have identified the obvious similarities between objectives. Experience in exercise evaluations indicates that several objectives can easily be combined, and others deleted, without weakening the evaluation process. * * * [We recommend] the consolidation of current objectives into * * * six Evaluation Areas * * * These Evaluation Areas would be established to support a ''results oriented'' evaluation process. Results oriented evaluation allows FEMA to focus on the outcome of actions taken by players in the implementation of their plans and procedures. This approach will give the exercise players more latitude to reach the desired results. Evaluators would then concentrate on the results of an exercise activity, not on the steps taken to arrive at a result. Within each Evaluation Area, objectives would be combined and duplicative Points of Review would be eliminated.''[13]

The Strategic Review Steering Committee recommended the consolidation of 29 of the 33 REP–14 Exercise Objective into six Exercise Evaluation Areas with sub-criteria. It also recommended the elimination of four of the REP–14 Objectives.[14]

Recommendation 1.2 addressed the frequency of demonstrations. The frequency for exercising each of the evaluation areas and sub criteria was set out in a table which accompanied Recommendation 1.2.[15]

Respondents to FEMA's request for public comment generally favored Recommendations 1.1 and 1.2.[16] On March

[7] On March 27, 1991, FEMA noticed the availability for REP–14 and REP–15 for public comment in the **Federal Register** [56 FR 12734]. It responded to public comments in a third publication, REP–18. *See*, 57 FR 4880 (February 10, 1992) corrected by 57 FR 10956 (March 31, 1992).

[8] *See*, REP–14, pages C–2.3 to C–2.4.

[9] The Strategic Review Steering Committee was composed of federal employees from FEMA headquarters, FEMA regional offices and the Nuclear Regulatory Commission.

[10] The concept paper can be reviewed at *http://www.fema.gov/pte/rep/exercise.htm* (viewed on May 22, 2001).

[11] The transcripts of the three public meetings can be reviewed at *http://www.fema.gov/pte/rep/trans.htm* (viewed on May 22, 2001).

[12] FEMA is proposing to address each of these issues through the changes described in this notice. Other issues identified in the concept paper will not be addressed through this notice. The concept paper observed that some aspects of radiological emergency preparedness can be demonstrated separate and apart from the exercise. It suggested that FEMA should provide guidance on when ''out of sequence'' demonstrations are permissible. FEMA has issued a policy statement on this issue which was made effective October 1, 1999. The policy statement may be viewed at *http://www.fema.gov/pte/rep/fnlpl-3.htm* (viewed May 30, 2001). The concept paper also observed that some aspects of radiological emergency preparedness are satisfactorily demonstrated by actual responses to disasters and emergencies or through other exercises in which OROs participate and credit should be given for demonstrated performance outside of a REP exercise. FEMA is still considering this issue. The concept paper suggested that FEMA should explore alternative approaches to evaluating emergency preparedness in addition to exercises. For example, it is suggested that maintenance and calibration of equipment that must be maintained under a radiological emergency response plan, can and should be verified separate and apart from an exercise. FEMA currently requires that OROs certify that various aspects of the radiological emergency response plans are functional through an ''Annual Letter of Certification.'' FEMA reserves the right to audit an ORO's representations in the Annual Letter of Certification. Some of the evaluation criteria contained in NUREG–0654/FEMA REP–1, Rev. 1 will not be exercised under the proposed Exercise Evaluation Areas described in this notice. This is because these criteria are most appropriately verified, in FEMA's judgment, through the Annual Letter of Certification and audits pursuant thereto. The concept paper recommended that FEMA expand its program of staff assistance visits to regularly provide feedback on emergency preparedness issues. FEMA is expanding this program.

[13] 63 Fed. Reg. 48225 (September 9, 1998).

[14] These were REP–14 Objectives 23, 31, 32 and 33. FEMA is proposing to eliminate REP–14 Objectives 23 and 31 in their entirety. Objective 23 tested the ORO's ability to identify and utilize federal and voluntary agency resources. FEMA plans to take lead responsibility for identifying available federal resources. The decision on whether to use these resources belongs to the ORO. A determination of whether the ORO is effectively utilizing voluntary agency resources is more appropriately made in reviewing the ORO's plans. Objective 31 tested the ORO's ability to evacuate non-essential personnel from the nuclear power plant site. We have concluded that the emergency preparedness benefit of evaluating this capability separate and apart from the capability to evacuate members of the general public is negligible. However, Objectives 32 (demonstrate the capability to carry out emergency response functions in an unannounced exercise or drill) and 33 (demonstrate the capability to carry out emergency response functions during an off-hours drill or exercise) are not proposed for elimination. These REP–14 Objectives would be folded into Exercise Evaluation Area 5.a.2, which provides for an unannounced drill of an incident requiring urgent response action by ORO's (also known as a ''fast breaker''). The drill may occur during off-hours.

[15] 63 Fed. Reg. 58226–58227 (September 9, 1998).

[16] A compilation of comments and the Strategic Review Steering Committee's response appears on

Continued

25, 1999, the strategic review recommendations, including Recommendations 1.1 and 1.2 were turned over to the REP Program by Kay C. Goss, CEM, Associate Director for Preparedness, Training and Exercises for further consideration. This notice addresses the proposed implementation of Recommendations 1.1 and 1.2.

Implementation of Strategic Review Steering Committee Recommendation 1.1

FEMA proposes to implement Recommendation 1.1 through adoption of the Exercise Evaluation Areas described in this notice. Two drafts of the Exercise Evaluation Area have already been released for public comment on the REP website. The first draft was released in November 1999. These comments and responses from the drafting group have been placed on the REP website.[17] A second draft was released in March 2000.[18]

During the fall of 2000, FEMA conducted pilot tests of the six draft Exercise Evaluation Areas at four nuclear power plants in different FEMA regions. A Pilot Evaluation Team, comprised of REP Regional Assistance Committee Chairs and FEMA headquarters REP staff, observed and assessed the pilot exercises. The team was instructed to identify any evaluation areas that needed revision. It was also asked to consider whether the new evaluation methodology provided an equal if not more robust review of State and local emergency response plans and procedures than the objective ''checklist approach.''

The conclusions drawn by the Pilot Evaluation Team are consistent with the comments FEMA has received since the inception of the strategic review process. Based upon these comments and reports from the Pilot Evaluation Team, FEMA has concluded:

- The current REP–14 and REP–15 evaluation methodology resulted in predictable exercises, judged against checklists; exercises under the proposed criteria will be based on emergency response plans, not the checklists, and should facilitate better coordination, communication, decisionmaking and implementation.
- Utilization of the new methodology will facilitate the introduction of more challenging scenarios geared to the particular community being evaluated. It will reduce the artificiality of exercises and more closely replicate responses to real incidents.
- The proposed methodology, which focuses on results, will increase ORO enthusiasm for exercise participation and substantially reduce the perception that the evaluators are nit-picking performance.
- The proposed methodology is more demanding on evaluators than the current checklists. It requires that they explain in narrative form what was observed and whether performance was adequate. This will result in more effective communication between evaluators and OROs about exercise issues and plan shortcomings. It will also provide the REP Program with better data from which to draw conclusions about emergency preparedness on a national level.
- Emergency preparedness can be significantly enhanced through better focused exercise evaluation criteria, coupled with FEMA's renewed emphasis on the Annual Letter of Certification and more frequent staff assistance visits.

Highlights of the Proposed Exercise Evaluation Areas

Evaluation Area 1—Emergency Operations Management

Evaluation Area 1 has five sub-elements: (a) mobilization, (b) facilities, (c) direction and control, (d) communications equipment and (e) equipment and supplies to support operations.

Criterion 1.a.1 requires that the OROs use effective procedures to alert, notify and mobilize emergency personnel and activate facilities in a timely manner. One of the more difficult issues to arise from the strategic review is how OROs demonstrate their twenty-four hour staffing capability in an exercise. The evaluation criteria associated with Planning Standard ''A'' of NUREG–0654/FEMA REP–1, Rev. 1 require that ''each principal organization shall be capable of continuous (twenty-four-hour) operations for a protracted period.''[19] These criteria also require that each State and local response organization be capable of twenty-four-hour emergency response.[20]

REP–14 Objective 30.1, which implements these criteria, presently requires all agencies responsible for providing twenty-four-hour staffing demonstrate a shift change once every six years. The shift change is demonstrated by providing a ''one-for-one replacement . . . of key staff responsible for communications, direction and control of operations, alert and notification for the public and the media, radiological monitoring, protective response and medical and public health support.''[21]

REP–14 Objective 30.2 requires that outgoing staff members should demonstrate their capability to brief their replacements on the current status of the simulated emergency. The purpose of this demonstration is to assure that the transition from the outgoing to incoming shift is accomplished without discontinuity in operations.

The dissatisfaction within the REP community about Objective 30 seems to stem from time constraints associated with the exercise. OROs will bring a second shift (often composed of volunteers who must take time away from other responsibilities) in for the exercise, only to discover that there is little time left in the exercise for the second shift to actually demonstrate their capabilities.

FEMA is sympathetic to the dissatisfaction with the present approach. However, we are equally uneasy about simply eliminating the shift change requirement. NUREG–0654/FEMA REP–1, Rev. 1, requires that we verify that response organizations have sufficient trained people in the key positions to perform twenty-four-hour operations. Moreover, we are concerned that our present approach offers those on the second and the third shift little opportunity to train for a real emergency through exercise participation.

Our proposed criterion 1.a.1 eliminates the requirement that OROs demonstrate a shift change once every six years. In order to assure that OROs have sufficient staffing to support twenty-four hour operations, we propose that the exercise evaluators inspect the procedures for twenty-four hour staffing at each facility and a staff roster to determine whether the response organization has identified the necessary personnel to carry out critical functions. These critical functions are the same functions named in REP–14 Objective 30.1. The inspection would occur during each exercise.[22] This approach is consistent with Planning Standard ''A'' of NUREG–0654/FEMA REP–1, Rev. 1. and its associated criteria. Neither requires the demonstration of a shift change.

However our consideration of the shift change issue leaves us mindful of the need to assure that key personnel on the off-hours shifts can perform as well as the primary responders. Without an opportunity to observe the performance of these personnel in an exercise, we are uncertain about whether the key personnel on the off-hours shifts can perform up to the standard that those who regularly exercise do. Moreover, we are concerned that our present exercise approach denies those in key positions on off-hours shifts an opportunity to train through meaningful exercise participation.

For this reason, FEMA is inclined to require that OROs demonstrate their twenty-four hour response capability by alternating the personnel that participate in the biennial exercises from among the shifts.[23] For example, the first biennial exercise of each six year cycle might involve personnel from the first twelve-hour shift. The second biennial exercise in the six year cycle would involve personnel from the second twelve-hour shift. The third biennial exercise in the six year cycle would involve personnel from the third shift (if the ORO uses three shifts in its plan) or the first shift (if the ORO uses two shifts in its plan) This would provide an opportunity for the key personnel on all shifts to have an opportunity to train by participating in an exercise as well as an opportunity for FEMA to evaluate the performance of all of the individuals who will play key roles in an actual response.

the REP Internet site, *http://www.fema.gov/pte/rep/finalrecc10 99.doc* (visited May 22, 2001).

[17] *http://www.fema.gov/pte/rep/comments.doc* (viewed May 22, 2001).

[18] *http://www.fema.gov/pte/rep/recini.htm* (viewed May 22, 2001).

[19] Planning Standard A, evaluation criterion A.4.

[20] Planning Standard A, evaluation criterion A.1.e

[21] REP–14 page D.30–1

[22] Additional assurance that OROs have sufficient trained personnel to support twenty-four-hour response and operations is contained in the Annual Letter of Certification. FEMA may audit the ORO's representations in the Annual Letter of Certification.

[23] We define key positions in this proposal in the same way that they are defined in REP–14 Objective 30.1, i.e. communications, direction and control of operations, alert and notification of the public, accident assessment, information for the public and the media, radiological monitoring, protective response, and medical and public health support functions.

We recognize that a limited number of key personnel, such as a county Emergency Management Director, intend to remain involved in an actual emergency response on a twenty-four-hour basis until the incident is resolved. We are prepared to accommodate the participation of these individuals in every exercise, but expect that each will have their designated successor participate in the exercise. An exercise scenario might provide that a county Emergency Management Director is unable to perform his or her duties and an alternate must step in to take over the operation.

FEMA believes it is crucial for all personnel expected to perform key roles in a radiological emergency response to exercise in their roles. However, we are not prepared to move forward with a definitive plan to achieve this objective without your comments. If you do not agree with the proposal described above, we would appreciate your identification of alternative means through which FEMA can assure that the key personnel who are expected to work the off-hours shifts are as well trained as those who work the shift that most often exercises. We are interested in your comments about whether FEMA needs to make any changes in the way it conducts exercises, i.e. commencing exercises on weekends, holidays or off-hours, to facilitate participation from those who would serve on the off-hours shifts in the event of an actual emergency. We also seek your views on whether or not this proposal will result in a net benefit to emergency preparedness.

Our review of the issues associated with the shift change also leads us to believe that the briefing required by Objective 30.2, which presently needs to be demonstrated only once every six years, should be demonstrated at every exercise in the future. This provision has been written into proposed criterion 1.a.1. We propose to give OROs the option of bringing in a second shift of key responders to receive the briefing or to provide the briefing to the evaluators.

Criterion 1.b.1 requires that the ORO demonstrate that its facilities are sufficient to support the emergency response. Under the proposed exercise methodology, facilities will only be evaluated if they are new or have substantial changes in structure or mission. It seems redundant to require the re-evaluation of a facility every two years if the facility has not changed. This change does not affect the current requirement that OROs certify in the Annual Letter of Certification that their facilities are available and adequate to meet emergency response needs. FEMA reserves the right to audit the representations made in the Annual Letter of Certification.

Criterion 1.c.1 requires that key personnel with leadership roles for the ORO provide direction and control to that part of the overall response for which they are responsible. This requirement is identical to that in Objective 3.1 [24] of REP–14.

Criterion 1.d requires that communications capabilities are managed in support of emergency operations with communication links established and maintained with appropriate locations. The proper functioning of communications equipment is essential to success in any exercise, just as it is essential to success in any response. FEMA expects that both the primary and backup communications systems, which are required by Planning Standard F, Evaluation Criteria F.1 of NUREG–0654/FEMA REP–1 Rev. 1, will be fully functional at the commencement of an exercise. Under REP–14 the functionality of these systems were tested at each exercise. Consistent with the spirit of the proposed Exercise Evaluation Areas, FEMA will not verify that the primary and backup communications systems are operational as a stand-alone evaluation item. However, we will craft exercise scenarios which call for the use of the primary system and scenarios which assume the failure of the primary system and require the use of the backup system. The ORO will not know prior to the start of the exercise whether one or both systems will be tested as part of the scenario. While an ORO may not be penalized if a communications system fails, so long as the other is operational, FEMA will take note of all communications system failures. They will be reported to Director of the REP Program and to the appropriate FEMA Regional Director and Regional Assistance Committee Chair as a planning issue.[25] The ORO is expected to correct any communication systems failure within 60 days of the conclusion of the exercise.

Criterion 1.e requires that equipment, dosimetry, supplies of potassium iodide and other required supplies are sufficient to support emergency operations. The requirements are similar to those in REP–14 Objectives 2.1, 5.1, 8.2 and 14.2. FEMA may or may not verify that these items are available and in good repair as a stand-alone item in every exercise. However, our exercise scenarios ordinarily require that the equipment and supplies be put to use. If equipment and supplies are unavailable or non-functional then the ORO may not be able to perform the emergency response activity at an acceptable level. Equipment and supplies that are not checked during an exercise will be checked during a staff assistance visit. Additional assurance that equipment and supplies are available in appropriate quantities and are properly maintained will be obtained in the Annual Letter of Certification. The representations contained in the Annual Letter of Certification are subject to audit.

Evaluation Area 2—Protective Action Decisionmaking

Evaluation Area 2 assesses the ORO's ability to render decisions about what protective actions members of the public and emergency workers need to take in the wake of an incident. It has five sub-elements: emergency worker exposure control, radiological assessment and protective action recommendations and decisions for the plume phase of the emergency,[26] protective action decision considerations for the protection of special populations, radiological assessment and decisionmaking for the ingestion pathway exposure[27] and radiological assessment and decisionmaking concerning relocation, re-entry and return.

The criteria in Evaluation Area 2 are generally similar to those in REP–14. We believe that proposed criterion 2.e.1 improves upon REP–14 Objectives 28.1 and 28.3 by eliminating the cumbersome standard and optional approaches to re-entry and relocation decisionmaking in REP–14. Criterion 2.e.1 contains a single approach to evaluating decisions in these areas

Evaluation Area 3—Protective Action Implementation

Evaluation Area 3 assesses the ORO's ability to implement protective actions, including evacuation. It contains six sub-elements: implementation of emergency worker exposure control, implementation of potassium iodide decisions, implementation of protective actions for special populations, implementation of traffic and access control, implementation of ingestion pathway decisions and implementation of relocation, re-entry and return decisions.

Criterion 3.a.1 requires that emergency workers demonstrate their ability to read dosimetry and understand the protective actions that they must take in response to specified levels. This requirement is similar to Objectives 5.1 and 5.2 in REP–14. Under the former evaluation methodology, emergency workers were subjected to the equivalent of a ''closed book examination'' on these matters. The proposed methodology makes it clear that emergency workers can refer to published procedures and confer with co-workers in responding to evaluator inquiries, just as they would, if necessary, in a real incident.

Criterion 3.b.1 tests the capability to distribute potassium iodide and appropriately instruct recipients on its use, in accordance with the ORO's emergency response plan. Potassium iodide is a non-prescription thyroid-blocking agent, which has been found effective in preventing thyroid cancer in those exposed to radiation during a nuclear plant incident. Criterion 3.b.1 also requires OROs to demonstrate their ability to maintain records on the administration of potassium iodide. Criterion 3.b.1 does not require that potassium iodide actually be administered. It requires only that OROs be able to demonstrate the functionality of this aspect of the plan.

Criterion 3.c.1 evaluates the protective action decisions that are implemented for special populations other than schools within areas subject to protective actions. OROs must demonstrate a capability to alert and notify special populations, transportation providers (including special resources for people with disabilities), and

[24] References to the REP–14 Objectives will appear in this form throughout this notice. REP–14 Objective 3.1 is Objective 3, Criterion 1.

[25] See, pages B.12 and B.21 of the Federal Emergency Management Agency, Radiological Emergency Preparedness Program, Standard Exercise Report Format (October 1995).

[26] The plume phase of the emergency focuses on preventing exposure of a population to radiation through direct contact with the plume.

[27] The ingestion pathway phase focuses on preventing exposure of a population to radiation through ingestion of foods that may have been exposed to radiation.

establish reception facilities. The availability of resources to transport special populations out of the plume exposure pathway is key. For this reason, proposed criterion 3.c.1 requires that OROs actually contact at least ⅓ of their transportation providers during each exercise to determine whether buses and drivers would be available if the exercise were an actual emergency.

Criterion 3.c.2 evaluates the capability to implement protective action decisions for schools. The proposed criterion requires that OROs contact each public school system, licensed day care provider and participating private school which would be required to implement a protective action decision if the exercise scenario were an actual emergency. Simulation of these calls is not allowed.

REP–14 Objective 16.2 presently requires that a single school bus be mobilized to drive an evacuation route as part of an exercise. FEMA does not believe that this demonstration achieves any significant emergency preparedness objective and is proposing to delete it. We do reserve the right to interview bus drivers to determine their familiarity with evacuation routes.

Criterion 3.d.1 evaluates the capability to establish and maintain appropriate traffic control and access points. REP–14 Objective 17.2 requires an actual deployment to test staffing capabilities. The proposed new criterion would not require an actual deployment. Capability could be established through an evaluative interview with appropriate public safety personnel. The decision to no longer require actual deployment stems from the recognition that public safety agencies regularly establish traffic and access control points in response to non-radiological incidents. The new criterion does not deprive FEMA of the ability to request a demonstration of actual deployment capability where appropriate. It simply establishes that actual deployment will not be required as a matter of course.

Criterion 3.d.2 evaluates the capability to remove impediments to evacuation. REP–14 Objective 17.4 required that actual telephone calls be placed to resources which might assist in removing the impediments, e.g., tow truck contractors. However, REP–14 did not require that tow trucks actually respond and remove the impediments. While there is some value in determining whether OROs maintain an accurate list of telephone numbers, it is not necessary to mandate regular testing of the ability to telephone a tow operator. The tow operators that might be relied upon in a nuclear power plant incident are similar to those who might be called upon in a traffic accident. Emergency dispatchers can reasonably be presumed to know how to contact tow operators.

Criterion 3.e.1 tests the availability and appropriate use of adequate information regarding water, food supplies, milk and agricultural production within the ingestion exposure pathway zone for implementation of protective actions. REP–14 Objective 27.1 requires that various maps and information sources required by Planning Standard J of NUREG–0654/REP–1 Rev 1 be available. The proposed criterion does not change the requirement that these information sources be available. However, it does not require that an evaluator specifically check off that they are present. Ingestion pathway exercises will be evaluated based upon whether OROs effectively use the information that must be available in addressing the exercise scenario. If the information is not available, OROs may not be able to meet the new ''results oriented'' criterion.

Criterion 3.e.2 evaluates measures, strategies and pre-printed instructional material for implementing protective action decisions for contaminated water, food products, milk and agricultural production. REP 14 Objective 11.4 requires that evaluators check off whether a distribution list is maintained and Objective 27.3 contains specific instructions on how implementation of ingestion pathway decisions should be evaluated. Through its level of detail, REP–14 established a single correct way to implement ingestion pathway decisions, notwithstanding that alternative approaches would also adequately protect public health and safety. FEMA believes that it is appropriate to give OROs the flexibility to implement ingestion pathway decisions in a way that they deem prudent. OROs will be evaluated on the basis of whether their decisions adequately protect public health and safety.

Criterion 3.f evaluates decisions regarding controlled re-entry of emergency workers and relocation and return. This criterion consolidates REP–14 Objectives 29.1, 29.2, 29.3 and 29.4.

Evaluation Area 4—Field Measurement and Analysis

Evaluation Area 4 assesses the ability of OROs to conduct and analyze field radiation measurements. It has three sub-elements: plume phase field measurement and analysis, post plume phase field measurements and sampling, and laboratory operations. The evaluation criteria are similar to those that appear in REP–14. The proposed evaluation criterion encourages OROs to utilize resources offered by federal agencies, where appropriate.

Evaluation Area 5—Emergency Notification and Public Information

Evaluation Area 5 looks at the ORO's ability to notify the public of an incident and to effectively communicate protective action recommendations. It contains two sub-elements: activation of the prompt alert and notification system and emergency information and instructions for the public and the media.

Proposed criteria 5.a.1, 5.a.2 and 5.a.3 address activation of the prompt alert and notification system. We believe that the proposed criteria represent a significant improvement in exercise methodology over REP–14. Plume exposure exercises under the REP–14 methodology have followed a familiar pattern—they all involved a scenario that incrementally escalates from a situation requiring no action by the public to a situation requiring urgent action by the public. The REP–14 methodology did not test the ability of ORO decisionmakers to reach a decision on activating the prompt alert and notification system in an atmosphere of uncertainty. The scenario left no discretion to the decisionmakers.

Proposed criteria 5.a.1 and 5.a.2 remedy this artificiality by requiring that alert and notification decisionmaking be tested under two different scenarios—one in which urgent action is not immediately required and one in which it is. Proposed criterion 5.a.1 addresses the situation in which urgent action by the public is not immediately required. Proposed criterion 5.a.2 addresses the situation in which urgent action by the public is immediately required due to quickly deteriorating conditions at the plant. This second scenario is known as the ''fast breaker.''

Proposed criterion 5.a.1 requires that the alert and notification system be activated in a timely manner following notification to the ORO by the nuclear power plant of an incident that requires activation of the alert and notification system but does not immediately require urgent action by the public. Whether decisionmakers initiate the alert and notification system in a ''timely manner'' will be judged in relation to the scenario. We will also evaluate the quality of the public notification.

Proposed criterion 5.a.2 requires that activities associated with the alert and notification system in a ''fast breaker'' situation must be completed within fifteen minutes of the time that the ORO has received verified notification from the nuclear power plant of a situation that immediately requires urgent public action. The fifteen-minute requirement derives from Nuclear Regulatory Commission regulations which appear at 10 CFR 50.47, Appendix E.IV.D. Since fast breaking situations are by their nature unpredictable, FEMA proposes to evaluate the ''fast breaker'' response in an unannounced drill, separate and apart from regular exercises. OROs will be notified of the week in which the drill will occur, but not the specific day or time. The ''fast breaker'' drill can occur during off-hours. In formulating criteria 5.a.1 and 5.a.2, FEMA considered comments made at ''fast breaker workshops'' during the April 2000 National Radiological Emergency Preparedness Conference [28] as well as comments submitted in the strategic review. We are especially interested in receiving written comments on proposed criteria 5.a.1 and 5.a.2 from those interested in ''fast breaker'' issues.

Proposed criteria 5.a.1 and 5.a.2 do not address what information must be contained in an initial instructional memorandum to the public. Under current FEMA guidance, [29] an initial instructional message must contain five elements at a minimum. These five elements include a coded ''Emergency

[28] The National Radiological Preparedness Conference is an annual meeting of individuals with an interest in radiological emergency preparedness. The conference is sponsored by an independent non-profit organization and is open to the public.

[29] The current guidance entitled ''Radiological Emergency Preparedness (REP) Guidance To Support Implementation of the Emergency Alert System (EAS)'' dated February 2, 1999 can be viewed at *http://www.fema.gov/pte/rep/easrep.htm* (viewed May 31, 2001). The guidance is contained in Attachment ''B'' to the memorandum entitled ''Background on the Emergency Alert System (EAS).''

Classification Level'' [30] and a protective action recommendation. Concerns have been expressed in the strategic review process that disclosure of an Emergency Classification Level in an initial message does not provide the public with useful information. Serious questions have been raised about when a protective action recommendation must be made, particularly if evacuation routes need to be cleared and reception facilities need to be opened to support a safe and orderly evacuation. For these reasons, FEMA is requesting comments in a notice, which appears in the same edition of the **Federal Register** as this one about whether its current guidance should be changed. We hope to complete our review of this guidance contemporaneously with our decision on whether to implement the proposed Exercise Evaluation Areas so that any changes concerning the content of initial messages can be incorporated into criteria 5.a.1 and 5.a.2.

Proposed criterion 5.a.3 addresses notification of people living in very remote areas, also known as ''exception areas,'' who are not reached by alert sirens or tone alert radios. People who reside in exception areas are notified of an incident by mobile teams called ''backup route alerting teams.'' Proposed criterion 5.a.3 is similar to the REP–14 criterion with respect to notification of people in ''exception areas.''

Proposed criterion 5.a.3 also addresses backup alerting and notification of the general public in the event of a failure in the primary alert and notification system. Criterion 5.a.3 requires that the completion of backup alerting and notification within 45 minutes of the decision by offsite emergency officials to notify the public of an emergency situation. REP–14 required completion of the notification within ''approximately'' 45 minutes after the decision. The proposed criterion more closely conforms to the requirement set forth in Appendix 3 to NUREG–0654/FEMA REP–1, Rev. 1.

Proposed criterion 5.b.1 tests whether OROs provide accurate emergency information and instructions to the public and the news media in a timely fashion. While FEMA is considering whether technical information such as Emergency Classification Levels should be included in alert and notification system messages, it believes that this information should be made available to the news media with a plain Language explanation. The ORO should be prepared to explain the Emergency Classification Level and related technical information in plain Language during an exercise.

Evaluation Area 6: Support Operations/ Facilities

Evaluation Area 6 assesses the ability of OROs to account for, monitor and decontaminate evacuees, emergency workers, and emergency worker equipment, to provide temporary care of evacuees and to assure that capabilities exist for transporting and treating injured individuals who have been exposed to radiation. These competencies are tested in the four sub-elements associated with Evaluation Area 6. The proposed Criteria are consistent with REP–14. While REP–14 establishes a series of prescriptive procedures that must be followed by the ORO, the proposed criteria describe the result which must be obtained, without instructing the ORO on how to obtain it.

TABLE 1.—COMPARISON OF PROPOSED EVALUATION AREAS WITH NUREG–0654/FEMA REP–1, REV. 1 PLANNING CRITERIA AND REP 14/15 OBJECTIVES AND CRITERIA

Evaluation area/Sub-element/Criterion	NUREG 0654 Criteria	REP–14/15 Objective and Criterion
1—Emergency Operations Management		1, 2, 3, 4, 5, 8, 14, 30
1.a—Mobilization		
1.a.1: OROs use effective proceduresto alert, notify, and mobilize emergency personnel and activate facilities in a timely manner.	A.4; D.3, 4; E.1, 2; H.4	1.1, 1.2; 30
1.b—Facilities		
1.b.1: Facilities are sufficient to support the emergency response	H.3	2.1
1.c—Direction and Control		
1.c.1: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible.	A.1.d; A.2.a, b	3.1
1.d—Communications Equipment		
1.d.1: At least two communication systems are available and at least one operates properly, and communication links are established with appropriate locations. Communications capabilities are managed in support of emergency operations.	F.1, 2	4.1
1.e—Equipment and Supplies to Support Operations		
1.e.1: Equipment, maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations.	H.7; J.10.a, b, e, J.11; K.3.a.	2.1; 5.1; 8.2; 14.2
2—Protective Action Decision Making		5, 7, 9, 14, 15, 16, 26, 28
2.a—Emergency Worker Exposure Control		
2.a.1: OROs use a decision making process, considering relevant factors and appropriate coordination, to insure that an exposure control system, including the use of KI, is in place for emergency workers including provisions to authorize radiation exposure in excess of administrative limits or protective action guides.	J.10.e, f; K.4	5.1, 5.3; 14.1
2.b—Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency		
2.b.1: Appropriate protective action recommendations are based on available information on plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of on-site and off-site environmental conditions.	I.8,10; Supp. 3	7.1
2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PADs) for the general public (including the recommendation for the use of KI, if ORO policy).	J.9; J.10.f, m	9.1; 14.1
2.c—Protective Action Decisions for the Protection of Special Populations		
2.c.1: Protective action decisions are made, as appropriate, for special population groups.	J.9; J.10.	9.1; 15.1

[30] Emergency Classification Levels are a standard way through which nuclear power plants communicate the severity of incidents with onsite and offsite responders and regulatory agencies. *See*, Planning Standard D, NUREG–0654/REP–1, Rev. 1.

TABLE 1.—COMPARISON OF PROPOSED EVALUATION AREAS WITH NUREG–0654/FEMA REP–1, REV. 1 PLANNING CRITERIA AND REP 14/15 OBJECTIVES AND CRITERIA—Continued

Evaluation area/Sub-element/Criterion	NUREG 0654 Criteria	REP–14/15 Objective and Criterion
2.d—Radiological Assessment and Decision-Making for the Ingestion Exposure Pathway		
2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate protective action decisions are made based on the ORO planning criteria.	J.11	26.1, 26.2
2.e—Radiological Assessment and Decision-Making Concerning Relocation, Re-entry, and Return		
2.e.1: Timely relocation re-entry, and return decisions are made and coordinated as appropriate, based on assessments of radiological conditions and criteria in the ORO's plan and/or procedures.	M.1	28.1, 28.2, 28.3, 28.4, 28.5
3. Protective Action Implementation		5, 11, 14, 15, 16, 17, 27, 29
3.a—Implementation of Emergency Worker Exposure Control		
3.a.1: The OROs issues appropriate dosimetry and procedures, and manage radiological exposure to emergency workers in accordance with the plan and procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart.	K.3.a, 3.b	5.1, 5.2
3.b—Implementation of KI Decision		
3.b.1: KI and appropriate instructions are made available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not the general public) is maintained.	J.10.e	14.1, 14.3
3.c—Implementation of Protective Actions for Special Populations		
3.c.1: Protective action decisions are implemented for special population groups within areas subject to protective actions.	J.10.c, d, g	15.1, 15.2
3.c.2: ORO/School officials decide upon and implement protective actions for schools.	J.10.c, d, g	16.1, 16.2, 16.3
3.d—Implementation of Traffic and Access Control		
3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access personnel.	J.10.g, j	17.1, 17.2, 17.3
3.d.2: Impediments to evacuation are identified and resolved	J.10.k	17.4
3.e—Implementation of Ingestion Pathway Decisions		
3.e.1: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions.	J.9,11	27.1
3.e.2: Appropriate measures, strategies and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production.	E.; J.9,11	11.4; 27.2; 27.3
3.f—Implementation of Relocation, Re-entry, and Return Decisions		
3.f.1: Decisions regarding controlled re-entry of emergency workers and relocation and return of the public are coordinated with appropriate organizations and implemented.	M.1, 3	29.1, 29.2, 29.3, 29.4
4—Field Measurement and Analysis		6, 8, 24, 25
4.a—Plume Phase Field Measurement and Analyses		
4.a.1: The field teams are equipped to perform field measurements of direct radiation exposure (cloud and ground shine) and to sample airborne radioiodine and particulates.	H.10, I.8, 9	6.1; 8.1, 8.2
4.a.2: Field teams are managed to obtain sufficient information to help characterize the release and to control radiation exposure.	I.8,11; J.10.a	6.3, 6.4
4.a.3: Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulate samples are collected. Teams will move to an appropriate low background location to determine whether any significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sampling media.	I.9	6.4, 6,5; 8.3, 8.4, 8.5, 8.6
4.b—Post Plume Phase Field Measurements and Sampling		
4.b.1: The field teams demonstrate the capability to make appropriate measurements and to collect appropriate samples (e.g., food crops, milk, water, vegetation, and soil) to support adequate assessments and protective action decision-making.	I.8; J.11	24.1
4.c—Laboratory Operations		
4.c.1: The laboratory is capable of performing required radiological analyses to support protective action decisions.	C.3; J.11	25.1, 25.2
5—Emergency Notification and Public Information		10, 11, 12, 13
5.a—Activation of the Prompt Alert and Notification System		

TABLE 1.—COMPARISON OF PROPOSED EVALUATION AREAS WITH NUREG–0654/FEMA REP–1, REV. 1 PLANNING CRITERIA AND REP 14/15 OBJECTIVES AND CRITERIA—Continued

Evaluation area/Sub-element/Criterion	NUREG 0654 Criteria	REP–14/15 Objective and Criterion
5.a.1: Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized off-site emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum: (1) identification of the State or local government organization and the official with the authority for providing the alert signal and instructional message; (2) identification of the commercial nuclear power plant and a statement than an emergency situation exists at the plant; (3) reference to REP-specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency; and (4) a closing statement asking the affected and potentially affected population to stay tuned for additional information.	10 CFR Part 50, Appendix E; E.5, 6.	10.1
5.a.2: Activities associated with primary alerting and notification of the public are completed within 15 minutes of verified notification from the utility of an emergency situation requiring urgent action (fast-breaking situation). The initial instructional message to the public must include as a minimum: (1) identification of the State or local government organization and the official with the authority for providing the alert signal and instructional message; (2) identification of the commercial nuclear power plant and a statement than an emergency situation exists at the plant; (3) reference to REP-specific emergency information (e.g., brochures and information in telephone books) for use by the general public during an emergency; and (4) a closing statement asking the affected and potentially affected population to say tuned for additional information. In addition, the ORO must demonstrate the capability to contact, in a timely manner, an authorized offsite decision maker relative to the nature and severity of the event, in accordance with plans and procedures.	10 CFR Part 50, Appendix E; E.5, 6.	10.1
5.a.3: Activities associated with FEMA approved exception areas (where applicable) are completed within 45 minutes of the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. Backup alert and notification of the public is completed within 45 minutes following the detection by the ORO of a failure of the primary alert and notification system.	Appendix 3: B.2.c; E.6	10.2, 10.3
5.b—Emergency Information and Instructions for the Public and the Media		
5.b.1: OROs provide accurate emergency information and instructions to the public and the news media in a timely manner.	E.5, 7; G.3.a; G.4.c	11.1, 11.2, 11.3; 12.1, 12.2; 13.1, 13.2
6—Support Operation/Facilities	.....	18, 19, 20, 21, 22
6.a—Monitoring and Decontamination of Evacuees and Emergency Workers, and Registration of Evacuees		
6.a.1: The reception center/emergency worker facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or emergency workers.	J.10.h; J.12; K.5.a, b	18.1, 18.2, 18.3, 18.4, 18.5; 22.1, 22.2
6.b—Monitoring and Decontamination of Emergency Worker Equipment		
6.b.1: The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment including vehicles.	K.5.a, b	22.1; 22.3
6.c—Temporary Care of Evacuees		
6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with American Red Cross planning guidelines. Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities.	J.10.h; J.12	19.1, 19.2
6.d—Transportation and Treatment of Contaminated Injured Individuals		
6.d.1: The facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring decontamination, and medical services to contaminated injured individuals.	F.2; H.10; K.5.a, b; L.1; L.4	20.1, 20.2, 20.3, 20.4, 20.5; 21.1, 21.2, 21.3, 21.4

Replacement of REP–15 With the Evaluation Module Form

Adoption of the proposed Exercise Evaluation Areas will render REP–15 which contains checklists keyed to the 33 REP–14 Objectives obsolete. FEMA plans to utilize new forms called ''Evaluation Modules'' in place of the REP–15 checklists. The Evaluation Modules will be keyed to the Exercise Evaluation Areas. A sample Evaluation Module appears below.

BILLING CODE 6718–06–P

SAMPLE EVALUATION MODULE

This is a sample of the REP exercise evaluation module for one evaluation area criterion.

EVALUATION AREA number and title

Sub-element number and title

Criterion number, description, and NUREG-0654 reference(s)

- Was this Criterion adequately demonstrated?
  YES_____ **NO**_____ **N/A**_____

  If **NO**, identify all exercise issues by addressing the elements listed on the attached **ISSUES FOR CRITERION** form.
  Remember, if there is no effect or potential effect, there is no exercise issue.

- **Reminder:** Provide a complete evaluator packet to the Team Leader with a written narrative summary, timeline of observations, and all forms and information used during the exercise. Cite outstanding performance where observed.

- The following **INTENT** and **EXTENT OF PLAY** information is provided for general reference only. Consult the site-specific extent of play agreement and your Team Leader for how it applies to your assigned location.

  INTENT

  Sub-element INTENT, as stated in the Evaluation Area

  EXTENT OF PLAY

  Criterion EXTENT OF PLAY, as stated in the Evaluation Area

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

NARRATIVE SUMMARY FOR CRITERION:

[Evaluator must write a narrative and insert it here]

ISSUES FOR CRITERION:

Address the following elements:

CONDITION (describe the inadequacy):

POSSIBLE CAUSE (what is responsible):

REFERENCE (cite the specific NUREG-0654 element, regulation, etc.):

EFFECT (what resulted, or could have resulted, from this issue):

RECOMMENDATION (how to correct it):

BILLING CODE 6718–06–C

Implementation of Strategic Review Steering Committee Recommendation 1.2

The REP–14 objectives are currently evaluated at the frequency described on Pages C–2.3 and C–2.4. Adoption of the proposed Exercise Evaluation Areas will render these pages obsolete. In Table 2 proposes the minimum frequency with each of the Exercise Evaluation Areas would be exercised. FEMA is open to ORO proposals to voluntarily exercise certain criteria more frequently than the minimums listed below.

TABLE 2.—FEDERAL EVALUATION PROCESS MATRIX

Proposed evaluation area and sub-elements	Consolidates REP–14 objective	Minimum frequency
1. Emergency Operations Management	1, 2, 3, 4, 5, 8, 14, 17, 30	
a. Mobilization		Every Exercise.
b. Facilities		Once if new.[1]
c. Direction and Control		Every Exercise.
d. Communications Equipment		Every Exercise.
e. Equipment and Supplies to Support Operations		Every Exercise.
2. Protective Action Decisionmaking	5, 7, 9, 14, 15, 16, 26, 28	
a. Emergency Worker Exposure Control		Every Exercise.
b. Radiological Assessment & Protective Action Recommendations & Decisions for the Plume Phase of theEmergency.		Every Exercise.
c. Protective Action Decisions for the Protection of Special Populations		Every Exercise.
d. Radiological Assessment & Decisionmaking for the Ingestion Exposure Pathway[2].		Once in 6 yrs.
e. Radiological Assessment & Decisionmaking Concerning Relocation, Re-entry, and Return[2].		Once in 6 yrs.
3. Protective Action Implementation	5, 11, 14, 15, 16, 17, 27, 29.	
a. Implementation of Emergency Worker Exposure Control		Every Exercise.
b. Implementation of KI Decision		Once in 6 yrs.
c. Implementation of Protective Actions for Special Populations		Once in 6 yrs.[3]
d. Implementation of Traffic and Access Control[4]		Every Exercise.
e. Implementation of Ingestion Pathway Decisions		Once in 6 yrs.
f. Implementation of Relocation, Re-entry, and Return Decisions		Once in 6 yrs.
4. Field Measurement and Analysis	6, 8, 24, 25	
a. Plume Phase Field Measurements & Analysis		Every Exercise.
b. Post Plume Phase Field Measurements and Sampling		Once in 6 yrs.
c. Laboratory Operations		Once in 6 yrs.
5. Emergency Notification and Public Information	10, 11, 12, 13	
a.1 Activation of the Prompt Alert and Notification System		Every Exercise.

TABLE 2.—FEDERAL EVALUATION PROCESS MATRIX—Continued

Proposed evaluation area and sub-elements	Consolidates REP–14 objective	Minimum frequency
a.2 Activation of the Prompt Alert and Notification System (Fast Breaking).	.....	Separate Drill once in 6 yrs.
a.3 Notification of exception areas and/or Back-up Alert and Notification System within 45 Minutes.	.....	Every Exercise—as needed.
b. Emergency Information & Instructions for the Public and the Media	.....	Every Exercise.
6. Support Operations/Facilities	18, 19, 20, 21, 22	
a. Monitoring & Decontamination of Evacuees and Emergency Workers & Registration of Evacuees.	.....	Once in 6 yrs.[3]
b. Monitoring & Decontamination of Emergency Worker Equipment[3]	.....	Once in 6 yrs.[3]
c. Temporary Care of Evacuees[5]	.....	Once in 6 yrs.[5]

[1] Will be evaluated if new or changed substantially.
[2] The plume phase and the post-plume phase (ingestion, relocation, re-entry and return) can be demonstrated separately.
[3] All facilities must be evaluated once during the six-year exercise cycle.
[4] Physical deployment of resources is not necessary.
[5] Facilities managed by the American Red Cross (ARC), under the ARC/FEMA Memorandum of Understanding, will be evaluated once when designated or when substantial changes occur; all other facilities not managed by the ARC must be evaluated once in the six-year exercise cycle.

Coordination With the Nuclear Regulatory Commission

FEMA conducts and evaluates exercises in part under authority of a Memorandum of Understanding with the Nuclear Regulatory Commission. The text of the current Memorandum of Understanding is published in Appendix A to 44 CFR Part 353 (2000 edition). Section E of the Memorandum of Understanding provides that each agency will provide an opportunity for the other agency to review and comment on emergency planning and preparedness guidance (including interpretations of agreed joint guidance) prior to adoption as formal agency guidance. FEMA has transmitted a copy of this document to the Nuclear Regulatory Commission and requested their comments no later than the date upon which the public comment period closes.

Evaluation Area 1—Emergency Operations Management

Sub-element 1.a—Mobilization

Intent

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

Criterion 1.a.1: OROs use effective procedures to alert, notify, and mobilize emergency personnel and activate facilities in a timely manner. (NUREG–0654, A.4; D.3, 4; E.1, 2; H.4)

Extent of Play. Responsible OROs should demonstrate the capability to receive notification of an emergency situation from the licensee, verify the notification, and contact, alert, and mobilize key emergency personnel in a timely manner. At each facility, a roster and/or procedures indicating 24-hour staffing capability for key positions (those emergency personnel necessary to carry out critical functions), as indicated in the plan and/or procedures, should be provided to the evaluator. Although demonstration of a shift change is not required, each ORO shall demonstrate its ability to transition from an outgoing shift to an incoming shift without discontinuity in operations either by having personnel in key positions briefing the evaluators or their actual replacements on the current status of the simulated emergency. In addition, responsible OROs should demonstrate the activation of facilities for immediate use by mobilized personnel when they arrive to begin emergency operations. Activation of facilities should be completed in accordance with the plan and/or procedures. Pre-positioning of emergency personnel is appropriate, in accordance with the extent of play agreement, at those facilities located beyond a normal commuting distance from the individual's duty location or residence. Further, pre-positioning of staff for out-of-sequence demonstrations is appropriate in accordance with the extent of play agreement.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 1.b—Facilities

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) have facilities to support the emergency response.

Criterion 1.b.1: Facilities are sufficient to support the emergency response. (NUREG–0654, H)

Extent of Play. Facilities will only be specifically evaluated for this criterion if they are new or have substantial changes in structure or mission. Responsible OROs should demonstrate the availability of facilities that support the accomplishment of emergency operations. Some of the areas to be considered are: adequate space, furnishings, lighting, restrooms, ventilation, backup power and/or alternate facility (if required to support operations).

Facilities must be set up based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 1.c—Direction and Control

Intent

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

Criterion 1.c.1: Key personnel with leadership roles for the ORO provide direction and control to that part of the overall response effort for which they are responsible. (NUREG–0654, A.1.d; A.2.a, b)

Extent of Play. Leadership personnel should demonstrate the ability to carry out essential functions of the response effort, for example: keeping the staff informed, coordinating with other appropriate OROs, and ensuring completion of requirements and requests.

All activities associated with direction and control must be performed based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 1.d—Communications Equipment

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) should establish at least two reliable 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 (EOC), and field teams.

Criterion 1.d.1: At least two communication systems are available, at least one operates properly, and communication links are established and maintained with appropriate locations. Communications capabilities are managed in support of emergency operations. (NUREG–0654, F.1, 2)

Extent of Play. Communications equipment and procedures for facilities and field units should be used as needed for the transmission and receipt of exercise

messages. All facilities and field teams should have the capability to access at least one communication system that is independent of the commercial telephone system and uses a separate power source. Responsible OROs should demonstrate the capability to manage the communication systems and ensure that all message traffic is handled without delays that might disrupt the conduct of emergency operations. OROs should ensure that a coordinated communication link for fixed and mobile medical support facilities exist. The specific communications capabilities of OROs should be commensurate with that specified in the response plan and/or procedures. Exercise scenarios could require the failure of a communications system and the use of an alternate system.

All activities associated with the management of communications capabilities must be demonstrated based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 1.e—Equipment and Supplies to Support Operations

Intent

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

Criterion 1.e.1: Equipment, maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations. (NUREG–0654, H., J.10.a, b, e, j, k; j.11; K.3.a)

Extent of Play. Equipment within the facility (facilities) should be sufficient and consistent with the role assigned to that facility in the ORO's plans and/or procedures in support of emergency operations. Use of maps and displays is encouraged.

All instruments, including air sampling flow meters (field teams only), should be inspected, inventoried, and operationally checked at least once each calendar quarter and after each use. They should be calibrated in accordance with the manufacturer's recommendations (or at least annually for the CDV–700 series or if there are no manufacturer's recommendations for a specific instrument). A label indicating such calibration should be on each instrument or verifiable by other means. Note: Field team equipment is evaluated under 4.a.1; radiological laboratory equipment under 4.c.1; reception center and emergency worker facilities' equipment is evaluated under 6.a.1; and ambulance and medical facilities' equipment is evaluated under 6.d.1.

Sufficient quantities of appropriate direct-reading and permanent record dosimetry and dosimeter chargers should be available for issuance to all categories of emergency workers that could be deployed from that facility. Appropriate direct-reading dosimeters should allow individual(s) to read the administrative reporting limits and maximum exposure limits contained in the ORO's plans and procedures.

Dosimeters should be inspected for electrical leakage at least annually and replaced, if necessary. CDV–138s, due to their documented history of electrical leakage problems, should be inspected for electrical leakage at least quarterly and replaced if necessary. This leakage testing will be verified during the exercise, through documentation submitted in the Annual Letter of Certification, and/or through a staff assistance visit.

Responsible OROs should demonstrate the capability to maintain inventories of KI sufficient for use by emergency workers, as indicated on rosters; institutionalized individuals, as indicated in capacity lists for facilities; and, where stipulated by the plan and/or procedures, members of the general public (including transients) within the plume pathway EPZ.

Quantities of dosimetry and KI available and storage locations(s) will be confirmed by physical inspection at storage location(s) or through documentation of current inventory submitted during the exercise, provided in the Annual Letter of Certification submission, and/or verified during a Staff Assistance Visit. Available supplies of KI should be within the expiration date indicated on KI bottles or blister packs. As an alternative, a letter from the drug manufacturer should be available that documents a formal extension of the KI expiration date. Another alternative is for the ORO to obtain approval from FEMA based on a certified independent laboratory testing to extend the shelf life.

At locations where traffic and access control personnel are deployed, appropriate equipment (e.g., vehicles, barriers, traffic cones and signs, etc.) should be available or their availability described.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Evaluation Area 2—Protective Action Decision-Making

Sub-Element 2.a—Emergency Worker Exposure Control

Intent

This sub-element is derived from NUREG–0654, which provides that an Offsite Response Organizations (ORO) 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 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 or organ-specific limits) identified in the ORO's plans and procedures.

Criterion 2.a.1: OROs use a decision-making process, considering relevant factors and appropriate coordination, to ensure that an exposure control system, including the use of KI, is in place for emergency workers including provisions to authorize radiation exposure in excess of administrative limits or protective action guides. (NUREG–0654, K.4, J.10. e, f)

Extent of Play. OROs authorized to send emergency workers into the plume exposure pathway EPZ should demonstrate the following capabilities on the basis of information in the emergency plan: (1) Determination of radiation exposure limits to be authorized for emergency workers; (2) appropriate decision making, based on projected doses and in accordance with emergency workers' exposure limits, as to whether or not to send emergency workers to areas within the plume exposure pathway EPZ; (3) establishment of procedures to allow emergency workers to voluntarily choose to enter the plume exposure pathway EPZ where radiation levels may expose individuals to higher than pre-authorized exposures for lifesaving missions, to protect valuable property, or to protect large populations; and (4) use of a KI decision-making process that involves close coordination between appropriate assessment and decision-making staff.

Whenever emergency personnel are planning to undertake an operation, it is essential that the best estimate of the situation be known by the personnel directing the operation. All sources of information, including projected exposure rate patterns, should be considered and a best estimate made of the exposure likely to be received during a specific mission. The mission must be planned by taking into consideration the most likely situation as well as the most potentially hazardous situation. Items to be considered include alternative entry and exit routes, potential changes in meteorological conditions, areas or roads to be avoided, equipment and vehicle failure, and other relevant items.

Responsible OROs should demonstrate the capability to make decisions concerning the authorization of exposure levels in excess of pre-authorized levels and to manage the number of emergency workers receiving radiation dose above pre-authorized levels.

As appropriate, OROs should demonstrate the capability to make decisions on the distribution and administration of KI, as a protective measure, based on the ORO's plan and/or procedures or projected thyroid dose compared with the established PAGs for KI administration.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 2.b.—Radiological Assessment and Protective Action Recommendations and Decisions for the Plume Phase of the Emergency

Intent

This sub-element is derived from NUREG–0654, which indicates that Offsite Response Organizations (ORO) have the capability to independently project integrated dose from exposure rates or other information and compare the estimated dose savings with the protective action guides. 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 procedures or EPA 400–R–92–001 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), availability of appropriate in-place shelter, weather conditions, evacuation time estimates, and situations that create higher than normal risk from evacuation.

Criterion 2.b.1: Appropriate protective action recommendations are based on available information on plant conditions, field monitoring data, and licensee and ORO dose projections, as well as knowledge of onsite and offsite environmental conditions. (NUREG–0654, I.8, 10, 11 and Supplement 3)

Extent of Play. During the initial stage of the emergency response, following notification of plant conditions that may warrant offsite protective actions, the ORO should demonstrate the capability to use appropriate means, described in the plan and/or procedures, to develop protective action recommendations (PAR) for decision-makers based on available information and recommendations from the licensee, and field monitoring data, if available.

When release and meteorological data are provided by the licensee, the ORO also considers these data. The ORO should demonstrate a reliable capability to independently validate dose projections. The types of calculations to be demonstrated depend on the data available and the need for assessments to support the PARs appropriate to the scenario. In all cases, calculation of projected dose should be demonstrated. Projected doses should be related to quantities and units of the PAG to which they will be compared. PARs should be promptly transmitted to decision-makers in a prearranged format.

Differences greater than a factor of 10 between projected doses by the licensee and the ORO should be discussed with the licensee with respect to the input data and assumptions used, the use of different models, or other possible reasons. Resolution of these differences should be incorporated into the PAR if timely and appropriate. The ORO should demonstrate the capability to use any additional data to refine projected doses and exposure rates and revise the associated PARs.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Criterion 2.b.2: A decision-making process involving consideration of appropriate factors and necessary coordination is used to make protective action decisions (PAD) for the general public (including the recommendation for the use of KI, if ORO policy). (NUREG–0654, J.9, 10.m)

Extent of Play. Offsite Response Organizations (ORO) should have the capability to make both initial and subsequent PADs. They should demonstrate the capability to make initial PADs in a timely manner appropriate to the situation, based on notification from the licensee, assessment of plant status and releases, and PARs from the utility and ORO staff.

The dose assessment personnel may provide additional PARs based on the subsequent dose projections, field monitoring data, or information on plant conditions. The decision-makers should demonstrate the capability to change protective actions as appropriate based on these projections.

Where specified in the plan and/or procedures, responsible OROs should demonstrate the capability to make decisions on the distribution and administration of KI as a protective measure. This decision should be based on the ORO's plan and/or procedures or projected thyroid dose compared with the established PAG for KI administration. The KI decision-making process should involve close coordination with appropriate assessment and decision-making staff.

If more than one ORO is involved in decision-making, OROs should communicate and coordinate PADs with affected OROs. OROs should demonstrate the capability to communicate the contents of decisions to the affected jurisdictions.

All decision-making activities by ORO personnel must be performed based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 2.c—Protective Action Decisions Consideration for the Protection of Special Populations

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) 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.

Criterion 2.c.1: Protective action decisions are made, as appropriate, for special population groups. (NUREG–0654, J.9, J.10.c, d, e, g)

Extent of Play. Usually, it is appropriate to implement evacuation in areas where doses are projected to exceed the lower end of the range of PAGs, except for situations where there is a high-risk environment or where high-risk groups (e.g., the immobile or infirm) are involved. In these cases, examples of factors that should be considered are: weather conditions, shelter availability, Evacuation Time Estimates, availability of transportation assets, risk of evacuation vs. risk from the avoided dose, and precautionary school evacuations. In situations where an institutionalized population cannot be evacuated, the administration of KI should be considered by the OROs.

All decision-making activities associated with protective actions, including consideration of available resources, for special population groups must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 2.d.—Radiological Assessment and Decision-Making for the Ingestion Exposure Pathway

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) have the means to assess the radiological consequences for the ingestion exposure pathway, relate them to the appropriate PAGs, and make timely, appropriate protective action decisions to mitigate exposure from the ingestion pathway.

During an accident at a nuclear power plant, a release of radioactive material may contaminate water supplies and agricultural products in the surrounding areas. Any such contamination would likely occur during the plume phase of the accident, and depending on the nature of the release could impact the ingestion pathway for weeks or years.

Criterion 2.d.1: Radiological consequences for the ingestion pathway are assessed and appropriate protective action decisions are made based on the ORO planning criteria. (NUREG–0654, I.8, 10; J.11)

Extent of Play. It is expected that the Offsite Response Organizations (ORO) will take precautionary actions to protect food and water supplies, or to minimize exposure to potentially contaminated water and food, in accordance with their respective plans and procedures. Often such precautionary actions are initiated by the OROs based on criteria related to the facility's emergency classification levels (ECL). Such actions may include recommendations to place milk animals on stored feed and to use protected water supplies.

The ORO should use its procedures (for example, development of a sampling plan) to assess the radiological consequences of a release on the food and water supplies. The ORO assessment should include the evaluation of the radiological analyses of representative samples of water, food, and other ingestible substances of local interest from potentially impacted areas, the characterization of the releases from the facility, and the extent of areas potentially impacted by the release. During this assessment, OROs should consider the use of agricultural and watershed data within the 50-mile EPZ. The radiological impacts on the food and water should then be compared to the appropriate ingestion PAGs contained in the ORO's plan and/or procedures. (The plan and/or procedures may contain PAGs based on specific dose commitment criteria or based on criteria as recommended by current Food and Drug Administration guidance.) Timely and appropriate recommendations should be provided to the ORO decision-makers group for implementation decisions. As time permits, the ORO may also include a comparison of taking or not taking a given action on the resultant ingestion pathway dose commitments.

The ORO should demonstrate timely decisions to minimize radiological impacts

from the ingestion pathway, based on the given assessments and other information available. Any such decisions should be communicated and to the extent practical, coordinated with neighboring and local OROs.

OROs should use Federal resources, as identified in the Federal Radiological Emergency Response Plan (FRERP), and other resources (e.g., compacts, nuclear insurers, etc.), if available. Evaluation of this criterion will take into consideration the level of Federal and other resources participating.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 2.e.—Radiological Assessment and Decision-Making Concerning Relocation, Re-entry, and Return

Intent

The sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) have the capability to make decisions on relocation, re-entry, and return of the general public. These decisions are essential for the protection of the public from the direct long-term exposure to deposited radioactive materials from a severe accident at a nuclear power plant.

Criterion 2.e.1: Timely relocation, re-entry, and return decisions are made and coordinated as appropriate, based on assessments of the radiological conditions and criteria in the ORO's plan and/or procedures. (NUREG–0654, A.1.b; I.10; M)

Extent of Play.

• *Relocation:* OROs should demonstrate the capability to estimate integrated dose in contaminated areas and to compare these estimates with PAGs, apply decision criteria for relocation of those individuals in the general public who have not been evacuated but where projected doses are in excess of relocation PAGs, and control access to evacuated and restricted areas. Decisions are made for relocating members of the evacuated public who lived in areas that now have residual radiation levels in excess of the PAGs. Determination of areas to be restricted should be based on factors such as the mix of radionuclides in deposited materials, calculated exposure rates vs. the PAGs, and field samples of vegetation and soil analyses.

• *Re-entry:* Decisions should be made regarding the location of control points and policies regarding access and exposure control for emergency workers and members of the general public who need to temporarily enter the evacuated area to perform specific tasks or missions.

Examples of control procedures are: the assignment of, or checking for, direct-reading and non direct-reading dosimeters for emergency workers; questions regarding the individual's objectives and locations expected to be visited and associated time frames; availability of maps and plots of radiation exposure rates; advice on areas to avoid; and procedures for exit including: monitoring of individuals, vehicles, and equipment; decision criteria regarding decontamination; and proper disposition of emergency worker dosimeters and maintenance of emergency worker radiation exposure records.

Responsible OROs should demonstrate the capability to develop a strategy for authorized re-entry of individuals into the restricted zone, based on established decision criteria. OROs should demonstrate the capability to modify those policies for security purposes (e.g., police patrols), for maintenance of essential services (e.g., fire protection and utilities), and for other critical functions. They should demonstrate the capability to use decision making criteria in allowing access to the restricted zone by the public for various reasons, such as to maintain property (e.g., to care for farm animals or secure machinery for storage), or to retrieve important possessions. Coordinated policies for access and exposure control should be developed among all agencies with roles to perform in the restricted zone. OROs should demonstrate the capability to establish policies for provision of dosimetry to all individuals allowed to re-enter the restricted zone. The extent that OROs need to develop policies on re-entry will be determined by scenario events.

• *Return:* Decisions are to be based on environmental data and political boundaries or physical/geological features, which allow identification of the boundaries of areas to which members of the general public may return. Return is permitted to the boundary of the restricted area that is based on the relocation PAG. Other factors that the ORO should consider are, for example: conditions that permit the cancellation of the emergency classification level and the relaxation of associated restrictive measures; basing return recommendations (i.e., permitting populations that were previously evacuated to reoccupy their homes and businesses on an unrestricted basis) on measurements of radiation from ground deposition; and the capability to identify services and facilities that require restoration within a few days and to identify the procedures and resources for their restoration. Examples of these services and facilities are: medical and social services, utilities, roads, schools, and intermediate term housing for relocated persons.

Evaluation Area 3—Protective Action Implementation

Sub-Element 3.a—Implementation of Emergency Worker Exposure Control

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) should have the capability to provide for the following: distribution, use, collection, and processing of direct-reading dosimeters and permanent record dosimeters; provide for direct-reading dosimeters to be read at appropriate frequencies by emergency workers; maintain a radiation dose record for each emergency worker; and provide for establishing a decision chain or authorization procedure for emergency workers to incur radiation exposures in excess of protective action guides, always applying the ALARA (As Low As is Reasonably Achievable) principle as appropriate.

Criterion 3.a.1: The OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers in accordance with the plans and procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. (NUREG–0654, K.3)

Extent of Play. OROs should demonstrate the capability to provide appropriate direct-reading and permanent record dosimetry, dosimetry chargers, and instructions on the use of dosimetry to emergency workers. For evaluation purposes, appropriate direct-reading dosimetry is defined as dosimetry that allows individual(s) to read the administrative reporting limits (that are pre-established at a level low enough to consider subsequent calculation of Total Effective Dose Equivalent) and maximum exposure limits (for those emergency workers involved in life saving activities) contained in the OROs plans and procedures.

Each emergency worker should have the basic knowledge of radiation exposure limits as specified in the ORO's plan and/or procedures. Procedures to monitor and record dosimeter readings and to manage radiological exposure control should be demonstrated.

During a plume phase exercise, emergency workers should demonstrate the procedures to be followed when administrative exposure limits and turn-back values are reached. The emergency worker should report accumulated exposures during the exercise as indicated in the plans and procedures. OROs should demonstrate the actions described in the plan and/or procedures by determining whether to replace the worker, to authorize the worker to incur additional exposures or to take other actions. If scenario events do not require emergency workers to seek authorizations for additional exposure, evaluators should interview at least two emergency workers, to determine their knowledge of whom to contact in the event authorization is needed and at what exposure levels. Emergency workers may use any available resources (e.g., written procedures and/or co-workers) in providing responses.

Although it is desirable for all emergency workers to each have a direct-reading dosimeter, there may be situations where team members will be in close proximity to each other during the entire mission and adequate control of exposure can be effected for all members of the team by one dosimeter worn by the team leader. Emergency workers who are assigned to low exposure rate areas, e.g., at reception centers, counting laboratories, emergency operations centers, and communications centers, may have individual direct-reading dosimeters or they may be monitored by dosimeters strategically placed in the work area. It should be noted that, even in these situations, each team member must still have their own permanent record dosimeter. Individuals without specific radiological response missions, such as farmers for animal care, essential utility service personnel, or other members of the public who must re-enter an evacuated area following or during the plume passage, should be limited to the lowest radiological

exposure commensurate with completing their missions.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 3.b—Implementation of KI Decision

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) should have the capability to provide radioprotective drugs for emergency workers, institutionalized individuals, and, if in the plan and/or procedures, to the general public for whom immediate evacuation may not be feasible, very difficult, or significantly delayed. While it is necessary for OROs to have the capability to provide KI to emergency workers and institutionalized individuals, the provision of KI to the general public is an ORO option and is reflected in ORO's plans and procedures. Provisions should include the availability of adequate quantities, storage, and means of the distribution of radioprotective drugs.

Criterion 3.b.1: KI and appropriate instructions are available should a decision to recommend use of KI be made. Appropriate record keeping of the administration of KI for emergency workers and institutionalized individuals (not the general public) is maintained. (NUREG–0654, E. 7, J. 10. e, f)

Extent of Play. Offsite Response Organizations (ORO) should demonstrate the capability to make KI available to emergency workers, institutionalized individuals, and, where provided for in the ORO plan and/or procedures, to members of the general public. OROs should demonstrate the capability to accomplish distribution of KI consistent with decisions made. Organizations should have the capability to develop and maintain lists of emergency workers and institutionalized individuals who have ingested KI, including documentation of the date(s) and time(s) they were instructed to ingest KI. The ingestion of KI recommended by the designated ORO health official is voluntary. For evaluation purposes, the actual ingestion of KI is not necessary. OROs should demonstrate the capability to formulate and disseminate appropriate instructions on the use of KI for those advised to take it. If a recommendation is made for the general public to take KI, appropriate information should be provided to the public by the means of notification specified in the ORO's plan and/or procedures.

Emergency workers should demonstrate the basic knowledge of procedures for the use of KI whether or not the scenario drives the use of KI. This can be accomplished by an interview with the evaluator.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 3.c—Implementation of Protective Actions for Special Populations

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) should have the capability to implement protective action decisions, including evacuation and/or sheltering, for all special populations. Focus is on those special populations that are (or potentially will be) affected by a radiological release from a nuclear power plant.

Criterion 3.c.1: Protective action decisions are implemented for special populations other than schools within areas subject to protective actions. (NUREG–0654, E.7; J.9, 10.c, d, e, g)

Extent of Play. Applicable OROs should demonstrate the capability to alert and notify (e.g., provide protective action recommendations and emergency information and instructions) special populations (hospitals, nursing homes, correctional facilities, mobility impaired individuals, transportation dependent, etc.). OROs should demonstrate the capability to provide for the needs of special populations in accordance with the ORO's plans and procedures.

Contact with special populations and reception facilities may be actual or simulated, as agreed to in the Extent of Play. At least ⅓ of transportation providers (including special resources for disabled individuals) must be actually contacted during each exercise. All actual and simulated contacts should be logged.

All implementing activities associated with protective actions for special populations must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Criterion 3.c.2: OROs/School officials decide upon and implement protective actions for schools. (NUREG–0654, J.10.c, d, g)

Extent of Play. Applicable OROs should demonstrate the capability to alert and notify all public schools, licensed day care centers, and participating private schools within the emergency planning zone of emergency conditions that are expected to or may necessitate protective actions for students.

In accordance with plans and/or procedures, OROs and/or officials of participating public and private schools and licensed day care centers should demonstrate the capability to make and implement prompt decisions on protective actions for students. Officials should demonstrate that the decision making process for protective actions considers (e.g., either accepts automatically or gives heavy weight to) protective action recommendations made by ORO personnel, the ECL at which these recommendations are received, preplanned strategies for protective actions for that ECL, and the location of students at the time (e.g., whether the students are still at home, en route to the school, or at the school).

Implementation of protective actions should be completed subject to the following provisions: At least one school in each affected school system or district, as appropriate, needs to demonstrate the implementation of protective actions. The implementation of canceling the school day, dismissing early, or sheltering should be simulated by describing to evaluators the procedures that would be followed. If evacuation is the implemented protective action, all activities to coordinate and complete the evacuation of students to reception centers, congregate care centers, or host schools may actually be demonstrated or accomplished through an interview process. If accomplished through an interview process, appropriate school personnel including decision making officials (e.g., superintendent/principal, transportation director/bus dispatcher), and at least one bus driver should be available to demonstrate knowledge of their role(s) in the evacuation of school children. Communications capabilities between school officials and the buses, if required by the plan and/or procedures, should be verified.

Officials of the participating school(s) or school system(s) should demonstrate the capability to develop and provide timely information to OROs for use in messages to parents, the general public, and the media on the status of protective actions for schools.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless specified above or indicated in the extent of play agreement.

Sub-Element 3.d.—Implementation of Traffic and Access Control

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) have the capability to implement protective action plans, 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.

Criterion 3.d.1: Appropriate traffic and access control is established. Accurate instructions are provided to traffic and access control personnel. (NUREG–0654, J.10.g, j, k)

Extent of Play. OROs should demonstrate the capability to select, establish, and staff appropriate traffic and access control points, consistent with protective action decisions (for example, evacuating,sheltering, and relocation), in a timely manner. OROs should demonstrate the capability to provide instructions to traffic and access control staff on actions to take when modifications in protective action strategies necessitate changes in evacuation patterns or in the area(s) where access is controlled.

Traffic and access control staff should demonstrate accurate knowledge of their roles and responsibilities. This capability may be demonstrated by actual deployment or by interview in accordance with the extent of play agreement.

In instances where OROs lack authority necessary to control access by certain types of traffic (rail, water, and air traffic), they should demonstrate the capability to contact the State or Federal agencies with authority to control access.

All activities must be based on the ORO's plans and procedures and completed as they

would be in an actual emergency, unless specified above or indicated in the extent of play agreement.

Criterion 3.d.2: Impediments to evacuation are identified and resolved. (NUREG–0654, J.10.k)

Extent of Play. OROs should demonstrate the capability, as required by the scenario, to identify and take appropriate actions concerning impediments to evacuation. Actual dispatch of resources to deal with impediments, such as wreckers, need not be demonstrated; however, all contacts, actual or simulated, should be logged.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless specified above or indicated in the extent of play agreement.

Sub-Element 3.e—Implementation of Ingestion Pathway Decisions

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) should have the capability to implement protective actions, based on criteria recommended by current Food and Drug Administration guidance, for the ingestion pathway zone (IPZ), the area within an approximate 50-mile radius of the nuclear power plant. This sub-element focuses on those actions required for implementation of protective actions.

Criterion 3.e.1: The ORO demonstrates the availability and appropriate use of adequate information regarding water, food supplies, milk, and agricultural production within the ingestion exposure pathway emergency planning zone for implementation of protective actions. NUREG–0654, J.9, 11)

Extent of Play. Applicable OROs should demonstrate the capability to secure and utilize current information on the locations of dairy farms, meat and poultry producers, fisheries, fruit growers, vegetable growers, grain producers, food processing plants, and water supply intake points to implement protective actions within the ingestion pathway EPZ. OROs should use Federal resources as identified in the FRERP, and other resources (e.g., compacts, nuclear insurers, etc.), if available. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Criterion 3.e.2: Appropriate measures, strategies, and pre-printed instructional material are developed for implementing protective action decisions for contaminated water, food products, milk, and agricultural production. (NUREG–0654, E.5, 7; J.9, 11)

Extent of Play. Development of measures and strategies for implementation of IPZ protective actions should be demonstrated during exercise play by formulation of protective action information for the general public and food producers and processors. This includes the capability for the rapid reproduction and distribution of appropriate pre-printed information and instructions to pre-determined individuals and businesses. OROs should demonstrate the capability to control, restrict or prevent distribution of contaminated food by commercial sectors. Exercise play should include demonstration of communications and coordination between organizations to implement protective actions. However, actual field play of implementation activities may be simulated. For example, communications and coordination with agencies responsible for enforcing food controls within the IPZ should be demonstrated, but actual communications with food producers and processors may be simulated.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-element 3.f—Implementation of Relocation, Re-entry, and Return Decisions

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) should demonstrate the capability to implement plans, procedures, and decisions for relocation, re-entry, and return. Implementation of these decisions is essential for the protection of the public from the direct long-term exposure to deposited radioactive materials from a severe accident at a commercial nuclear power plant.

Criterion 3.f.1: Decisions regarding controlled re-entry of emergency workers and relocation and return of the public are coordinated with appropriate organizations and implemented. (NUREG–0654, M.1, 3)

Extent of Play.

- *Relocation:* OROs should demonstrate the capability to coordinate and implement decisions concerning relocation of individuals, not previously evacuated, to an area where radiological contamination will not expose the general public to doses that exceed the relocation PAGs. OROs should also demonstrate the capability to provide for short-term or long-term relocation of evacuees who lived in areas that have residual radiation levels above the PAGs.

Areas of consideration should include the capability to communicate with OROs regarding timing of actions, notification of the population of the procedures for relocation, and the notification of, and advice for, evacuated individuals who will be converted to relocation status in situations where they will not be able to return to their homes due to high levels of contamination. OROs should also demonstrate the capability to communicate instructions to the public regarding relocation decisions.

- *Re-entry:* OROs should demonstrate the capability to control re-entry and exit of individuals who need to temporarily re-enter the restricted area, to protect them from unnecessary radiation exposure and for exit of vehicles and other equipment to control the spread of contamination outside the restricted area. Monitoring and decontamination facilities will be established as appropriate.

Examples of control procedure subjects are: (1) The assignment of, or checking for, direct-reading and non-direct-reading dosimeters for emergency workers; (2) questions regarding the individuals' objectives and locations expected to be visited and associated timeframes; (3) maps and plots of radiation exposure rates; (4) advice on areas to avoid; and procedures for exit, including monitoring of individuals, vehicles, and equipment, decision criteria regarding contamination, proper disposition of emergency worker dosimeters, and maintenance of emergency worker radiation exposure records.

- *Return:* OROs should demonstrate the capability to implement policies concerning return of members of the public to areas that were evacuated during the plume phase. OROs should demonstrate the capability to identify and prioritize services and facilities that require restoration within a few days, and to identify the procedures and resources for their restoration. Examples of these services and facilities are medical and social services, utilities, roads, schools, and intermediate term housing for relocated persons.

Communications among OROs for relocation, re-entry, and return may be simulated; however all simulated or actual contacts should be documented. These discussions may be accomplished in a group setting.

OROs should use Federal resources as identified in the FRERP, and other resources (e.g., compacts, nuclear insurers, etc.), if available. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Evaluation Area 4—Field Measurement And Analysis

Sub-Element 4.a—Plume Phase Field Measurements and Analyses

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) 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 emergency planning zone to measure airborne radioiodine in the presence of noble gases and to measure radioactive particulate material in the airborne plume. In the event of an accident at a nuclear power plant, the possible release of radioactive material may pose a risk to the nearby population and environment. Although accident assessment methods are available to project the extent and magnitude of a release, these methods are subject to large uncertainties. During an accident, it is important to collect field radiological data in order to help characterize any radiological release. This does not imply that plume exposure projections should be made from

the field data. Adequate equipment and procedures are essential to such field measurement efforts.

Criterion 4.a.1: The field teams are equipped to perform field measurements of direct radiation exposure (cloud and ground shine) and to sample airborne radioiodine and particulates. (NUREG–0654, H.10; I.7, 8, 9, 11)

Extent of Play. Field teams should be equipped with all instrumentation and supplies necessary to accomplish their mission. This should include instruments capable of measuring gamma exposure rates and detecting the presence of beta radiation. These instruments should be capable of measuring a range of activity and exposure consistent with the intended use of the instrument and the ORO's plans and procedures, including radiological protection/exposure control of team members and detection of activity on the air sample collection media. An appropriate radioactive check source should be used to verify proper operational response for each low range radiation measurement instrument (less than 1 R/hr) and for high range instruments when available. If a source is not available for a high range instrument, a procedure should exist to operationally test the instrument before entering an area where only a high range instrument can make useful readings. All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Criterion 4.a.2: Field teams are managed to obtain sufficient information to help characterize the release and to control radiation exposure. (NUREG–0654, H.12; I.8, 11; J.10.a)

Extent of Play. Responsible Offsite Response Organizations (ORO) should demonstrate the capability to brief teams on predicted plume location and direction, travel speed, and exposure control procedures before deployment.

Field measurements are needed to help characterize the release and to support the adequacy of implemented protective actions or to be a factor in modifying protective actions. Teams should be directed to take measurements in such locations, at such times to provide information sufficient to characterize the plume and impacts.

If the responsibility to obtain peak measurements in the plume has been accepted by licensee field monitoring teams, with concurrence from OROs, there is no requirement for these measurements to be repeated by State and local monitoring teams. The sharing and coordination of plume measurement information among all field teams (licensee, Federal, and ORO) is essential. Coordination concerning transfer of samples, including a chain-of-custody form, to a radiological laboratory should be demonstrated. OROs should use Federal resources as identified in the Federal Radiological Emergency Response Plan (FRERP), and other resources (e.g., compacts, utility, etc.), if available. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Criterion 4.a.3: Ambient radiation measurements are made and recorded at appropriate locations, and radioiodine and particulate samples are collected. Teams will move to an appropriate low background location to determine whether any significant (as specified in the plan and/or procedures) amount of radioactivity has been collected on the sampling media. (NUREG–0654, I.7, 8, 9, 11)

Extent of Play. Field teams should demonstrate the capability to report measurements and field data pertaining to the measurement of airborne radioiodine and particulates and ambient radiation to the field team coordinator, dose assessment, or other appropriate authority. If samples have radioactivity significantly above background, the appropriate authority should consider the need for expedited laboratory analyses of these samples. Offsite Response Organizations (ORO) should share data in a timely manner with all appropriate OROs. All methodology, including contamination control, instrumentation, preparation of samples, and a chain-of-custody form for transfer to a laboratory, will be in accordance with the ORO plan and/or procedures. OROs should use Federal resources as identified in the FRERP, and other resources (e.g., compacts, utility, etc.), if available. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 4.b—Post Plume Phase Field Measurements and Sampling

Intent

This sub-element is derived from NUREG–0654, which provides that OROs should have the capability to assess the actual or potential magnitude and locations of radiological hazards in the ingestion pathway zone (IPZ) and for relocation, re-entry and return measures. This sub-element focuses on the collection of environmental samples for laboratory analyses that are essential for decisions on protection of the public from contaminated food and water and direct radiation from deposited materials.

Criterion 4.b.1: The field teams demonstrate the capability to make appropriate measurements and to collect appropriate samples (e.g., food crops, milk, water, vegetation, and soil) to support adequate assessments and protective action decision-making. (NUREG–0654, H.12; I.8; J.10.a, 11)

Extent of Play. The Offsite Response Organizations (ORO) field teams should demonstrate the capability to take measurements and samples, at such times and locations as directed, to enable an adequate assessment of the ingestion pathway and to support re-entry, relocation, and return decisions. When resources are available, the use of aerial surveys and in-situ gamma measurement is appropriate. All methodology, including contamination control, instrumentation, preparation of samples, and a chain-of-custody form for transfer to a laboratory, will be in accordance with the ORO plan and/or procedures.

Ingestion pathway samples should be secured from agricultural products and water. Samples in support of relocation and return should be secured from soil, vegetation, and other surfaces in areas that received radioactive ground deposition. OROs should use Federal resources as identified in the FRERP, and other resources (e.g., compacts, utility, nuclear insurers, etc.), if available. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 4.c—Laboratory Operations

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) should have the capability to perform laboratory analyses of radioactivity in air, liquid, and environmental samples to support protective action decision-making.

Criterion 4.c.1: The laboratory is capable of performing required radiological analyses to support protective action decisions. (NUREG–0654, C.3; I.8, 9; J.11)

Extent of Play. The laboratory staff should demonstrate the capability to follow appropriate procedures for receiving samples, including logging of information, preventing contamination of the laboratory, preventing buildup of background radiation due to stored samples, preventing cross contamination of samples, preserving samples that may spoil (e.g., milk), and keeping track of sample identity. In addition, the laboratory staff should demonstrate the capability to prepare samples for conducting measurements.

The laboratory should be appropriately equipped to provide analyses of media, as requested, on a timely basis, of sufficient quality and sensitivity to support assessments and decisions as anticipated by the ORO's plans and procedures. The laboratory (laboratories) instrument calibrations should be traceable to standards provided by the National Institute of Standards and Technology. Laboratory methods used to analyze typical radionuclides released in a reactor incident should be as described in the plans and procedures. New or revised methods may be used to analyze atypical radionuclide releases (e.g., transuranics or as a result of a terrorist event) or if warranted by circumstances of the event. Analysis may require resources beyond those of the ORO.

The laboratory staff should be qualified in radioanalytical techniques and contamination control procedures.

OROs should use Federal resources as identified in the FRERP, and other resources

(*e.g.,* compacts, utility, nuclear insurers, *etc.*), if available. Evaluation of this criterion will take into consideration the level of Federal and other resources participating in the exercise.

All activities must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Evaluation Area 5—Emergency Notification and Public Information

Sub-Element 5.a—Activation of the Prompt Alert and Notification System

Intent

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

Criterion 5.a.1: Activities associated with primary alerting and notification of the public are completed in a timely manner following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. The initial instructional message to the public must include as a minimum the elements required by current FEMA REP guidance. (10 CFR Part 50, Appendix E.IV.D and NUREG–0654, E. 1, 4, 5, 6, 7)

Extent of Play. Responsible Offsite Response Organizations (ORO) should demonstrate the capability to sequentially provide an alert signal followed by an initial instructional message to populated areas (permanent resident and transient) throughout the 10-mile plume pathway EPZ. Following the decision to activate the alert and notification system, in accordance with the ORO's plan and/or procedures, completion of system activation should be accomplished in a timely manner (will not be subject to specific time requirements) for primary alerting/notification. The initial message should include the elements required by current FEMA REP guidance.

For exercise purposes, timely is defined as ''the responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay.'' If message dissemination is to be identified as not having been accomplished in a timely manner, the evaluator(s) will document a specific delay or cause as to why a message was not considered timely.

Procedures to broadcast the message should be fully demonstrated as they would in an actual emergency up to the point of transmission. Broadcast of the message(s) or test messages *is not* required. The alert signal activation may be simulated. However, the procedures should be demonstrated up to the point of actual activation. The capability of the primary notification system to broadcast an instructional message on a 24-hour basis should be verified during an interview with appropriate personnel from the primary notification system.

All activities for this criterion must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, except as noted above or otherwise indicated in the extent of play agreement.

Criterion 5.a.2: After the State and local governmental agency (agencies) point of contact is notified by the licensee of the situation requiring urgent action, activities associated with primary alerting and notification of the public in the event of an emergency situation requiring urgent action (a fast-breaking situation) are completed in one of the two following ways:

(1) The State and local governmental agency (agencies) point of contact has 15 minutes from verified notification by the licensee in which to complete primary alerting and notification of the public. In addition, the initial point of contact must demonstrate the capability to contact, in a timely manner, an authorized offsite decision-maker relative to the nature and severity of the event, in accordance with plans and procedures.

(2) The State and local governmental agency (agencies) point of contact promptly (in a timely manner) notifies State and local official(s) of the situation requiring urgent action, who then have 15 minutes in which to complete primary alerting and notification of the public.

The initial instructional message to the public must include the elements required by current FEMA REP guidance. (10 CFR Part 50, Appendix E.IV.D and NUREG–0654, E. 1, 3, 5, 6, 7)

Extent of Play. The ORO's capability to meet this criterion must be evaluated at least once every six years during a fast breaker drill. The ORO's established fast-breaking incident procedures will be evaluated. When the ORO's point of contact is notified by the licensee of an emergency situation requiring urgent action, the applicable ORO should demonstrate the capability to sequentially provide an alert signal followed by an initial instructional message to populated areas (permanent resident and transient) throughout the 10-mile plume pathway EPZ in one of the following two ways:

(1) The State and local governmental agency (agencies) point of contact demonstrates the capability to sequentially provide an alert signal followed by an initial instructional message to populated areas (permanent resident and transient) throughout the 10-mile plume pathway EPZ within 15 minutes of verified notification from the utility that a situation exists requiring urgent action. The initial instructional message should include the elements required by current FEMA REP guidance. The ''clock'' will start when the transmission of an initial notification of a General Emergency and a protective action recommendation from the utility is completed and verified. Within 15 minutes, actual contact of the primary notification system facility (facilities) and dissemination of the initial message to the public should be demonstrated; this is when the ''clock'' will stop.

Broadcast of the message may be simulated; however, once again, all activities leading to that point should be demonstrated. In addition, the ORO(s) should demonstrate the capability to contact, in a timely manner, an authorized offsite decision-maker relative to the nature and severity of the event, in accordance with plans and procedures. This contact may occur either prior to, or immediately subsequent to, activation of the primary alerting and notification system. Although it must be accomplished in a timely manner, contact of the decision-maker does not have to be completed within the 15-minute timeframe discussed above. The drill will be terminated when the alert signal activation (simulated) is initiated, the broadcast (simulated) is initiated by the primary notification system facility (facilities), and an authorized offsite decision-maker has been contacted.

(2) The State and local governmental agency (agencies) point of contact demonstrates the capability to promptly (in a timely manner) notify State and local official(s) of the situation requiring urgent action, who then must sequentially provide an alert signal followed by an initial instructional message to populated areas (permanent resident and transient) throughout the 10-mile plume pathway EPZ within 15 minutes of notification by the point of contact. The initial instructional message should include the elements required by current FEMA REP guidance. The ''clock'' will start when the transmission of an initial notification of a situation requiring urgent action is received by the State and local governmental official(s). Within 15 minutes, actual contact of the primary notification system facility (facilities) and dissemination of the initial message to the public should be demonstrated; this is when the ''clock'' will stop. Broadcast of the message may be simulated; however, once again, all activities leading to that point should be demonstrated. The drill will be terminated when the alert signal activation (simulated) is initiated and the broadcast (simulated) is initiated by the primary notification system facility (facilities).

The drill will be scheduled to be conducted ''Unannounced'' within a one-week window. The evaluators and controllers for each jurisdiction will be briefed in detail concerning the extent of play and timing of the drill. Evaluators and controllers will be stationed at each location where actions will be initiated, where alert signals are controlled, and at the applicable primary notification system facility (facilities). The actual activation of the alert signal may be simulated; however, all activities leading up to activation should be demonstrated and should be completed within the 15-minute time frame. It should be noted that coordination among OROs is normally desirable; however, in the event of a fast breaker situation this coordination is not necessary prior to activation of the primary alert and notification sequence.

All activities for this criterion must be based on the ORO's plans and procedures

and completed as they would be in an actual emergency, except as noted above or otherwise indicated in the extent of play agreement.

Criterion 5.a.3: Activities associated with FEMA approved exception areas (where applicable) are completed within 45 minutes following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. Backup alert and notification of the public is completed within 45 minutes following the detection by the ORO of a failure of the primary alert and notification system. (NUREG–0654, E. 6, Appendix 3.B.2.c)

Extent of Play. Offsite Response Organizations (ORO) with FEMA-approved exception areas (identified in the approved Alert and Notification System Design Report) 5–10 miles from the nuclear power plant should demonstrate the capability to accomplish primary alerting and notification of the exception area(s) within 45 minutes following the initial decision by authorized offsite emergency officials to notify the public of an emergency situation. The 45-minute clock will begin when the OROs make the decision to activate the alert and notification system for the first time for a specific emergency situation. The initial message should, at a minimum, include: a statement that an emergency exists at the plant and where to obtain additional information.

For exception area alerting, at least one route needs to be demonstrated and evaluated. The selected routes should vary from exercise to exercise. However, the most difficult route should be demonstrated at least once every six years. All alert and notification activities along the route should be simulated (that is, the message that would actually be used is read for the evaluator, but not actually broadcast) as agreed upon in the extent of play. Actual testing of the mobile public address system will be conducted at some agreed upon location.

Backup alert and notification of the public should be completed within 45 minutes following the detection by the ORO of a failure of the primary alert and notification system. Backup route alerting needs only be demonstrated and evaluated, in accordance with the ORO's plan and/or procedures and the extent of play agreement, if the exercise scenario calls for failure of any portion of the primary system(s), or if any portion of the primary system(s) actually fails to function. If demonstrated, only one route needs to be selected and demonstrated. All alert and notification activities along the route should be simulated (that is, the message that would actually be used is read for the evaluator, but not actually broadcast) as agreed upon in the extent of play. Actual testing of the Public Address system will be conducted at some agreed upon location.

All activities for this criterion must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, except as noted above or otherwise indicated in the extent of play agreement.

Sub-Element 5.b—Emergency Information and Instructions for the Public and the Media

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) 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 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 be available for dealing with rumors.

Criterion 5.b.1: OROs provide accurate emergency information and instructions to the public and the news media in a timely manner. (NUREG–0654, E. 5, 7; G.3.a, G.4.a, b, c)

Extent of Play. Subsequent emergency information and instructions should be provided to the public and the media in a timely manner (will not be subject to specific time requirements). For exercise purposes, timely is defined as ''the responsible ORO personnel/representatives demonstrate actions to disseminate the appropriate information/instructions with a sense of urgency and without undue delay.'' If message dissemination is to be identified as not having been accomplished in a timely manner, the evaluator(s) will document a specific delay or cause as to why a message was not considered timely.

The Offsite Response Organizations (ORO) should ensure that emergency information and instructions are consistent with protective action decisions made by appropriate officials. The emergency information should contain all necessary and applicable instructions to assist the public in carrying out protective action decisions provided to them (e.g., evacuation instructions, evacuation routes, reception center locations, what to take when evacuating, information concerning pets, shelter-in-place instructions, information concerning protective actions for schools and special populations, rumor control telephone number, etc.). The ORO should also be prepared to disclose and explain the emergency classification level (ECL) of the incident. As a minimum, this must be included in media briefings and/or press releases. OROs should demonstrate the capability to use language that is clear and understandable to the public, including tribes, within both the plume and ingestion pathway EPZs. This includes demonstration of the capability to use familiar landmarks and boundaries to describe protective action areas.

The emergency information should be all-inclusive by including previously identified protective action areas that are still valid as well as new areas. The OROs should demonstrate the capability to ensure that emergency information that is no longer valid is rescinded and not repeated by broadcast media. In addition, the OROs should demonstrate the capability to ensure that current emergency information is repeated at pre-established intervals in accordance with the plan and/or procedures.

OROs should demonstrate the capability to develop emergency information in a non-English language when required by the plan and/or procedures.

If ingestion pathway measures are exercised, OROs should demonstrate that a system exists for rapid dissemination of ingestion pathway information to pre-determined individuals and businesses in accordance with the ORO's plan and/or procedures.

OROs should demonstrate the capability to provide timely, accurate, concise, and coordinated information to the news media for subsequent dissemination to the public. This would include demonstration of the capability to conduct timely and pertinent media briefings and distribute press releases as the situation warrants. The OROs should demonstrate the capability to respond appropriately to inquiries from the news media. All information presented in media briefings and press releases should be consistent with protective action decisions and other emergency information provided to the public. Copies of pertinent emergency information (e.g., EAS messages and press releases) and media information kits should be available for dissemination to the media.

OROs should demonstrate that an effective system is in place for dealing with rumors. Rumor control staff should demonstrate the capability to provide or obtain accurate information for callers or refer them to an appropriate information source. Information from the rumor control staff, including information that corrects false or inaccurate information when trends are noted, should be included, as appropriate, in emergency information provided to the public, media briefings, and/or press releases.

All activities for this criterion must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Evaluation Area 6—Support Operation/ Facilities

Sub-Element 6.a—Monitoring and Decontamination of Evacuees and Emergency Workers, and Registration of Evacuees

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) have the capability to implement radiological monitoring and decontamination of evacuees and emergency workers, while minimizing contamination of the facility, and registration of evacuees at reception centers.

Criterion 6.a.1: The reception center/ emergency worker facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or emergency workers. (NUREG–0654, J.10.h; J.12; K.5.b)

Extent of Play. Radiological monitoring, decontamination, and registration facilities for evacuees/ emergency workers should be set up and demonstrated as they would be in an actual emergency or as indicated in the

extent of play agreement. This would include adequate space for evacuees' vehicles. Expected demonstration should include 1/3 of the monitoring teams/portal monitors required to monitor 20% of the population allocated to the facility within 12 hours. Prior to using monitoring instrument(s), the monitor(s) should demonstrate the process of checking the instrument(s) for proper operation.

Staff responsible for the radiological monitoring of evacuees should demonstrate the capability to attain and sustain a monitoring productivity rate per hour needed to monitor the emergency planning zone (EPZ) population planning base within about 12 hours. This monitoring productivity rate per hour is the number of evacuees that can be monitored per hour by the total complement of monitors using an appropriate monitoring procedure. A minimum of six individuals per monitoring station should be monitored, using equipment and procedures specified in the plan and/or procedures, to allow demonstration of monitoring, decontamination, and registration capabilities. The monitoring sequences for the first six simulated evacuees per monitoring team will be timed by the evaluators in order to determine whether the twelve-hour requirement can be met. Monitoring of emergency workers does not have to meet the twelve-hour requirement. However, appropriate monitoring procedures should be demonstrated for a minimum of two emergency workers.

Decontamination of evacuees/emergency workers may be simulated and conducted by interview. The availability of provisions for separately showering should be demonstrated or explained. The staff should demonstrate provisions for limiting the spread of contamination. Provisions could include floor coverings, signs and appropriate means (e.g., partitions, roped-off areas) to separate clean from potentially contaminated areas. Provisions should also exist to separate contaminated and uncontaminated individuals, provide changes of clothing for individuals whose clothing is contaminated, and store contaminated clothing and personal belongings to prevent further contamination of evacuees or facilities. In addition, for any individual found to be contaminated, procedures should be discussed concerning the handling of potential contamination of vehicles and personal belongings.

Monitoring personnel should explain the use of action levels for determining the need for decontamination. They should also explain the procedures for referring evacuees who cannot be adequately decontaminated for assessment and follow up in accordance with the ORO's plans and procedures. Contamination of the individual will be determined by controller inject and not simulated with any low-level radiation source.

The capability to register individuals upon completion of the monitoring and decontamination activities should be demonstrated. The registration activities demonstrated should include the establishment of a registration record for each individual, consisting of the individual's name, address, results of monitoring, and time of decontamination, if any, or as otherwise designated in the plan. Audio recorders, camcorders, or written records are all acceptable means for registration.

All activities associated with this criterion must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Sub-Element 6.b—Monitoring and Decontamination of Emergency Worker Equipment

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) have the capability to implement radiological monitoring and decontamination of emergency worker equipment, including vehicles.

Criterion 6.b.1: The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment, including vehicles. (NUREG–0654, K.5.b)

Extent of Play. The monitoring staff should demonstrate the capability to monitor equipment, including vehicles, for contamination in accordance with the Offsite Response Organizations (ORO) plans and procedures. Specific attention should be given to equipment, including vehicles, that was in contact with individuals found to be contaminated. The monitoring staff should demonstrate the capability to make decisions on the need for decontamination of equipment including vehicles based on guidance levels and procedures stated in the plan and/or procedures.

The area to be used for monitoring and decontamination should be set up as it would be in an actual emergency with all route markings, instrumentation, record keeping and contamination control measures in place. Monitoring procedures should be demonstrated for a minimum of one vehicle. It is generally not necessary to monitor the entire surface of vehicles. However, the capability to monitor areas such as air intake systems, air filters, radiator grills, bumpers, wheel wells and tires of vehicles, and door handles, as a minimum, should be demonstrated. Interior surfaces of vehicles that were in contact with individuals found to be contaminated should also be checked.

Decontamination capabilities, and provisions for vehicles and equipment that cannot be decontaminated, may be simulated and conducted by interview.

All activities associated with this criterion must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.

Sub-Element 6.c—Temporary Care of Evacuees

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) demonstrate the capability to establish relocation centers in host areas. Congregate care is normally provided in support of OROs by the American Red Cross (ARC) under existing letters of agreement.

Criterion 6.c.1: Managers of congregate care facilities demonstrate that the centers have resources to provide services and accommodations consistent with American Red Cross planning guidelines. (Found in MASS CARE—Preparedness Operations, ARC 3031) Managers demonstrate the procedures to assure that evacuees have been monitored for contamination and have been decontaminated as appropriate prior to entering congregate care facilities. (NUREG–0654, J.10.h, J.12)

Extent of Play. Under this criterion, demonstration of congregate care centers may be conducted out of sequence with the exercise scenario. The evaluator should conduct a walk-through of the center to determine, through observation and inquiries, that the services and accommodations are consistent with ARC 3031. In this simulation, it is not necessary to set up operations as they would be in an actual emergency. Alternatively, capabilities may be demonstrated by setting up stations for various services and providing those services to simulated evacuees. Given the substantial differences between demonstration and simulation of this objective, exercise demonstration expectations should be clearly specified in extent-of-play agreements.

Congregate care staff should also demonstrate the capability to ensure that evacuees have been monitored for contamination, have been decontaminated as appropriate, and have been registered before entering the facility. This capability may be determined through an interview process.

If operations at the center are demonstrated, material that would be difficult or expensive to transport (e.g., cots, blankets, sundries, and large-scale food supplies) need not be physically available at the facility (facilities). However, availability of such items should be verified by providing the evaluator a list of sources with locations and estimates of quantities.

All activities associated with this criterion must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless noted above or otherwise indicated in the extent of play agreement.

Sub-Element 6.d—Transportation and Treatment of Contaminated Injured Individuals

Intent

This sub-element is derived from NUREG–0654, which provides that Offsite Response Organizations (ORO) should have the capability to transport contaminated injured individuals to medical facilities with the capability to provide medical services.

Criterion 6.d.1: The facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals. (NUREG–0654, F.2; H.10; K.5.a, b; L.1, 4)

Extent of Play. Monitoring, decontamination, and contamination control

efforts will not delay urgent medical care for the victim.

Offsite Response Organizations (ORO) should demonstrate the capability to transport contaminated injured individuals to medical facilities. An ambulance should be used for the response to the victim. However, to avoid taking an ambulance out of service for an extended time, any vehicle (e.g., car, truck, or van) may be utilized to transport the victim to the medical facility. Normal communications between the ambulance/dispatcher and the receiving medical facility should be demonstrated. If a substitute vehicle is used for transport to the medical facility, this communication must occur prior to releasing the ambulance from the drill. This communication would include reporting radiation monitoring results, if available. Additionally, the ambulance crew should demonstrate, by interview, knowledge of where the ambulance and crew would be monitored and decontaminated, if required, or whom to contact for such information.

Monitoring of the victim may be performed prior to transport, done enroute, or deferred to the medical facility. Prior to using a monitoring instrument(s), the monitor(s) should demonstrate the process of checking the instrument(s) for proper operation. All monitoring activities should be completed as they would be in an actual emergency. Appropriate contamination control measures should be demonstrated prior to and during transport and at the receiving medical facility.

The medical facility should demonstrate the capability to activate and set up a radiological emergency area for treatment. Equipment and supplies should be available for the treatment of contaminated injured individuals.

The medical facility should demonstrate the capability to make decisions on the need for decontamination of the individual, to follow appropriate decontamination procedures, and to maintain records of all survey measurements and samples taken. All procedures for the collection and analysis of samples and the decontamination of the individual should be demonstrated or described to the evaluator.

All activities associated with this criterion must be based on the ORO's plans and procedures and completed as they would be in an actual emergency, unless otherwise indicated in the extent of play agreement.

Dated: June 5, 2001.

Archibald C. Reid III,

Acting Executive Associate Director, Preparedness, Training & Exercises Directorate.

[FR Doc. 01–14637 Filed 6–8–01; 8:45 am]

BILLING CODE 6718–06–P

FEDERAL EMERGENCY MANAGEMENT AGENCY

Radiological Emergency Preparedness: Alert and Notification

AGENCY: Federal Emergency Management Agency.

ACTION: Notice.

SUMMARY: FEMA is considering whether it should continue to require State and local emergency management agencies to characterize and to identify the appropriate Emergency Classification Level (ECL) when initially notifying the public of incidents at nuclear power plants. We also are considering whether to leave to the discretion of State and local emergency management agencies what, if anything, to say about protective action recommendations. We invite your views on these issues and on any other concerns that you may have about the content of initial notification messages.

DATES: Please submit your comments on or before August 10, 2001.

ADDRESSES: Please submit your comments to the Rules Docket Clerk, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street, SW., room 840, Washington, DC 20472, or send them by e-mail to *rules@fema.gov.* Please refer to the ''REP Alert and Notification Notice'' in the subject line of your e-mail or comment letter.

FOR FURTHER INFORMATION CONTACT: Vanessa Quinn, Chief, Radiological Emergency Preparedness Branch, Chemical and Radiological Preparedness Division, Federal Emergency Management Agency, 500 C Street SW., Washington, DC 20472; (202) 646–3664, or (e-mail) *vanessa.quinn@fema.gov,* or Nathan S. Bergerbest, Office of the General Counsel, Federal Emergency Management Agency, 500 C Street, SW., Washington DC 20472, (202) 646–2685, or (e-mail) *nathan.bergerbest@fema.gov.*

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA), through its Radiological Emergency Preparedness program (REP), reviews the emergency response plans of Offsite Response Organizations (OROs), which are the State and local emergency management agencies responsible for responding to incidents involving nuclear power plant. FEMA also conducts exercises to test the capability of OROs to perform in accordance with the provisions of their plans. These activities are undertaken pursuant to FEMA regulations, which appear in Part 350 of Title 44 of the Code of Federal Regulations and a Memorandum of Understanding between FEMA and the Nuclear Regulatory Commission which appears at 44 CFR Part 353, Appendix A.

FEMA recently completed a strategic review of the REP program. In the course of the strategic review, questions were raised regarding what information should be included in the initial message informing the public that an incident has occurred at a nuclear power plant.

FEMA requires that OROs demonstrate their ability to communicate effectively with the public following an incident at a nuclear power plant. We address how this initial notification should be given to the public in several guidance documents. These include the joint *FEMA/Nuclear Regulatory Commission Criteria for Preparation and Evaluation of Radiological Emergency Response Plans* and *Preparedness in Support of Nuclear Power Plants (NUREG–0654/REP–1, Rev. 1),* dated November 1980 [1], FEMA's *Radiological Emergency Preparedness Exercise Manual (REP–14),* dated September, 1991 [2], FEMA's *Radiological Emergency Preparedness Exercise Evaluation Methodology (REP–15),* dated September, 1991 [3] and FEMA's *Guidance for Providing Emergency Information and Instructions to the Public for Radiological Emergencies Using the New Emergency Alert System (EAS),* dated February 2, 1999.[4]

FEMA regulations require that planning standards and evaluation criteria in NUREG–0654/FEMA REP–1, Rev. 1,[5] and the Nuclear Regulatory Commission's emergency planning rule [6] are to be used in evaluating ORO plans and capabilities. While both the Nuclear Regulatory Commission's emergency planning rule and NUREG–0654/FEMA REP–1, Rev. 1 contemplate that initial notification messages will be made in a timely manner, neither prescribe the content of the initial notification message.[7]

[1] Planning Standard F, evaluation criterion E.7

[2] Objective 11.

[3] Objective 11.

[4] Attachment ''B'' to Memorandum for FEMA Regional Directors and Regional Assistance Committee Chairs from Kay C. Goss, Associate Director for Preparedness, Training and Exercises. The attachment can be viewed at *htpp://www.fema.gov/pte/rep/easrep.htm.* (viewed May 30, 2001). This document is referred to as the ''February 2, 1999 Guidance'').

[5] 44 CFR 350.5.

[6] 10 CFR 50.47, 10 CFR Part 50 (Appendix E) and Part 70.

[7] Planning Standard ''E'', evaluation criteria E.7 provides that ''Each [ORO] shall provide written messages intended for the public, consistent with the [nuclear power plant's classification scheme. In particular, draft messages to the public giving instructions with regard to specific protective actions to be taken by occupants of affected areas shall be prepared and included as part of the State and local [emergency response plans]. Such messages should include the appropriate aspects of sheltering, ad hoc respiratory protection, e.g., handkerchief over mouth, thyroid blocking or evacuation * * *''