

NUREG-0654/FEMA-REP-1, REVISION 2, STAKEHOLDER ENGAGEMENT MATERIAL

The enclosed information is provided in support of the Stakeholder Engagement sessions scheduled for October 29-31, 2013 (ADAMS Accession No. ML13193A171; www.regulations.gov, Docket ID: FEMA-2012-0026). The information that follows consists of preliminary draft evaluation criteria for Section II of NUREG-0654/FEMA-REP-1, Revision 2. The criteria are grouped by the planning standards found in Federal Emergency Management Agency (FEMA) and Nuclear Regulatory Commission (NRC) regulations (44 CFR 350.5(a) and 10 CFR 50.47(b) respectively).

Each planning standard was assigned to one of four writing teams, comprised of FEMA and NRC headquarters and regional emergency preparedness staff. The teams were tasked with developing new or revising current evaluation criteria based on changes to emergency preparedness-related regulations, policies, directives, technologies, and lessons learned since NUREG-0654/FEMA-REP-1, Revision 1, was issued. This is a key step in revising the document to provide enhanced guidance for the development, review, and evaluation of NRC licensee and offsite radiological emergency response planning and preparedness surrounding the Nation's commercial nuclear power plants.

Each preliminary draft criterion is presented in the following format:

- the wording of the criterion and list of applicable organizations;
- any clarifying or explanatory information associated with the criterion;
- the corresponding criterion (or criteria) and applicable organizations as found in NUREG-0654/FEMA-REP-1, Revision 1;
- a redline version of the criterion to show where changes have been made; and
- a general discussion of why changes were made to an existing criterion, why an existing criterion is no longer needed, or why a new criterion was added.

The writing teams will review the criteria with stakeholders during the sessions and be available for questions. Feedback provided by stakeholders will be considered by the writing teams in making any further changes to the criteria.

Several key changes have been incorporated into the preliminary draft evaluation criteria, as highlighted below:

- The criteria have been written using non-mandatory, active voice language to denote they are provided as recommendations for meeting the planning standards. These criteria would be used by FEMA and NRC reviewers for determining the adequacy of emergency plans and preparedness programs in the absence of an approved alternative approach.
- Additional explanatory information for the criteria will be placed in the FEMA REP Program Manual and a new NRC emergency preparedness guidance document to be developed in conjunction with NUREG-0654/FEMA-REP-1, Revision 2.
- The criteria for utility offsite radiological emergency response planning and preparedness, for those situations in which State and/or local governments decline to participate in emergency planning, have been incorporated into the criteria for other offsite response organizations (OROs) where appropriate. These criteria were located in Supplement 1 to NUREG-0654/FEMA-REP-1, Revision 1, and can now be identified by the term "Licensee ORO" in the list of applicable organizations.
- Tribal entities have been incorporated into the wording of the criteria and list of applicable organizations (where appropriate) in accordance with Federal policy.
- Separate criteria for early site permit (ESP) applicants are no longer provided, as the information within Supplement 2 to NUREG-0654/FEMA-REP-1, Revision 1, has been subsumed into the main document. Section I of NUREG-0654/FEMA-REP-1, Revision 2, will provide a discussion of the actions an ESP applicant will need to address for submitting an emergency plan as part of its application.
- Several criteria were revised or added to incorporate information from other FEMA and NRC guidance documents, including Supplement 4 of NUREG-0654/FEMA-REP-1, Revision 1, the FEMA REP Program Manual, NSIR/DPR-ISG-01, NUREG-0696, and NUREG-0737, Supplement 1.

In summary, the writing teams have been focused on developing preliminary draft evaluation criteria in Section II of NUREG-0654/FEMA-REP-1, Revision 2, for discussion on October 29-31, 2013. The revision of Section I and other changes to the document are in progress and will be available for public review at a later time.

Planning Standard L

Planning Standard Language
Arrangements are made for medical services for contaminated injured individuals. ¹
Regulatory References: 10 CFR 50.47(b)(12) , 44 CFR 350.5(a)(12)

Evaluation Criterion L.1

Preliminary Draft Rev. 2 Version
Offsite response organizations establish and document arrangements with local and backup hospital and medical services that have the capability for evaluation of radiation exposure and uptake, including assurance that persons providing these services are adequately trained and prepared to handle contaminated and/or injured individuals.
Applicability: State, Local, Tribal, Licensee ORO
Additional Information: LOAs can be used to establish these arrangements. 1. OROs: LOAs should be validated annually and included in the documentation for the Annual Letter of Certification.

L.1, Rev. 1 Version	Redline Version
Each organization shall arrange for local and backup hospital and medical services having the capability for evaluation of radiation exposure and uptake, including assurance that persons providing these services are adequately prepared to handle contaminated individuals.	Each organization shall arrange for <u>Offsite response organizations establish and document arrangements with</u> local and backup hospital and medical services having that <u>have</u> the capability for evaluation of radiation exposure and uptake, including assurance that persons providing these services are adequately <u>trained and</u> prepared to handle contaminated <u>and/or injured</u> individuals.
Applicability: Licensee, State, Local	Applicability: Licensee , State, Local, <u>Tribal, Licensee ORO</u>
General Discussion <i>This criterion was split to remove applicability to the licensee. Due to the range of radiological injuries that could occur at a nuclear power plant site, more extensive criteria were deemed necessary and are now provided for licensees in criteria L.2, L.3, and L.4. Criterion L.1 was revised to be more specific to OROs. "Tribal" and "Licensee ORO" entities have been added as part of this revision to consolidate Supplement 1 to NUREG-0654/FEMA-REP-1, Revision 1, and align with FEMA's Tribal policy. <u>This change constitutes a revision of Evaluation Criterion L.1.</u></i>	

¹ The availability of an integrated emergency medical services systems and a public health emergency plan serving the area in which the facility is located and, as a minimum, equivalent to the Public Health Service Guide for Developing Health Disaster Plans, 1974, and to the requirements of an emergency medical services system as outlined in the Emergency Medical Services System Act of 1973 (P.L. 93-154 and amendments in 1979 P.L. 96-142), should be a part of and consistent with overall State or local disaster control plans and should be compatible with the specific overall emergency response plan for the facility.

Evaluation Criterion L.2

Preliminary Draft Rev. 2 Version	
The plan describes arrangements for the medical treatment of contaminated injured onsite personnel, and the treatment of those onsite personnel who have received significant radiation exposures and/or significant uptakes of radioactive materials. These arrangements include the components identified below:	
Applicability: Licensee	
Additional Information for Licensees: This requirement is not intended to address all requirements (OSHA, SARA III, etc.) for preparedness for medical events that could occur within the facility. The preparedness for injuries involving radiological contamination is expected to provide a basis for treatment of other injuries. As used herein, an injury is bodily harm that occurs suddenly as the result of an accident. It does not include illnesses. Although a licensee may be able to make these arrangements with offsite medical facilities, sites located in remote areas may need to provide these capabilities onsite.	

Rev. 1 Version	Redline Version
New criterion; no previous version exists.	<u>The plan describes arrangements for the medical treatment of contaminated injured onsite personnel, and the treatment of those onsite personnel who have received significant radiation exposures and/or significant uptakes of radioactive materials. These arrangements include the components identified below:</u>
Applicability: n/a	Applicability: <u>Licensee</u>
General Discussion <i>Criterion L.2 in Revision 1 of NUREG-0654/FEMA-REP-1 has now been expanded to include multiple sub-criteria that more fully address the full spectrum of medical treatment of radiological injuries that could occur in the industrial environment of a nuclear power plant and offer additional guidance. <u>This change constitutes the creation of a new criterion.</u></i>	

Evaluation Criterion L.2.a

Preliminary Draft Rev. 2 Version	
An onsite first aid capability on a 24 hour per day / 7 day per week basis. Adequate medical equipment and supplies necessary to perform this capability are maintained on site.	
Applicability: Licensee	

L.2, Rev. 1 Version	Redline Version
Each licensee shall provide for onsite first aid capability.	Each licensee shall provide for An onsite first aid capability on a 24 hour per day / 7 day per week basis. Adequate medical equipment and supplies necessary to perform this capability are maintained on site.
Applicability: Licensee	Applicability: Licensee
General Discussion <i>This criterion provides more descriptive guidance to address issues with access to first aid capabilities and medical equipment identified during NRC EP inspection/enforcement activities. <u>This change constitutes a revision of Evaluation Criterion L.2.</u></i>	

Evaluation Criterion L.2.b

Preliminary Draft Rev. 2 Version	
At least one member of each response team working within the plant (e.g., maintenance team, radiological monitoring team, etc.) has Red Cross First Aid, CPR, AED training and qualification, at a minimum.	
Applicability: Licensee	
Additional Information for Licensees: This item criterion does not apply to members of the ERO assigned to the Control Room, TSC, EOF, etc., and who will not enter the plant as part of a response team.	

Rev. 1 Version	Redline Version
New criterion; no previous version exists.	<u>At least one member of each response team working within the plant (e.g., maintenance team, radiological monitoring team, etc.) has Red Cross First Aid, CPR, AED training and qualification, at a minimum.</u>
Applicability: n/a	Applicability: <u>Licensee</u>
General Discussion <i>This criterion addresses first aid coverage for personnel who are assigned to activities within the plant in areas with high levels of radiation, hot surfaces, and/or pressurized fluids. First aid under these conditions can be successful only if it is immediately available. <u>This change constitutes the creation of a new criterion.</u></i>	

Evaluation Criterion L.2.c

Preliminary Draft Rev. 2 Version	
Primary and backup offsite medical facilities to treat contaminated, injured personnel on a 24 hour per day / 7 day per week basis. The plan identifies the expected patient transport time to the primary facility.	
Applicability: Licensee	
Additional Information for Licensees: It is recommended that there is flexibility to allow use of treatment centers not at the level of a full hospital (e.g., trauma centers, emergency room-only facilities, out-patient clinics, etc.). This criterion could be met by more than one facility with different operating hours. Licensees in remote areas may need to consider transport means such as life flight. The primary objective of this capability is medical treatment for the injury of a contaminated person. (See L.3 for treatment of radiation sickness.)	

Rev. 1 Version	Redline Version
New criterion; no previous version exists.	<u>Primary and backup offsite medical facilities to treat contaminated, injured personnel on a 24 hour per day / 7 day per week basis. The plan identifies the expected patient transport time to the primary facility.</u>
Applicability: n/a	Applicability: <u>Licensee</u>
General Discussion <i>This criterion was added to build upon criterion L.2 and distinguish between the arrangements for a contaminated injury and a radiation injury (which is addressed in criterion L.3). A radiation injury seldom has the immediacy of a trauma. <u>This change constitutes the creation of a new criterion.</u></i>	

Evaluation Criterion L.2.d

Preliminary Draft Rev. 2 Version	
Arrangements for radiological controls, including the isolation of contamination, assessment of contamination levels, radiation exposure monitoring for medical facility staff, collection of contaminated waste, and decontamination of treatment areas. In medical facilities without nuclear medicine departments, licensee radiological control personnel provide the radiological control capabilities. In these latter cases, the licensee provides basic radiological control training to the medical facility staff.	
Applicability: Licensee	
Additional Information for Licensees: The type and qualifications of the medical facility will largely determine what the role of the licensee will be with regard to the radiological controls implemented at the medical facility for the treatment of a contaminated injured person. Such arrangements are described in the LOA with the facility. Radiation exposure monitoring is specified for the facility staff treating the injured person. (The licensee personnel accompanying the injured person will have their own dosimetry.)	

Rev. 1 Version	Redline Version
New criterion; no previous version exists.	<u>Arrangements for radiological controls, including the isolation of contamination, assessment of contamination levels, personal dosimetry for medical facility staff, collection of contaminated waste, and decontamination of treatment areas. In medical facilities without nuclear medicine departments, licensee radiological control personnel provide the radiological control capabilities. In these latter cases, the licensee provides basic radiological control training to the medical facility staff.</u>
Applicability: n/a	Applicability: <u>Licensee</u>
General Discussion <i>This criterion was added to provide explicit guidance on contamination control at medical treatment facilities. <u>This change constitutes the creation of a new criterion.</u></i>	

Evaluation Criterion L.3

Preliminary Draft Rev. 2 Version	
The plan identifies, and maintains contact data for, medical experts in the treatment of radiation sickness due to exposure to radioactive materials, when indicated.	
Applicability: Licensee	
<p>Additional Information for Licensees: Treatment of radiation sickness occurs after treatment of injury (see criterion L.2.c) and can be provided at a specialized facility or by radiation medicine physicians (e.g., REAC/TS, etc.) consulting with the medical facilities identified in criterion L.2.c.</p> <p>Licensees are not required to enter into retaining contracts or maintain letters of agreement for this expertise since the treatment of radiation sickness does not involve the immediacy of physical trauma events for which arrangements must be in place. Licensees may refer to the Commission's Statement of Policy on Emergency Planning Standard 10 CFR 50.47(b)(12) dated 12 September 1986 (51 <i>Federal Register</i> 32904).</p>	

Rev. 1 Version	Redline Version
New criterion; no previous version exists.	<u>The plan identifies, and maintains contact data for, medical experts in the treatment of radiation sickness due to exposure to radioactive materials, when indicated.</u>
Applicability: n/a	Applicability: <u>Licensee</u>
<p>General Discussion</p> <p><i>This criterion arises from the Commission decision in 51 Federal Register 32904 that established a distinction between the extent of arrangements for treatment of injuries in which contamination is also present from injuries caused by exposure to high levels of radiation (e.g., due to severe overexposures). This new criterion establishes specific guidance and provides the licensee with flexibility to provide the medical expertise. This approach is consistent with the way most licensees have established their existing programs. <u>This change constitutes the creation of a new criterion.</u></i></p>	

Evaluation Criterion L.4

Preliminary Draft Rev. 2 Version	
The plan provides for the evaluation of injured personnel for radiological contamination prior to transport.	
Applicability: Licensee	
Additional Information for Licensees: Radiation monitoring and/or decontamination should not be allowed to delay needed medical treatment for injuries.	

Rev. 1 Version	Redline Version
New criterion; no previous version exists.	<u>The plan provides for the evaluation of injured personnel for radiological contamination prior to transport.</u>
Applicability: n/a	Applicability: <u>Licensee</u>
General Discussion <i>This criterion was added to emphasize that although evaluation of the contamination levels is necessary, medical treatment for the trauma should not be delayed by monitoring and decontamination efforts. <u>This change constitutes the creation of a new criterion.</u></i>	

Evaluation Criterion L.5

Preliminary Draft Rev. 2 Version	
Supplemental lists are developed that indicate the location of the closest public, private, and military hospitals and other emergency medical services facilities within the State or contiguous States considered capable of providing medical support for any individual also contaminated by radiation.	
Applicability: State, Licensee ORO	
Additional Information: The listing includes the name, location, type of facility, capacity, and any special radiological capabilities and equipment. These medical facilities should be able to conduct radiological monitoring, decontamination of personnel, and the ability to care for contaminated injured individuals.	

L.3, Rev. 1 Version	Redline Version
Each State shall develop lists indicating the location of public, private and military hospitals and other emergency medical services facilities within the State or contiguous States considered capable of providing medical support for any contaminated injured individual. The listing shall include the name, location, type of facility and capacity and any special radiological capabilities. These emergency medical services should be able to radiologically monitor contamination personnel, and have facilities and trained personnel able to care for contaminated injured persons.	Each State shall develop Supplemental lists are developed <u>that</u> indicate ing the location of <u>the closest</u> public, private and military hospitals and other emergency medical services facilities within the State or contiguous States considered capable of providing medical support for any contaminated injured individual <u>also contaminated by radiation</u> . The listing shall include the name, location, type of facility and capacity and any special radiological capabilities. These emergency medical services should be able to radiologically monitor contamination personnel, and have facilities and trained personnel able to care for contaminated injured persons
Applicability: State	Applicability: State, <u>Licensee ORO</u>
General Discussion <i>Editorial changes were made for clarity. "Licensee ORO" was added as part of this revision to consolidate information from Supplement 1 to NUREG-0654/FEMA-REP-1, Revision 1. <u>This change constitutes a revision of Evaluation Criterion L.3.</u></i>	

Evaluation Criterion L.6

Preliminary Draft Rev. 2 Version	
Each organization arranges for and documents the means to control contamination while transporting victims of radiological accidents to medical support facilities, including assurance that persons providing these services are adequately trained and prepared to handle contaminated and injured individuals.	
Applicability: State, Local, Tribal, Licensee ORO	
Additional Information: Letters of Agreement (LOAs) can be used to establish these arrangements. <ol style="list-style-type: none"> OROs: It is recommended that LOAs be validated annually and included in the documentation for the Annual Letter of Certification. 	

L.4, Rev. 1 Version	Redline Version
Each organization shall arrange for transporting victims of radiological accidents to medical support facilities.	Each organization shall <u>arranges</u> for <u>and documents the means to control contamination while</u> transporting victims of radiological accidents to medical support facilities, <u>including assurance that persons providing these services are adequately trained and prepared to handle contaminated and injured individuals.</u>
Applicability: Licensee, State, Local	Applicability: Licensee, State, Local, <u>Tribal, Licensee ORO</u>
General Discussion <i>Guidance was added to help ensure that persons providing these services maintain their ability to control contamination while transporting victims of radiological accidents on an ongoing basis. This criterion was split to remove applicability to the licensee, which is now addressed in new criterion L.6.a. "Tribal" and "Licensee ORO" entities have been added as part of this revision to consolidate Supplement 1 to NUREG-0654/FEMA-REP-1, Revision 1, and align with FEMA's Tribal policy. This change constitutes a revision of Evaluation Criterion L.4.</i>	

Evaluation Criterion L.6.a

Preliminary Draft Rev. 2 Version
The plan describes arrangements to prevent the contamination of transport vehicles and for monitoring and decontamination of transport vehicles following use.
Applicability: Licensee

Rev. 1 Version	Redline Version
New criterion; no previous version exists.	<u>The plan describes arrangements to prevent the contamination of transport vehicles and for monitoring and decontamination of transport vehicles following use.</u>
Applicability: n/a	Applicability: <u>Licensee</u>
General Discussion <i>This criterion was added to ensure that arrangements are in place to prevent the spread of contamination from the injured individual to the transport vehicle and to ensure that the transport vehicles are monitored for contamination following use and decontaminated prior to being returned to use. <u>This change constitutes the creation of a new criterion.</u></i>	