Disaster Initiated Review

FEMA Standard Operating Guide

July 2011

FEMA

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DISCLAIMER

This document represents the Federal Emergency Management Agency Radiological Emergency Program's interpretations of a statutory or regulatory requirement. The guide itself does not impose legally enforceable rights and obligations, but sets forth a standard operating procedure or agency practice that FEMA employees follow to be consistent, fair, and equitable in the implementation of the Agency's authorities.

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PART I: DISASTER INITIATED REVIEW STANDARD OPERATING GUIDE

A. BACKGROUND

The Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA) Radiological Emergency Preparedness Program (REP) Program has primary responsibility to continually assess the status of offsite emergency preparedness (EP), and to issue a "Statement of Reasonable Assurance" that the State(s), tribal, and local governments' emergency plans can be implemented in a manner to ensure public health and safety in the event of a disaster (natural or manmade) at a U.S. Nuclear Regulatory Commission (NRC) licensed reactor facility. All agency decisions involving the FEMA REP Program and NRC are made at the HQ level. FEMA REP Program Headquarters (HQ) is the sole authority for generating a "Statement of Reasonable Assurance" to the NRC.

Conference calls between all involved parties are encouraged. These conference calls are specifically important for "no-notice" events. Based on information acquired from any involved party on damages sustained or security issues, the REP Program HQ Branch Chief, in consultation with the REP Program Regional Technological Hazards Branch Chief/Regional Assistance Committee Chairperson (RAC Chair), will make a determination on the need for a Disaster Initiated Review (DIR).

B. PURPOSE

These guidelines and procedures for the FEMA REP Program are for completion of a DIR. The purpose of a DIR is to determine the capability of offsite emergency response infrastructure following electric grid blackouts, malevolent act, pandemic, or natural disaster (e.g., hurricane, tornado, flood, and earthquake) in the vicinity of commercial Nuclear Power Plants (NPPs).

C. SCOPE

This Standard Operating Guide (SOG) should be used when a natural or manmade disaster, has occurred at, or near, a NPP and has none or minimal effect on the plant, but damage or changes to the offsite emergency response infrastructure may be substantial or are in question. In this situation, FEMA may elect to perform a DIR whether the NPP is operating or in shutdown mode. If FEMA's review indicates a finding that the state of emergency preparedness does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological event, and the NPP continues to operate, then such a finding would be handled by the NRC under 10 CFR 50.54(s)(2) & (3).

FEMA uses this SOG when an extended plant shutdown (outage lasting longer than six months), or shutdown caused by electric grid blackout, occurs. The DIR would determine whether offsite emergency response capabilities are adequate to protect the public health and safety. These procedures are consistent with those of the *NRC Inspection Manual* Chapter 1601.

FEMA developed this operating guide to support decision making regarding offsite preparedness, when baseline emergency response capabilities are significantly compromised. The Regional Technological Hazards Branch Chief/RAC Chair and the DIR Team may tailor and modify this SOG based on the extent of damage and the urgency for plant startup.DHS/FEMA REP Program, HQ, and Regional management, in consultation with the OROs, and the NRC, will decide on the necessary actions to ensure adequate protection of public health and safety. If reasonable assurance is in question while the NPP is operational, then FEMA REP Program will follow procedures outlined in 44 CFR 350.13.

D. OBJECTIVES

- Identify FEMA REP Program Region personnel roles and responsibilities related to completion of DIR objectives.
- Identify applicable criteria to decide whether a DIR is warranted to determine the capability of offsite emergency response infrastructure and EP capability.
- Identify FEMA REP Program Headquarters (HQ) staff roles and responsibilities associated with issuance of a “Statement of Reasonable Assurance” to the Nuclear Regulatory Commission (NRC) following satisfactory completion of a DIR.
- Identify applicable criteria to decide whether a DIR is warranted to determine the capability of offsite emergency response infrastructure.
- Establish communication links and assigned roles for information sharing and coordination among the FEMA Region, State, Tribal, and Local Government Agencies, the NRC and the Licensee, in completion of the DIR.
- Provide a DIR report template (Appendix D) to communicate DIR findings to FEMA HQ for use in developing the “Statement of Reasonable Assurance.”
- Provide a flow chart to display the path which determines the need for a DIR and the communication flow of response structure.
- Provide a guideline for establishing a DIR support element at FEMA Headquarters and Regional Offices to support the activation of a DIR Team.
- Provide guidance to Regional offices for other unusual events such as State-driven budget shutdowns.

E. DIR DETERMINATION

This SOG should be implemented consistent with the agreements of the Memorandum of Understanding (MOU)(*Appendix E* of this document)between the FEMA REP Program and the NRC contained in Section I, "Recovery from Disasters Affecting Offsite Emergency Preparedness," of 44 CFR Part 353, Appendix A. In this regard, if a disaster causes damage or changes to the emergency response infrastructure around a licensed operating nuclear power plant to the extent that the damage raises serious questions about the continued adequacy of offsite emergency preparedness, the identifying agency (FEMA Program/NRC) will inform the other promptly.

When evaluating whether or not the impacting event warrants the implementation of these guidelines, among other things, consider whether alternative means can adequately compensate for the offsite function(s) that have been impacted.

The evaluation should include these questions:

- Has a State or local emergency been declared?
- Are Emergency Response facilities damaged, compromised or lacking power?
- Is the Emergency Response Organization unavailable?
- Are facilities for people with disabilities and access/functional needs impacted?
- Are Alert and Notification Systems inoperable?
- Are communication systems inoperable?
- Are evacuation routes impeded?
- Are Support Facilities unavailable?
- Have compensatory measures been put in place by the State, tribal or local governments or NRC Licensee?
- What is the initial assessment of the infrastructure for the Facility, State, tribal and Local Risk County?
- Are the EPZ Counties and State capable of implementing the protective actions?

If based on an initial review, the answer to any of the above questions creates concern, then consideration needs to be given as to whether predetermined backup means are available or adequate compensatory measures have been established that can adequately compensate for the offsite function(s) that have been impacted.

Regional management may elect to use this SOG as guidance to evaluate proposed State compensatory measures for unusual situations, such as budget driven shutdowns. For these instances, the region will negotiate the terms of review with the affected State.

If the status of offsite emergency preparedness is inadequate, it is imperative that appropriate compensatory measures are developed and implemented to ensure public health and safety. These compensatory measures may be the responsibility of the offsite response organizations (ORO) or the NRC Licensee. Compensatory measures required from the NRC Licensee should be coordinated through the NRC.

During an extended plant shutdown, or a shutdown due to an electric grid blackout, the NRC may petition the FEMA REP Program to issue a "Statement of Reasonable Assurance". This statement certifies that the applicable OROs emergency plans can be implemented in a

manner to protect public health and safety in the event of a radiological incident at the specific NRC Licensee emerging from the shutdown.

If NRC finds that the state of emergency preparedness does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency (*including findings based on requirements of10 CFR 350, appendix E, section IV.D.3*) and if the deficiencies (*including deficiencies based on requirements of appendix E, section IV.D.3*) are not corrected within four months of that finding, the Commission will determine whether the reactor shall be shut down until such deficiencies are remedied or whether other enforcement action is appropriate.[1]

The NRC will determine if enforcement action or shutdown procedures are necessary by using the following criteria: has the licensee demonstrated that the identified deficiency is insignificant to plant operations, are adequate actions in place to satisfactorily rectify the problem on an interim basis, or are there compelling reason for continued plant operations.

The NRC will make a determination on the suitability of State, tribal or local emergency plans based on a review of FEMA's findings. Upon completion of the review, the NRC will assess the plans adequacy for implementation. This paragraph in no way limits the authority of the commission to act under other regulations at any time they deem appropriate.[1]

[1] 10 CFR 50.54(s)(2) & (3),

PART II: RESPONSIBILITIES AND AUTHORITIES

A. FEMA REGIONAL ADMINISTRATOR:

Review the DIR needs assessment results and/or Findings Report submitted by the FEMA REP Program Regional Technological Hazards Branch Chief/RAC Chair. Forward to the FEMA REP Program HQ Branch Chief and THD Director with the Regional Recommendation for a "Statement of Reasonable Assurance".

B. FEMA REP PROGRAM REGIONAL TECHNOLOGICAL HAZARDS BRANCH CHIEF/RAC CHAIR:

During and/or following a disaster event, the affected Regional staff should be in close communication with the State, tribal and local officials regarding the condition of the EP infrastructure and EP Capabilities within the 10-mile emergency planning zone (EPZ) and the reactor plant status should be provided through communications with the respective NRC Regional State Liaison Officer.

If information provided by State, tribal and local governments, NRC Regions or HQ and the Region reveals that there is no damage or not sufficient damage to the 10-mile EPZ EP infrastructure to raise doubts on the adequacy of EP, the Regional Technological Hazards Branch Chief/RAC Chair will notify the REP Program HQ Branch Chief/Section Chiefs of the results of their assessment and recommendations for HQ to make a determination that EP remains adequate to protect public health and safety.

Conference calls between all involved parties are encouraged. These conference calls are specifically important for "no-notice" events. Based on information acquired from any of these sources on damage sustained or security issues, the REP Program HQ Branch Chief, in consultation with the REP Program Regional Technological Hazards Branch Chief/RAC Chair, will make a determination on the need for a DIR.

When disaster related damage or changes to the offsite EP infrastructure is considered to be substantial or in question, the REP Program Regional Technological Hazards Branch Chief/RAC Chair, following consultation with the REP Program's HQ Branch Chief or Section Chiefs, will:

Establish a schedule for conducting the DIR. The schedule should be established in consultation with OROs, the NRC, and the affected NRC Licensee.

Establish the team responsible for conducting the DIR within 24 hours of the decision to conduct a DIR. Establishment of the DIR Team should include (to the maximum extent practicable):

1. Regional RAC Chair (or designee) and site specialist.
2. A representative from the NRC regional office
3. Representatives from the affected OROs emergency management programs and radiation control programs.
4. Representatives from the emergency planning staff of the affected NRC licensee.

REP Program Regional Technological Hazards Branch Chief/RAC Chair should oversee and coordinate completion of the DIR, maintaining the established schedule. The DIR Team should utilize the Post Disaster Assessment of Off-Site Capabilities (*Appendix* B) ensuring that essential emergency response elements are included in the review. One assessment should be completed for each impacted jurisdiction. The Team will provide routine progress updates to the REP Program Region Technological Hazards Branch Chief/RAC Chair or REP Program HQ Branch Chief or Section Chief.

NOTE: *Appendix C should be utilized in addition to Appendix B, for those disasters that have been determined to be catastrophic in nature.*

Prepare and transmit a DIR Report to the FEMA Regional Administrator then forward the results to the THD Director (via the REP Program HQ Branch Chief or Section Chief). A template for the DIR Report is included as Attachment D.

C. REP PROGRAM HQ BRANCH CHIEF OR SECTION CHIEFS:

Consult with the Regional Technological Hazards Branch Chief/RAC Chair to determine the need for a DIR.

Communicate the recommendation to the THD Director.

Facilitate the communication between REP Program Branch Chief/Sections Chiefs and the NRC Operating Reactor Licensing and Outreach Branch, to include, at a minimum:

1. Verbally communicate FEMA'S decision to conduct an initial review of offsite infrastructure and EP capabilities surrounding the nuclear power plant site based on a disaster, pandemic or malevolent act, in determining whether a DIR is warranted;
2. Verbally communicate FEMA HQ'S decision whether or not to conduct a DIR and basis for determination; and
3. Verbally communicate FEMA HQ'S DIR findings and recommendation in support of restart of a licensed, operating nuclear power plant.

Review the DIR Findings Report submitted by the REP Program Regional Technological Hazards Branch Chief/RAC Chair, forward to the THD Director with a recommendation to support a "Statement of Reasonable Assurance", or request additional input from the REP Program's Regional Technological Hazards Branch Chief/RAC Chair.

D. FEMA TECHNOLOGICAL HAZARDS DIVISION DIRECTOR:

In consultation with the Regional Technological Hazards Branch Chief/RAC Chair and the REP Program's Branch Chief or Section Chiefs, make a final determination on the need for a DIR.

Communicate the decision to the NRC Deputy Director for Emergency Preparedness using the examples provided below for initial statement:

> "On [DATE], based on our review of available information gathered in discussions with State, tribal, and local government agencies, FEMA has concluded that offsite radiological emergency preparedness remains adequate to provide "Reasonable Assurance" and that appropriate measures can be taken to protect the health and safety of the public in the event of a radiological emergency at the [Nuclear Power Plant]. At this time, FEMA is not initiating actions to conduct a Disaster Initiated Review of offsite emergency preparedness issues within the [Nuclear Power Plant] 10-mile emergency planning zone."

> "On [DATE], based on our review of available information gathered in discussions with State, tribal, and local government agencies response organizations, FEMA has concluded that impediments may exist to offsite radiological emergency preparedness within the [Nuclear Power Plant] EPZ. This requires further evaluation to verify appropriate measures can continue to be taken to protect the health and safety of the public in the event of a radiological emergency. FEMA is initiating a Disaster Initiated Review of offsite emergency preparedness issues within the [Nuclear Power Plant] 10-mile emergency planning zone."

Review the DIR Findings Report submitted by the REP Program. Prepare and submit a "Statement of Reasonable Assurance" to the NRC or request additional input from the REP Program's Regional Technological Hazards Branch Chief/RAC Chair. Once the DIR is completed, the REP Program should provide an initial "Statement of Reasonable Assurance" via e-mail or fax using a pre-approved template. This initial statement will then be supplemented by a formal letter. Example provided below for initial statement:

> "On [DATE], a comprehensive investigation and collection of field data was performed by a joint FEMA/NRC DIR Team, in accordance with the FEMA Post Disaster Assessment of Offsite Capabilities checklist. Based on our review of all information gathered, FEMA has concluded that offsite radiological emergency preparedness remains adequate to provide "Reasonable Assurance" and that appropriate measures can be taken to protect the health and safety of the public in the event of a radiological emergency at the [Nuclear Power Plant]."

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PART III: GENERAL DIR TEAM GUIDANCE

DIR Kits should be prepared in advance with information on each NRC Licensee within the Region. These kits should include (but are not limited to):

1. Copies of this SOG with additional copies of the Post Disaster Assessment of Off-Site Capabilities checklist, and the Special Addendum for Catastrophic Events. Use one checklist for each impacted jurisdiction. (reference Appendices)
2. Copies of State, Tribal and local emergency response plans for the site.
3. Copies of the Alert and Notification System Design Report for the site. (Useful in determining the disaster's impact on the alert system.)
4. Copies of public/emergency information materials distributed. (Useful in reviewing evacuation routes, and public information related items, for example: has there been an impact on the public inquiry capability?).
5. Copies of the Evacuation Time Estimate. (Useful in determining impact of the disaster on evacuation.)
6. Contact phone listings for State, tribal and local government (to include emergency contact information). If satellite phone numbers are available, these numbers should be included as well).
7. Contact phone listings for the NRC Regional Office (to include emergency contact information).
8. Contact phone listings for REP Program Management This should include contact information (and emergency information) for the REP Program HQ Branch Chief, Section Chiefs, the FEMA THD Director and legal counsel
9. Cell phone and satellite phone (if available)
10. Government Emergency Telephone System (GETS) Cards
11. Laptop and printer
12. Digital camera (if available)
13. GPS Navigation System

Accommodations in the disaster area may not be available. The DIR Team should be prepared to obtain non-traditional lodging when necessary. Sleeping bags, etc. may be necessary.

Be sensitive of the disaster incident facts during the review. If a capability or location has been impacted, determine whether there is an alternative that can be implemented. Assist and be actively engaged in developing acceptable solutions. If delays or problems are encountered, notify the REP Program Regional Technological Hazards Branch Chief/RAC Chair as soon as possible.

Upon completion of a DIR assessment, prepare the draft DIR Findings Report for FEMA HQ. Prior to releasing the review team members, submit the Draft DIR Findings to the REP Program Regional Technological Hazards Branch Chief/RAC Chair, the HQ REP Program Branch Chief or Section Chiefs and the FEMA THD Director for comment and concurrence (be prepared to submit additional information if necessary by collecting, all documents, e-mails, notes, field notes and any document created throughout the process). The DIR and all documentation should be kept for official records.

For guidance on how to prepare and format the report, refer to the Post Disaster Assessment of Off-Site Capabilities (*Appendix* B), the Special Addendum for Catastrophic Events (*Appendix* C), and Report Guidelines memo (*Appendix* D).

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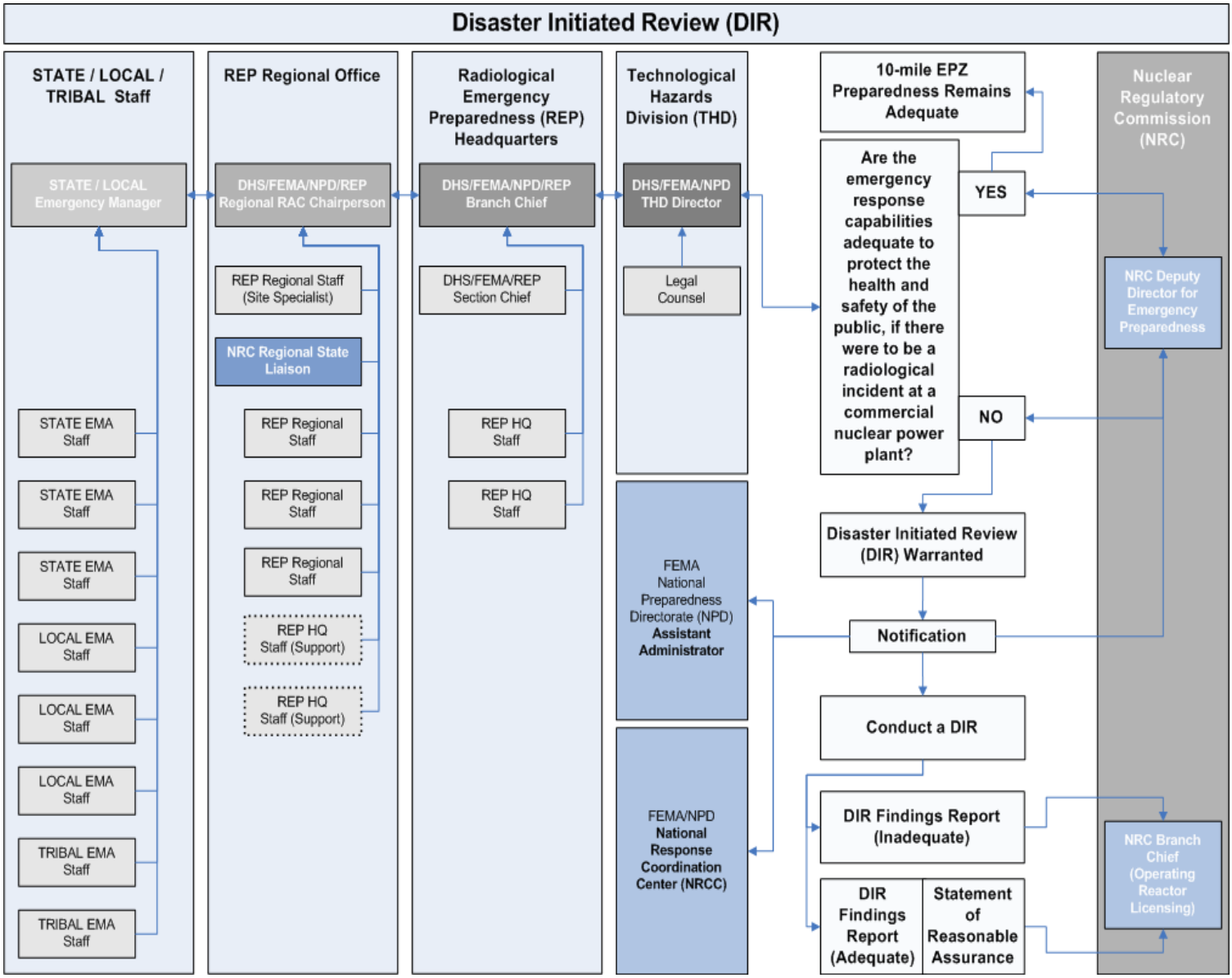
APPENDIX A: FEMA REP DISASTER INITIATED DIAGRAM



The diagram below outlines the communication direction and actions that the FEMA REP Program initiates during a Disaster Initiated Review.

DISASTER INITIATED REVIEW DECISION PROCESS

DISASTER INITIATED REVIEW DECISION PROCESS	Office of Primary Responsibility (OPR)		
Communication direction and actions that the FEMA REP Program initiates during a Disaster Initiated Review	**REP Headquarters**	**REP Region**	**NRC**
1. Impacting Event	**X**	**X**	
2. Establish a conference call between the regional administrator(s), REP Program HQ Branch Chief, REP Program Regional Technological Hazards Branch Chief/RAC Chair, to make a determination on the need for a DIR. **(ESTABLISHED BY THE REP PROGRAM)**	**X**	**X**	
3. Communicate the recommendation to FEMA THD Director	**X**		
4. Facilitate communication with NRC regarding DIR process	**X**		
5. Determination if a DIR is needed	**X**		
6. Establish a DIR Team within 24 hours of decision to conduct a DIR	**X**		
7. If a DIR is not warranted, further evaluation and determination on the adequacy of compensatory measures will be made		**X**	
8. Conduct a DIR		**X**	
9. REP Branch Chief will review the DIR Findings Report	**X**		
10. REP Branch Chief will provide THD Director with a recommendation to support "Statement of Reasonable Assurance"	**X**		
11. Statement of Reasonable Assurance issued	**X**		

COMMUNICATION DIRECTION AND ACTIONS

COMMUNICATION DIRECTION AND ACTIONS	Office of Primary Responsibility (OPR)			
Communication direction and actions that the FEMA REP Program initiates during a Disaster Initiated Review	**FEMA Regional Administrator**	**FEMA REP Program Regional Technological Hazards Branch Chief/RAC Chair**	**REP Program HQ Branch Chief or Section Chiefs**	**FEMA Technological Hazards Division Director**
1. RAC Chair will notify FEMA Rep Program Branch Chief		**X**		
2. Assist in determining the need for a DIR by consulting with the FEMA REP Program Regional Technological Hazards Branch Chief/RAC Chair	**X**			
3. Communicate the recommendation to the FEMA HQ Technological Hazards Division (THD) Director	**X**			
4. Review the DIR Findings Report submitted by the FEMA REP Program Regional Technological Hazards Branch Chief/RAC Chair, forward to the FEMA REP Program HQ Branch Chief and THD Director with a recommendation to support a "Statement of Reasonable Assurance", or request additional input from FEMA REP Program Regional Technological Hazards Branch Chief/RAC Chair	**X**			

COMMUNICATION DIRECTION AND ACTIONS	Office of Primary Responsibility (OPR)			
Communication direction and actions that the FEMA REP Program initiates during a Disaster Initiated Review	**FEMA Regional Administrator**	**FEMA REP Program Regional Technological Hazards Branch Chief/RAC Chair**	**REP Program HQ Branch Chief or Section Chiefs**	**FEMA Technological Hazards Division Director**
5. Communicate with regional staff and ensure close communication with the State, Tribal and local officials regarding the condition of the EP infrastructure within the 10-mile emergency planning zone (EPZ) and reactor plant status. Provide updates to the respective NRC Regional State Liaison Officer.		**x**		
6. Notify the REP Program HQ Branch Chief/Section Chiefs of the results of their assessment and recommendations for HQ to make a determination that EP remains adequate to protect public health and safety		**x**		
7. Establish a schedule for conducting the DIR. The schedule should be established in consultation with OROs, the NRC, and the affected NRC Licensee.		**x**		
8.Establish the team responsible for conducting the DIR within 24 hours of the decision to conduct a DIR IAW SOG		**x**		
9. Ensure routine progress updates to the REP Program Region Technological Hazards Branch Chief/RAC Chair or REP Program HQ Branch Chief or Section Chief.		**x**		

COMMUNICATION DIRECTION AND ACTIONS	Office of Primary Responsibility (OPR)			
Communication direction and actions that the FEMA REP Program initiates during a Disaster Initiated Review	**FEMA Regional Administrator**	**FEMA REP Program Regional Technological Hazards Branch Chief/RAC Chair**	**REP Program HQ Branch Chief or Section Chiefs**	**FEMA Technological Hazards Division Director**
10.Prepare and transmit a DIR Report to the FEMA THD Director (via the REP Program HQ Branch Chief or Section Chief)		**x**		
11.Consult with the Regional Technological Hazards Branch Chief/RAC Chair to determine the need for a DIR			**x**	
12.Communicate the recommendation to the THD Director			**x**	
13. Facilitate the communication between REP Program Branch Chief/Sections Chiefs and the EP Operating Reactor Licensing, NRC Branch Chief			**x**	
14. Review the DIR Findings Report and provide a recommendation to support a "Statement of Reasonable Assurance", or request additional input from the REP Program's Regional Technological Hazards Branch Chief/RAC Chair			**x**	
15 Make a final determination on the need for a DIR.				**x**

COMMUNICATION DIRECTION AND ACTIONS	Office of Primary Responsibility (OPR)			
Communication direction and actions that the FEMA REP Program initiates during a Disaster Initiated Review	**FEMA Regional Administrator**	**FEMA REP Program Regional Technological Hazards Branch Chief/RAC Chair**	**REP Program HQ Branch Chief or Section Chiefs**	**FEMA Technological Hazards Division Director**
16. Review the DIR Findings Report submitted by the REP Program. Prepare and submit a "Statement of Reasonable Assurance" to the NRC or request additional input from the REP Program's Regional Technological Hazards Branch Chief/RAC Chair			**x**	
17. Once the DIR is completed, the REP Program should provide an initial "Statement of Reasonable Assurance" via e-mail or fax using a pre-approved template	**x**			
18Communiicate DIR decision to NRCC Watch Officer				**x**
19. Communicate DIR decision to the Assistant Administrator, National Preparedness Directorate (NPD) in the Federal Emergency Management Agency (FEMA				**x**

APPENDIX B: POST DISASTER ASSESSMENT OF OFF-SITE CAPABILITIES

Disaster:	**Date of Assessment:**
Site:	**Location:**

Estimated EPZ Population Evacuated:

Estimated Time for allowing evacuees to return:

Did this disaster cause catastrophic damage in the 10-mile EPZ? YES ☐ NO ☐

[Note: Catastrophic damage would include the destruction of roads, bridges, buildings, communication systems, and transportation resources, other infrastructure, and declaration of a State or local emergency.]

If yes, please refer to the attached Special Addendum for a Catastrophic Incident to review population shifts and evacuation routes. Obtain schedules for the repair of the infrastructure and analyze the schedule for its impact on State and/or local government's ability to protect the health and safety of the population in the 10-mile EPZ. Identify compensatory measures planned and implemented.

Emergency Response:

EMERGENCY RESPONSE ORGANIZATIONS			
As Specified in the Plans are the following groups/individuals available:	Yes	No	N/A
Elected Officials or other decision-makers			
Emergency Response Organization:			
Emergency Management			
Public Information Officers			
Law enforcement personnel			
Fire/Rescue personnel			
EMS/Medical personnel			
Public Works			
Education Officials			
Are Schools Open?			
Are Schools Closed?			
Social Services			
Health			
Agriculture			
Other departments and/or agencies:			
American Red Cross			
Amateur radio			
Other non-governmental volunteer organizations:			
Private organizations:			

(Complete for each Emergency Response Organization, as specified in the plan)

EMERGENCY RESPONSE FACILITY			
Is the Facility?	Yes	No	N/A
Operational?			
Structurally Safe?			
Operating on Primary Power?			
Is facility operating on backup?			
Estimated schedule for restoration of primary power?			
Number of days of fuel on site?			

COMMUNICATION			
Are the following systems available:	Yes	No	N/A
Dedicated Lines:			
Hot Ring Down from the Plant			
Decision/Administrative Line (If applicable)			
Commercial Telephone			
Cellular Telephone			
Satellite Communications (If applicable)			
State/Local Government Radios			
Amateur Radio			
Internet Access			
Other Communication Systems:			
If the primary and backup systems are inoperative, please obtain a schedule for repair and also discuss the contingency plans for communication.			
Comments:			

PUBLIC ALERT AND NOTIFICATIONS			
Alert System	Yes	No	N/A
Sirens:			
Total number of sirens:			
Number of sirens operational:			
Percentage of sirens operational:			
Sirens on battery backup power			
Siren Restoration and Testing Plan: (attach)			
What is the expected completion date:			
Emergency Alert System (EAS) available			
Primary Power			
Backup Power			
Availability of NOAA and/or other tone alert radios			
Availability of other local TV and Radio stations			
List Stations:			
Cable Interrupt capability Percentage of service in EPZ:			

PUBLIC ALERT AND NOTIFICATIONS (cont)			
Local telephone service operational			
TDD and other devices for special needs populations available			
Power Outages:			
Percentage of EPZ population without power:			
Estimated restoration schedule			
Backup Route Alerting:			
Number of Routes for EPZ:			
Equipment available			
Personnel Available – organizations responsible according to plan			
Signs (Both Information and Evacuation Route Markers)			
Are Signs permanently placed?			
Number of signs missing:			
Replacement Signs available			
If no, number days to get replacements:			
Joint Information Center (JIC)			
JIC available?			
Primary power			
Backup power			

SPECIAL NEEDS AND TRANSPORTATION RESOURCES			
	Yes	No	N/A
Are facilities for people with disabilities and access/functional needs in the EPZ, excluding schools			
Open?			
Have schools, including licensed daycare centers, reopened?			
Has the disaster impacted the ability to provide transportation resources?			
If yes, has the government instituted compensatory measures?			
Attach plan:			

EVACUATION ROUTES			
Evacuation Routes	Yes	No	N/A
Open – unrestricted access?			
If No:			
Were any roads or bridges destroyed or otherwise inaccessible?			
If Yes, see catastrophic appendix (Appendix B)			
Estimate of population impacted by evacuation route problem:			
Any lanes passable, if so number of lanes:			
Percentage capacity reduced:			
Evacuation time increase:			
Rerouting of traffic:			
Evacuation time increase:			
Public information on changes to evacuation routes?			
Estimated time for restoration of planned evacuation routes:			

ACCIDENT ASSESSMENT			
Personnel	Yes	No	N/A
Personnel available to perform dose assessment calculations?			
Personnel available for field monitoring teams?			
Personnel available for laboratory operations?			
Personnel available for sample transport, and other support functions?			
Equipment			
Equipment for field monitoring?			
Equipment for mobile laboratory?			
Power for mobile laboratory?			
Communications to all field elements?			
Access to monitoring locations			
Field teams have unrestricted access to monitoring and sampling locations?			
Identify alternate means to reach monitoring/sampling locations?			

SUPPORT SERVICES			
Reception Center (Evacuee Monitoring)	Yes	No	N/A
Planned facility available?			
Staff available to operate facility?			
Equipment available?			
Emergency Worker Decontamination			
Planned facility available?			
Staff available to operate facility?			
Equipment available?			
Temporary Care Facility			
Planned facility available?			
Staff available to operate facility?			
Equipment available?			
Hospital – Is the hospital designated to treat patients contaminated with radiation open?			
Areas Requiring Follow-up (Attach)			
Compensatory Measures in Effect (Attach)			

POPULATION SHIFTS			
Disaster related population changes in the EPZ?	Yes	No	N/A
Temporary increase after reentry?			
Estimated increase in EPZ population:			
Temporary decrease after reentry?			
Estimated decrease in EPZ population:			
Temporary Housing Areas developed in EPZ			
Developed notification procedures (attach procedures)			
Identified resources to assist with evacuation, if needed			
Plans developed for transport dependent population			
Permanent change in population			
Greater than 10% of total			

EVACUATION ROUTES			
	Yes	No	N/A
Roads destroyed and negative impact on evacuation			
Rerouting of evacuation traffic			
Impact on evacuation times			
Bridges			
Problems with bridges			
If yes,			
Identify location of bridge(s):			
Bridge(s) closed			
Damage minor and accessible			
Damage major and non-accessible			
Non-functioning drawbridge			
Impact on Evacuation Routes:			
Public allowed access to area served by damaged bridge			
Alternative methods for crossing waterways			
Schedule for revising evacuation time estimate, if needed:			
Areas Requiring Follow-up (Attach)			
Compensatory Measures in Effect (Attach)			

APPENDIX C: SPECIAL ADDENDUM FOR A CATASTROPHIC EVENT

Catastrophic Impact – Population Shifts	Yes	No	N/A
Disaster related population changes in the EPZ			
Temporary (increase or decrease) after reentry			
Estimated increase in EPZ population:			
Temporary Housing areas developed in EPZ			
Developed notification procedures (attach procedures)			
Identified resources to assist with evacuation, if needed			
Plans developed for transport dependent population			
Permanent change in population			
Greater than 10% of total			

Catastrophic Impact – Evacuation Routes	Yes	No	N/A
Roads destroyed and negative impact on evacuation			
Rerouting of evacuation traffic			
Impact on evacuation times			
Bridges			
Problems with bridges			
If yes,			
Identify location of bridge(s):			
Bridge(s) closed			
Damage minor and accessible			
Damage major and non-accessible			
Non-functioning drawbridge			
Impact on evacuation routes:			
Public allowed access to area served by damaged bridge			
Alternative methods for crossing waterways			
Schedule for revising evacuation time estimate, if needed:			

Areas Requiring Follow-up	Yes	No	N/A
1.			
2.			
3.			
4.			
5.			
Compensatory Measures in effect	**Yes**	**No**	**N/A**
1.			
2.			
3.			
4.			
5.			

APPENDIX D: REPORT GUIDELINES MEMO

Date

MEMORANDUM FOR: _____, Director
Technological Hazards Division
National Preparedness Directorate
U.S. Department of Homeland Security-FEMA

ATTENTION: _____, Chief
Radiological Emergency Preparedness Branch
Technological Hazards Division
National Preparedness Directorate
U.S. Department of Homeland Security-FEMA

FROM:
Regional Technological Hazards Branch Chief/RAC Chair
(include name, title and location)

SUBJECT: Disaster Initiated Review – Nuclear Power Plant Name

Background:

List event/date/time and affected nuclear power plant. Provide a description of the event; effects on the plant (onsite and offsite) and a shutdown timeline; list impacted areas within Emergency Planning Zone (EPZ) (parish/county).

Include the dates of the review and a brief statement of the FEMA Region, State, Tribal and Local Government Agencies, NRC Licensee and other Federal Agency representatives involved in conducting the assessment.

Assessment: For all areas: Include information on areas requiring follow-up actions and provide information on any compensatory measures that are in effect.

1. Emergency Response Facilities

   Summarize findings for off-site facilities using the Post Disaster Assessment of Off-Site Capabilities as a guide.

2. Communications

   Summarize findings for communications using the Post Disaster Assessment of Off-Site Capabilities as a guide.

3. Emergency Response Organizations

   Summarize findings for emergency response organizations using the Post Disaster Assessment of Off-Site Capabilities as a guide.

4. Public Alert and Notification

   Summarize findings for public alert and notification using the Post Disaster Assessment of Off-Site Capabilities as a guide.

5. Special Needs and Transportation Resources

   Summarize findings for special needs and transportation resources using the Post Disaster Assessment of Off-Site Capabilities as a guide.

6. Evacuation Routes

   10Summarize findings for evacuation routes using the Post Disaster Assessment of Off-Site Capabilities as a guide.

7. Accident Assessment

   Summarize findings for accident assessment using the Post Disaster Assessment of Off-Site Capabilities as a guide.

8. Support Services

   Summarize findings for support services using the Post Disaster Assessment of Off-Site Capabilities as a guide.

9. Catastrophic Impact

   If a catastrophic event has occurred, include detailed information on the categories listed in the Special Addendum (Appendix C).

10. Supporting Documentation

    Supporting documentation may be gathered in the course of the review. While it is necessary to maintain this documentation on file, it is not required to be submitted with the report. A statement should be made to the effect that "All supporting documentation gathered by the Review Team will be on file at the ____ Region."

Conclusions:

Summarize the findings of the Review Team. Make a specific recommendation with regard to providing a "Statement of Reasonable Assurance" to the Nuclear Regulatory Commission (NRC).

APPENDIX E: MEMORANDUM OF UNDERSTANDING

Appendix A to Part 353—Memorandum of Understanding Between Federal Emergency Management Agency and Nuclear Regulatory Commission

The Federal Emergency Management Agency (FEMA) and the Nuclear Regulatory Commission (NRC) have entered into a new Memorandum of Understanding (MOU) Relating to Radiological Emergency Planning and Preparedness. This supersedes a memorandum entered into on November 1, 1980 (published December 16, 1980, 45 FR 82713), revised April 9, 1985 (published April 18, 1985, 50 FR 15485), and published as Appendix A to 44 CFR part 353. The substantive changes in the new MOU are: (1) Self-initiated review by the NRC; (2) Early Site Permit process; (3) adoption of FEMA exercise time-frames; (4) incorporation of FEMA definition of exercise deficiency; (5) NRC commitment to work with licensees in support of State and local governments to correct exercise deficiencies; (6) correlation of FEMA actions on withdrawal of approvals under 44 CFR Part 350 and NRC enforcement actions; and (7) disaster-initiated reviews in situations that affect offsite emergency infrastructures. The text of the MOU follows. Memorandum of Understanding between NRC and FEMA Relating to Radiological Emergency Planning and Preparedness.

I. Background and Purposes

This Memorandum of Understanding (MOU) establishes a framework of cooperation between the Federal Emergency Management Agency (FEMA) and the U.S. Nuclear Regulatory Commission (NRC) in radiological emergency response planning matters so that their mutual efforts will be directed toward more effective plans and related preparedness measures at and in the vicinity of nuclear reactors and fuel cycle facilities which are subject to 10 CFR part 50, appendix E, and certain other fuel cycle and materials licensees which have potential for significant accidental offsite radiological releases. The memorandum is responsive to the President's decision of December 7, 1979, that FEMA will take the lead in offsite planning and response, his request that NRC assist FEMA in carrying out this role, and the NRC's continuing statutory responsibility for the radiological health and safety of the public.

On January 14, 1980, the two agencies entered into a ''Memorandum of Understanding Between NRC and FEMA to Accomplish a Prompt Improvement in Radiological Emergency Preparedness,'' that was responsive to the President's December 7, 1979, statement. A revised and updated Memorandum of Understanding became effective November 1, 1980. The MOU was further revised and updated on April 9, 1985. This MOU is a further revision to reflect the evolving relationship between NRC and FEMA and the experience gained in carrying out the provisions of the previous MOU's. This MOU supersedes these two earlier versions of the MOU.

The general principles agreed to in the previous MOU's and reaffirmed in this MOU, are as follows:

FEMA coordinates all Federal planning for the offsite impact of radiological emergencies and takes the lead for assessing offsite radiological emergency response plans1 and preparedness, makes findings and determinations as to the adequacy and capability of implementing offsite plans, and communicates those findings and determinations to the NRC. The NRC reviews those FEMA findings and determinations in conjunction with the NRC onsite findings for the purpose of making determinations on the overall state of emergency

preparedness. These overall findings and determinations are used by NRC to make radiological health and safety decisions in the issuance of licenses and the continued operation of licensed plants to include taking enforcement actions as notices of violations, civil penalties, orders, or shutdown of operating reactors. This delineation of responsibilities avoids duplicative efforts by the NRC staff in offsite preparedness matters. However, if FEMA informs the NRC that an emergency, unforeseen contingency or other reason would prevent FEMA from providing a requested finding in a reasonable time, then, in consultation with FEMA, the NRC might initiate its own review of offsite emergency preparedness.

A separate MOU dated October 22, 1980, deals with NRC/FEMA cooperation and responsibilities in response to an actual or potential radiological emergency. Operations Response Procedures have been developed that implement the provisions of the Incident Response MOU. These documents are intended to be consistent with the Federal Radiological Emergency Response Plan which describes the relationships, roles, and responsibilities of Federal Agencies for responding to accidents involving peacetime nuclear emergencies. On December 1, 1991, the NRC and FEMA also concluded a separate MOU in support of Executive Order 12657 (FEMA Assistance in Emergency Preparedness Planning at Commercial Nuclear Power Plants).

Assessments of offsite plans may be based on State and local government plans submitted to FEMA under its rule (44 CFR Part 350), and as noted in 44 CFR 350.3(f), may also be based on plans currently available to FEMA or furnished to FEMA through the NRC/FEMA Steering Committee.
FEMA-NRC MOU (App. A to 44CFR353): [58 FR 47997, Sept. 14, 1993] Page 2 of 6

II. Authorities and Responsibilities

FEMA-Executive Order 12148 charges the Director, FEMA, with the responsibility to '' establish Federal policies for, and coordinate, all civil defense and civil emergency planning, management, mitigation, and assistance functions of Executive agencies'' (Section 2–101) and ''* represent the President in working with State and local governments and the private sector to stimulate vigorous participation in civil emergency preparedness, mitigation, response, and recovery programs'' (Section 2–104.).

On December 7, 1979, the President, in response to the recommendations of the Kemeny Commission on the Accident at Three Mile Island, directed that FEMA assume lead responsibility for all offsite nuclear emergency planning and response. Specifically, the FEMA responsibilities with respect to radiological emergency preparedness as they relate to NRC are:

1. To take the lead in offsite emergency planning and to review and assess offsite emergency plans and preparedness for adequacy.

2. To make findings and determinations as to whether offsite emergency plans are adequate and can be implemented (e.g., adequacy and maintenance of procedures, training, resources, staffing levels and qualifications, and equipment). Notwithstanding the procedures which are set forth in 44 CFR Part 350 for requesting and reaching a FEMA administrative approval of State and local plans, findings, and determinations on the current status of emergency planning and preparedness around particular sites, referred to as interim findings, will be provided by FEMA for use as needed in the NRC licensing process. Such findings will be provided by FEMA on mutually agreed to schedules or on specific NRC request. The request and findings will normally be by written communications between the co-chairs of the NRC/FEMA Steering Committee. An interim finding provided under this

arrangement will be an extension of FEMA's procedures for review and approval of offsite radiological emergency plans and preparedness set forth in 44 CFR Part 350. It will be based on the review of currently available plans and, if appropriate, joint exercise results related to a specific nuclear power plant site.

If the review involves an application under 10 CFR Part 52 for an early site permit, the NRC will forward to FEMA pertinent information provided by the applicant and consult with FEMA as to whether there is any significant impediment to the development of offsite emergency plans. As appropriate, depending upon the nature of information provided by the applicant, the NRC will also request that FEMA determine whether major features of offsite emergency plans submitted by the applicant are acceptable, or whether offsite emergency plans submitted by the applicant are adequate, as discussed below.

An interim finding based only on the review of currently available offsite plans will include an assessment as to whether these plans are adequate when measured against the standards and criteria of NUREG–0654/ FEMA–REP–1, and, pending a demonstration through an exercise, whether there is reasonable assurance that the plans can be implemented. The finding will indicate one of the following conditions: (1) Plans are adequate and there is reasonable assurance that they can be implemented with only limited or no corrections needed; (2) plans are adequate, but before a determination can be made as to whether they can be implemented, corrections must be made to the plans or supporting measures must be demonstrated (e.g., adequacy and maintenance of procedures, training, resources, staffing levels and qualifications, and equipment) or (3) plans are inadequate and cannot be implemented until they are revised to correct deficiencies noted in the Federal review.

If, in FEMA's view, the plans that are available are not completed or are not ready for review, FEMA will provide NRC with a status report delineating milestones for preparation of the plan by the offsite authorities as well as FEMA's actions to assist in timely development and review of the plans.

An interim finding on preparedness will be based on review of currently available plans and joint exercise results and will include an assessment as to (1) whether offsite emergency plans are adequate as measured against the standards and criteria of NUREG–0654/FEMA–REP–1 and(2) whether the exercise(s) demonstrated that there is reasonable assurance that the plans can be implemented.

An interim finding on preparedness will indicate one of the following conditions: (1) There is reasonable assurance that the plans are adequate and can be implemented as demonstrated in an exercise; (2) there are deficiencies that must be corrected; or (3) FEMA is undecided and will provide a schedule of actions leading to a decision.

3. To assume responsibility, as a supplement to State, local, and utility efforts, for radiological emergency preparedness training of State and local officials.

4. To develop and issue an updated series of interagency assignments which delineate respective agency capabilities and responsibilities and define procedures for coordination and direction for emergency planning and response. [Current assignments are in 44 CFR part 351, March 11, 1982. (47 FR 10758)] NRC-The Atomic Energy Act of 1954, as amended, requires that the NRC grant licenses only if the health and safety of the public is adequately protected. While the Atomic Energy Act does not specifically require emergency plans and related preparedness measures, the NRC requires

consideration of overall emergency preparedness as a FEMA-NRC MOU (App. A to 44CFR353):

[58 FR 47997, Sept. 14, 1993] Page 3 of 6 part of the licensing process. The NRC rules (10 CFR 50.33, 50.34, 50.47, 50.54, and appendix E to 10 CFR part 50, and 10 CFR part 52) include requirements for the licensee's emergency plans. Specifically, the NRC responsibilities for radiological emergency preparedness are:

1. To assess licensee emergency plans for adequacy. This review will include organizations with whom licensees have written agreements to provide onsite support services under emergency conditions.

2. To verify that licensee emergency plans are adequately implemented (e.g., adequacy and maintenance of procedures, training, resources, staffing levels and qualifications, and equipment).

3. To review the FEMA findings and determinations as to whether offsite plans are adequate and can be implemented.

4. To make radiological health and safety decisions with regard to the overall state of emergency preparedness (i.e., integration of emergency preparedness onsite as determined by the
NRC and offsite as determined by FEMA and reviewed by NRC) such as assurance for continued operation, for issuance of operating licenses, or for taking enforcement actions, such as notices of violations, civil penalties, orders, or shutdown of operating reactors.

III. Areas of Cooperation

A. NRC Licensing Reviews

FEMA will provide support to the NRC for licensing reviews related to reactors, fuel facilities, and materials licensees with regard to the assessment of the adequacy of offsite radiological emergency response plans and preparedness. This will include timely submittal of an evaluation suitable for inclusion in NRC safety evaluation reports. Substantially prior to the time that a FEMA evaluation is required with regard to fuel facility or materials license review, NRC will identify those fuel and materials licensees with potential for significant accidental offsite radiological releases and transmit a request for review to FEMA as the emergency plans are completed.

FEMA routine support will include providing assessments, findings and determinations (interim and final) on offsite plans and preparedness related to reactor license reviews. To support its findings and determinations, FEMA will make expert witnesses available before the Commission, the NRC Advisory Committee on Reactor Safeguards, NRC hearing boards and administrative law judges, for any court actions, and during any related discovery proceedings.
FEMA will appear in NRC licensing proceedings as part of the presentation of the NRC staff. FEMA counsel will normally present FEMA witnesses and be permitted, at the discretion of the
NRC licensing board, to cross-examine the witnesses of parties, other than the NRC witnesses, on matters involving FEMA findings and determinations, policies, or operations; however, FEMA will not be asked to testify on status reports. FEMA is not a party to NRC proceedings and, therefore, is not subject to formal discovery requirements placed upon

parties to NRC proceedings. Consistent with available resources, however, FEMA will respond informally to discovery requests by parties.

Specific assignment of professional responsibilities between NRC and FEMA counsel will be primarily the responsibility of the attorneys assigned to a particular case. In situations where questions of professional responsibility cannot be resolved by the attorneys assigned, resolution of any differences will be made by the General Counsel of FEMA and the General Counsel of the NRC or their designees. NRC will request the presiding Board to place FEMA on the service list for all litigation in which it is expected to participate.

Nothing in this MOU shall be construed in any way to diminish NRC's responsibility for protecting the radiological health and safety of the public.

B. FEMA Review of Offsite Plans and Preparedness

NRC will assist in the development and review of offsite plans and preparedness through its membership on the Regional Assistance Committees (RAC). FEMA will chair the Regional Assistance Committees. Consistent with NRC's statutory responsibility, NRC will recognize FEMA as the interface with State and local governments for interpreting offsite radiological emergency planning and preparedness criteria as they affect those governments and for reporting to those governments the results of any evaluation of their radiological emergency plans and preparedness.
Where questions arise concerning the interpretation of the criteria, such questions will continue to be referred to FEMA Headquarters, and when appropriate, to the NRC/ FEMA Steering Committee to assure uniform interpretation. FEMA-NRC MOU (App. A to 44CFR353): [58 FR 47997, Sept. 14, 1993] Page 4 of 6
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Per 10 CFR 50.54(s)(2)(ii), the Commission will determine whether the reactor shall be shut downor other appropriate enforcement actions if such conditions are not corrected within four months.
The NRC is not limited by this provision of the rule, for, as stated in 10 CFR 50.54(s)(3), ''Nothing in this paragraph shall be construed as limiting the authority of the Commission to take action under any other regulation or authority of the Commission or at any time other than that specified in this paragraph'' (emphasis added).

C. Preparation for and Evaluation of Joint Exercises

FEMA and NRC will cooperate in determining exercise requirements for licensees, and State and local governments. They will also jointly observe and evaluate exercises. NRC and FEMA will institute procedures to enhance the review of objectives and scenarios for joint exercises. This review is to assure that both the onsite considerations of NRC and the offsite considerations of FEMA are adequately addressed and integrated in a manner that will provide for a technically sound exercise upon which an assessment of preparedness capabilities can be based. The NRC/FEMA procedures will provide for the availability of exercise objectives and scenarios sufficiently in advance of scheduled exercises to allow enough time for adequate review by NRC and FEMA and correction of any deficiencies by the licensee. The failure of a licensee to develop a scenario that adequately addresses both onsite and offsite considerations may result in NRC taking enforcement actions.

The FEMA reports will be a part of an interim finding on emergency preparedness; or will be the result of an exercise conducted pursuant to FEMA's review and approval procedures under 44 CFR Part 350 and NRC's requirement under 10 CFR Part 50, appendix E, Section IV.F. Exercise evaluations will identify one of the following conditions: (1) There is

reasonable assurance that the plans are adequate and can be implemented as demonstrated in the exercise; (2) there are deficiencies that must be corrected; or (3) FEMA is undecided and will provide a schedule of actions leading to a decision. The schedule for issuance of the draft and final exercise reports will be as shown in FEMA-REP–14 (Radiological Emergency Preparedness Exercise Manual). The deficiency referred to in (2) above is defined as an observed or identified inadequacy of organizational performance in an exercise that could cause a finding that offsite emergency preparedness is not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear power plant. Because of the potential impact of deficiencies on emergency preparedness, they should be corrected within 120 days through appropriate remedial actions, including remedial exercises, drills, or other actions. Where there are deficiencies of the types noted above, and when there is a potential for remedial actions, FEMA Headquarters will promptly (1–2 days) discuss these with NRC Headquarters. Within 10 days of the exercise, official notification of identified deficiencies will be made by FEMA to the State, NRC Headquarters, and the RAC with an information copy to the licensee. NRC will formally notify the licensee of the deficiencies and monitor the licensee's efforts to work with State and local authorities to correct the deficiencies. Approximately 60 days after official notification of the deficiency, the NRC, in consultation with FEMA, will assess the progress being made toward resolution of the deficiencies.

D. Withdrawal of Reasonable Assurance Finding

If FEMA determines under 44 CFR 350.13 of its regulations that offsite emergency plans or preparedness are not adequate to provide reasonable assurance that appropriate protective measures can be taken in the event of radiological emergency to protect the health and safety of the public FEMA shall, as described in its rule, withdraw approval.

Upon receiving notification of such action from FEMA, the NRC will promptly review FEMA's findings and determinations and formally document the NRC's position. When, as described in 10 CFR 50.54(s)(2)(ii) and 50.54(s)(3) of its regulations, the NRC finds the state of emergency preparedness does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency, the NRC will notify the affected licensee accordingly and start the ''120-day clock.''

E. Emergency Planning and Preparedness Guidance

NRC has lead responsibility for the development of emergency planning and preparedness guidance for licensees. FEMA has lead responsibility for the development of radiological emergency planning and preparedness guidance for State and local agencies. NRC and FEMA recognize the need for an integrated, coordinated approach to radiological emergency planning and preparedness by NRC licensees and State and local governments. NRC and FEMA will each, therefore, provide opportunity for the other agency to review and comment on such guidance (including interpretations of agreed joint guidance) prior to adoption as formal agency guidance. FEMA-NRC MOU (App. A to 44CFR353): [58 FR 47997, Sept. 14, 1993] Page 5 of 6

F. Support for Document Management System

FEMA and NRC will each provide the other with continued access to those automatic data processing support systems which contain relevant emergency preparedness data.

G. Ongoing NRC Research and Development Programs

Ongoing NRC and FEMA research and development programs that are related to State and local radiological emergency planning and preparedness will be coordinated. NRC and FEMA will each provide opportunity for the other agency to review and comment on relevant research and development programs prior to implementing them.

H. Public Information and Education Programs

FEMA will take the lead in developing public information and educational programs. NRC will assist FEMA by reviewing for accuracy educational materials concerning radiation, and its hazards and information regarding appropriate actions to be taken by the general public in the event of an accident involving radioactive materials.

I. Recovery from Disasters Affecting Offsite Emergency Preparedness

Disasters that destroy roads, buildings, communications, transportation resources or other offsite infrastructure in the vicinity of a nuclear power plant can degrade the capabilities of offsite response organizations in the 10-mile plume emergency planning zone. Examples of events that could cause such devastation are hurricanes, tornadoes, earthquakes, tsunamis, volcanic eruptions, major fires, large explosions, and riots.

If a disaster damages the area around a licensed operating nuclear power plant to an extent that FEMA seriously questions the continued adequacy of offsite emergency preparedness, FEMA will inform the NRC promptly. Likewise, the NRC will inform FEMA promptly of any information it receives from licensees, its inspectors, or others, that raises serious questions about the continued adequacy of offsite emergency preparedness. If FEMA concludes that a disaster-initiated review of offsite radiological emergency preparedness is necessary to determine if offsite emergency preparedness is still adequate, it will inform the NRC in writing, as soon as practicable, including a schedule for conduct of the review. FEMA will also give the NRC (1) interim written reports of its findings, as appropriate, and (2) a final written report on the results of its review.

The disaster-initiated review is performed to reaffirm the radiological emergency preparedness capabilities of affected offsite jurisdictions located in the 10-mile emergency planning zone and is not intended to be a comprehensive review of offsite plans and preparedness.

The NRC will consider information provided by FEMA Headquarters and pertinent findings from FEMA's disaster-initiated review in making decisions regarding the restart or continued operation of an affected operating nuclear power reactor. The NRC will notify FEMA Headquarters, in writing, of the schedule for restart of an affected reactor and keep FEMA Headquarters informed of changes in that schedule.

IV. NRC/FEMA Steering Committee

The NRC/FEMA Steering Committee on Emergency Preparedness will continue to be the focal point for coordination of emergency planning and preparedness. As discussed in Section I of this agreement, response activities between these two agencies are addressed in a separate MOU. The Steering Committee will consist of an equal number of members to represent each agency with one vote per agency. When the Steering Committee cannot agree on the resolution of an issue, the issue will be referred to NRC and FEMA management. The NRC members will have lead responsibility for licensee planning and

preparedness and the FEMA members will have lead responsibility for offsite planning and preparedness. The Steering Committee will assure coordination of plans and preparedness evaluation activities and revise, as necessary, acceptance criteria for licensee, State and local radiological emergency planning and preparedness. NRC and FEMA will then consider and adopt criteria, as appropriate, in their respective jurisdictions (See Attachment 1).

V. Working Arrangements

A. The normal point of contact for implementation of the points in this MOU will be the NRC/FEMA Steering Committee.

B. The Steering Committee will establish the day-to-day procedures for assuring that the arrangements of this MOU are carried out. FEMA-NRC MOU (App. A to 44CFR353): [58 FR 47997, Sept. 14, 1993] Page 6 of 6

VI. Memorandum of Understanding

A. This MOU shall be effective as of date of signature and shall continue in effect unless terminated by either party upon 30 days notice in writing.

B. Amendments or modifications to this MOU may be made upon written agreement by both parties.

Approved for the U.S. Nuclear Regulatory Commission.
Dated: June 17, 1993
James M. Taylor,
Executive Director for Operations
Dated: June 17, 1993
Approved for the Federal Emergency Management Agency
Richard W. Krimm,
Acting Associate Director, State and Local Programs and Support

ATTACHMENT 1—FEMA/NRC STEERING COMMITTEE

Purpose

Assure coordination of efforts to maintain and improve emergency planning and preparedness for nuclear power reactors as described in the NRC and FEMA rules and the NRC/FEMA MOU on Radiological Emergency Planning and Preparedness. Coordinate consistent criteria for licensee, State and local emergency plans and preparedness.

Membership

The NRC and FEMA consignees of this MOU will designate respective co-chairs for the Steering Committee. The designated co chairs will, in turn, appoint their respective members to the Committee.

Membership Changes

Changes to the membership of the NRC/FEMA Steering Committee may be made by the co-chairs representing the agency whose member is being changed.

Operating Procedures

The Steering Committee will maintain a record of each meeting to include identification of issues discussed and conclusions reached. No meeting will be held without the attendance and participation of at least the co-chairs or two assigned members of each agency.

Coordination

When items involving responsibilities of other NRC or FEMA offices are discussed, the affected offices will be contacted as appropriate.
[58 FR 47997, Sept. 14, 1993]