## NRC INSPECTION MANUAL

NSIR/DPR/EPD

## MANUAL CHAPTER 1601

#### COMMUNICATION AND COORDINATION PROTOCOL FOR DETERMINING THE STATUS OF OFFSITE EMERGENCY PREPAREDNESS FOLLOWING A NATURAL DISASTER, MALEVOLENT ACT, OR EXTENDED PLANT SHUTDOWN

#### 1601-01 PURPOSE

To provide procedures and guidelines for determining the status of offsite emergency preparedness (EP), and its impact on restart activities, following an extended plant shutdown (or shutdown caused by electric grid blackouts), malevolent act, or natural disaster (e.g., hurricane, tornado, flood, storm, earthquake) in the vicinity of power reactors.

#### 1601-02 OBJECTIVES

02.01 Identify Nuclear Regulatory Commission (NRC) groups or individuals responsible for monitoring licensee restart activities.

02.02 Identify Department of Homeland Security - Federal Emergency Management Agency (DHS-FEMA) contacts who can provide information on offsite conditions.

02.03 Establish communication links for coordinating information between the various organizations involved in plant restart, offsite recovery, or both.

02.04 Provide a checklist to facilitate tracking of restart assessment activities.

#### 1601-03 APPLICABILITY

03.01 This manual chapter is used when a natural disaster or malevolent act has occurred at or in the vicinity of a power reactor and is of such severity that plant damage is minimal, but damage or changes to the offsite emergency response infrastructure may be substantial or are in question. Changes to the emergency response infrastructure may include physical changes as well as artificial changes (such as the erection of a "tent city"). In instances where substantial damage to the plant has occurred, the plant restart activities should be coordinated using NRC Inspection Manual Chapter 0350, "Oversight of Operating Reactor Facilities in an Extended Shutdown as a Result of Significant Performance Problems."

03.02 This manual chapter should be implemented consistent with the agreements of the Memorandum of Understanding between the NRC and DHS-FEMA. In this regard, if a disaster damages or changes the area around a licensed operating nuclear power plant to an extent that raises serious questions about the continued adequacy of offsite

emergency preparedness, the identifying agency (DHS-FEMA/NRC) will inform the other promptly. When evaluating implementation of this manual chapter, among other things, consider whether alternative means can adequately compensate for the offsite function(s) impacted. If the status of offsite emergency preparedness is inadequate, it is incumbent on the State and applicable local governments to develop appropriate compensatory measures to ensure public health and safety.

03.03 During an extended plant shutdown, or a shutdown due to an electric grid blackout, the NRC may need to petition DHS-FEMA to issue a statement of Reasonable Assurance, certifying that the applicable State and local government emergency plans can and will be implemented in a manner to protect public health and safety in the event of a radiological incident at the specific plant emerging from an extended shutdown.

03.04 This manual chapter only applies when a reactor plant is shutdown and an offsite review of emergency preparedness is required. If the reactor plant is operating and there is damage to the offsite emergency preparedness infrastructure or any portion of offsite emergency preparedness is degraded, DHS-FEMA management, in consultation with State and applicable local governments and the NRC, will decide on the necessary actions to ensure adequate protection of public health and safety. This manual chapter may be used as a guide to support decision making regarding offsite preparedness under these conditions.

03.05 This manual chapter applies only to fixed nuclear power reactors. It does not apply to fuel cycle facilities.

## 1601-04 BACKGROUND

The NRC has primary responsibility for ensuring the adequacy of emergency preparedness for commercial nuclear power plants. NRC defers to DHS-FEMA to assess the status of offsite emergency preparedness, via its Disaster Initiated Review, and to issue a Statement of Reasonable Assurance that the State(s) and local governments emergency plans can and will be implemented in a manner to ensure public health and safety in the event of an accident at an NRC licensed reactor facility. The Memorandum of Understanding between DHS-FEMA and the NRC describes the responsibilities and the authorities of the two agencies. All agency decisions involving DHS-FEMA and NRC must take place between Headquarters offices. It is important to note that DHS-FEMA Headquarters management is the <u>sole</u> authority for generating a Statement of Reasonable Assurance. For this reason, direct communication and coordination between the two agencies is essential when events with the potential to impact the onsite or offsite emergency response infrastructure occur. These events include, but are not limited to, hurricanes, tornadoes, floods, storms, fires, earthquakes, malevolent acts, and extended plant shutdowns (electric grid issues).

## 1601-05 RESPONSIBILITIES AND AUTHORITIES

The following individuals shall perform the listed actions. It is not necessary for communications to be restricted to those NRC personnel listed in this manual chapter. Reporting information to other NRC personnel should not delay the expected reporting in this manual chapter.

05.01 <u>Chief, Inspection and Communications Section (EPD-A Section Chief), Office of</u> <u>Nuclear Security and Incident Response (NSIR), Division of Preparedness and</u> <u>Response (DPR), Emergency Preparedness Directorate (EPD)</u>

- a. Act as the lead technical point of contact for the activities of this manual chapter and ensure completion of all activities using the checklist in Appendix 1.
- b. Participate as the lead technical contact during the restart counterpart conference call (RCCC, as defined in section 06.02)
- c. Ensure that the Office of Nuclear Reactor Regulation (NRR) Project Manager is informed of any new developments.
- d. Communicate important developments in the restart process or continued plant operation, and the Disaster Initiated Review to the following individuals (who do not participate in the RCCC):
  - 1. Director of NSIR/DPR;
  - 2. Chief of DHS-FEMA's Radiological Emergency Preparedness (REP) Section;
  - 3. Director of NSIR/DPR/EPD;
  - 4. Director of the Incident Response Directorate (IRD), NSIR/DPR.
- e. Inform the Chief of DHS-FEMA's REP Section of the licensee's estimated restart date and time, including heatup if the reactor is in cold shutdown.
- f. Obtain from the Chief of DHS-FEMA's REP Section, as soon as it is available, the results of DHS-FEMA's Disaster Initiated Review regarding the status of offsite emergency preparedness and whether it is adequate to support plant restart. As soon as this information is received, provide it to the NRR Reactor Projects Directors, the NRR Project Managers, regional DRS EP Branch Chiefs, and Director of EPD, NSIR.
- g. If it appears that DHS-FEMA's Disaster Initiated Review will not be complete before the time of the licensee's restart schedule, or if the information received from DHS-FEMA is that the state of offsite emergency preparedness is <u>not</u> adequate to support plant restart on the schedule proposed by the licensee, do the following:
  - 1. Obtain a thorough understanding of the significance of the EP issues in question.
    - (a) State and local governments, in coordination with DHS-FEMA, will decide what compensatory measures, if any, are (or could be) available to offset the EP program elements that are not fully functional; and
    - (b) Obtain the projected date on which the emergency planning zone (EPZ) infrastructure will be fully functional or when adequate compensatory measures will be in place.
  - 2. Discuss these issues with the NRR Executive Team, NSIR senior management, and senior regional management to determine follow-up actions with the licensee, DHS-FEMA, and others, as appropriate.
- h. If it appears that communications problems between the various offsite response organizations are preventing the completion of a timely assessment regarding the status of offsite emergency preparedness, offer the services of NRC

telecommunications resources to the parties so that an effective conference call to exchange information can be held. Examples of resources to consider in accomplishing this conference include the following:

- 1. NRC Operations Center bridge network
- 2. Regional Office bridge network
- 3. Resident inspector and regional satellite telephone equipment

#### 05.02 NRR Project Directors for the Affected Sites

- a. Participate in the RCCC.
- b. Communicate important developments in the restart process and the Disaster Initiated Review with the NRR Executive Team.
- 05.03 NRR Project Managers for the Affected Sites
- a. Organize and facilitate the RCCC (as defined in section 06.02).
- b. Keep the EPD-A Section Chief informed of any new developments.
- c. Obtain from the EPD-A Section Chief, as soon as it is available, the results of DHS-FEMA's Disaster Initiated Review and whether it is adequate to support plant restart or continued operation. As soon as this information is received, provide it to the NRR Executive Team and regional DRP Branch Chief for the affected site.
- 05.04 <u>Regional State Liaison Officers (RSLOs) and/or NRC Regional Assistance</u> <u>Committee (RAC) Representatives</u>
- a. Participate in the DHS-FEMA-led Disaster Initiated Review, as necessary and appropriate to the representative's skills.
  - Note: Consider obtaining a portable satellite telephone unit from the Regional Emergency Response Coordinator to facilitate the communication responsibilities of this paragraph in the event of degraded communication infrastructure in the affected area.
- b. Obtain information regarding important developments in the onsite recovery and restart process to support the DHS-FEMA-led Disaster Initiated Review.

#### 05.05 <u>Regional Division of Reactor Projects (DRP) Branch Chiefs</u>

- a. Participate in the RCCC, as necessary.
- b. Communicate important developments in the restart process to senior regional management.
- c. Establish a dialogue with licensee management to determine their schedule for reactor restart, or the status of continued operations and assessments of risks involved. Inform them whether any offsite EP assessments are scheduled, or ongoing, so that licensee management may factor these into their plans.

#### 05.06 <u>Regional Division of Reactor Safety (DRS) EP Branch Chiefs</u>

- a. Participate in the RCCC.
- 1601

- b. Communicate status of emergency preparedness assessment activities with senior regional management and the EPD-A Section Chief.
- c. Establish a dialogue with licensee EP management to determine the status of ongoing actions to restore EP infrastructure.
- d. Once informed by the EPD-A Section Chief of DHS-FEMA's Disaster Initiated Review results, provide this information to senior regional management. Note that this Statement of Reasonable Assurance can <u>only</u> originate from DHS-FEMA Headquarters.

#### 05.07 Senior Resident Inspectors

- a. Participate in the RCCC, as necessary.
- b. Communicate important developments in the restart process and the assessment of onsite EP elements that link to offsite preparedness and emergency sirens (if maintained by the licensee) with the regional DRP Branch Chief.
- c. The following information should be relayed as soon as it is known:
  - 1. Licensee's expected commencement of heatup and/or rod withdrawal, if the reactor is shut down;
  - 2. General condition of the EP infrastructure (see communications protocol identified in the caution statement that follows).
    - (a) The general condition may be determined from discussions with licensee personnel. (Obtaining this information does not require an independent inspection to verify the status.)
  - CAUTION: It is <u>not</u> appropriate to contact offsite agencies to determine this information. That responsibility rests with the appropriate DHS-FEMA regional office. The Regional State Liaison Officer is the primary NRC staff member who is responsible for interface with DHS-FEMA at the regional/local level. All <u>decisions</u> concerning the adequacy of offsite EP will be based on DHS-FEMA's Disaster Initiated Review.
    - (b) Particular effort should be made to determine the status of the following (gathered from the licensee and the inspector's insights):
      - (1) Communication circuits between the licensee and the offsite authorities;
      - (2) Licensee's emergency response facilities;
      - (3) Licensee's ability to staff the required emergency response organization positions and critical plant personnel;
      - (4) Environmental monitoring;
      - (5) Meteorological towers;
      - (6) Evacuation routes to and from the plant site;
      - (7) Emergency sirens, if maintained by the licensee; and

- (8) Structures, systems, and components needed for Emergency Action Level classifications.
- 05.08 <u>NRC Operations Center Headquarters Operations Officer (HOO) and</u> <u>Headquarters Emergency Response Officer (HERO)</u>
- a. Relay any incoming information from any source (i.e., licensee, NRC employee, other Federal agency employee) that may affect the restart process, or continued plant operation, to the EPD-A Section Chief.
- 05.09 NRR Executive Team
- a. Participate in the restart decision, along with NSIR senior management and senior regional management.
- b. Evaluate the need for the NRC to issue an order or confirmatory action letter to the licensee to ensure that the restart does not occur under degraded offsite conditions, and the plant is maintained in a condition of minimal risk.
- c. Determine whether the affected plant is subject to the restart provisions of Inspection Manual Chapter 0350, "Oversight of Operating Reactor Facilities in an Extended Shutdown as a Result of Significant Performance Problems."
- 05.10 NSIR Senior Management (Office Director, Deputy Director, Division Directors)
- a. Participate in the restart decision, along with the NRR Executive Team and senior regional management.
- 05.11 <u>Senior Regional Management (Regional Administrator, Deputy Regional Administrator, Division Directors)</u>
- a. Participate in the restart decision, along with NSIR senior management and the NRR Executive Team.
- b. Evaluate the need for the NRC to issue an order or confirmatory action letter to the licensee to ensure that the restart does not occur under degraded offsite conditions, and the plant is maintained in a condition of minimal risk.
- c. Determine whether the affected plant is subject to the restart provisions of Inspection Manual Chapter 0350, "Oversight of Operating Reactor Facilities in an Extended Shutdown as a Result of Significant Performance Problems."
- d. The Regional Administrator shall inform the licensee of the restart decision.

#### 1601-06 GUIDANCE

06.01 The restart decision, if applicable, will be made jointly by the NRR Executive Team, NSIR senior management, and Regional Administrator. The Regional Administrator will inform the licensee of the restart decision.

06.02 The restart counterpart conference call (RCCC) is the primary means for information sharing during the restart assessment process. The call should be scheduled once daily, and additionally as necessary, while the actions of this manual chapter are ongoing. The NRR Project Manager for the affected site will establish a conference bridge and notify all stakeholders (identified in this manual chapter) of the schedule and logistics

for the call. During the call, the EPD-A Section Chief will lead discussion of new and updated information. This call is NRC-internal; the EPD-A Section Chief has the responsibility to ensure that DHS-FEMA HQ is notified of any relevant information.

06.03 The most important activity to be pursued by all NRC parties is the establishment of informative and timely communications. It is not necessary to continuously maintain open circuits with other offices or agencies; important information and developments should be relayed to designated contacts as quickly as possible. The NRR Executive Team, NSIR senior management, and the Regional Administrator need to be reliably informed so that they can communicate with the licensee for a safe restart.

Note: Prompt communication of findings and the Statement of Reasonable Assurance is of the utmost importance and may necessitate late night conference calls. Review activities pertaining to a restart decision should not wait for daylight hours.

06.04 If, at any time, NRC staff receives new or updated information, it should be passed on to the EPD-A Section Chief. The EPD-A Section Chief, in consultation with the NRR Project Manager for the affected site, shall pass that information on to the appropriate stakeholders; or, if applicable, the NRR Project Manager will schedule a RCCC to allow dissemination of the information.

06.05 If the reaffirmation of adequate offsite emergency preparedness is not forthcoming before the licensee plans to heat up the plant or restart the reactor then inform the NRR Executive Team, NSIR senior management, and the Regional Administrator of this fact as soon as possible. These officials will evaluate the need for the NRC to issue an order, or confirmatory action letter to the licensee. This will ensure that the restart does not occur under degraded offsite conditions, and the plant is maintained in a condition of minimal risk. These senior officials will also determine whether the affected plant is subject to the restart provisions of Inspection Manual Chapter 0350, "Oversight of Operating Reactor Facilities in an Extended Shutdown as a Result of Significant Performance Problems."

06.06 NRC shall strive to ensure that all decisions regarding emergency preparedness reviews are carried out consistently across regional boundaries, both during one initiating event and from one event to another. Additionally, if an emergency preparedness assessment is necessary for more than one plant site simultaneously, the NRC should prioritize reviews per this manual chapter on situational information.

#### 1601-07 REFERENCES

NRC Inspection Manual Chapter 0350, "Oversight of Operating Reactor Facilities in an Extended Shutdown as a Result of Significant Performance Problems."

DHS-FEMA-NRC Memorandum of Understanding (MOU).

END

#### APPENDIX A EMERGENCY PREPAREDNESS RESTART STATUS CHECKLIST

#### Initiating Action:

- 1. After consulting with DHS-FEMA, if any of the following events affect the 10-mile emergency planning zone surrounding a power reactor, this checklist <u>should be</u> <u>considered</u>: hurricanes, tornados, flooding, high winds, large fires, blizzards, ice storms, seismic activity, malevolent acts, or any other events that challenge offsite emergency preparedness capability. Also, for extended plant shutdowns (including electric grid blackouts), this checklist <u>should be considered</u> (see section 03.03).
- 2. If the licensee has made any level of emergency declaration in regard to any of these events, this checklist <u>must be implemented</u>.
- 3. Contact from DHS-FEMA regarding the status of offsite preparedness may also warrant implementation of this checklist.

# This checklist should be initiated immediately following the resolution of the response to an event or after the determination is made that the checklist is required.

#### Notes:

\*\*\*<u>ALL</u> agency decisions involving DHS-FEMA and the NRC must take place between Headquarters offices.

\*\*\*Written reports may be necessary per the MOU to document agency reports and decisions, however, verbal communication is appropriate and acceptable for all agency interactions.

Required Action	Responsible Party	Date Completed
1. Determine whether this checklist shall be implemented for a given event.	NSIR EPD	
2. Refer to IMC 1601 for complete list of communications requirements.	All NRC stakeholders	
3. Make contact with the relevant NRC Region / DRP to begin the assessment process. Notify the NRR Project Manager for the affected sites.	NSIR EPD	
4. Initiate dialogue with licensee to determine current plant status, restart plan (if applicable), and status of licensee communications with DHS-FEMA regarding offsite EP (if known). Report results to NSIR EPD.	NRC Region / DRP and Resident Inspectors	
5. Initiate dialogue with DHS-FEMA HQ / REP to inform them of current status/restart plan for affected plant (estimated restart date/time, including heatup if the reactor is in cold shutdown), and to discuss offsite EP issues that the NRC and DHS-FEMA are aware of.	NSIR EPD	

Continuous Actions				
If immediate agency action is required (i.e., orders, conference calls, ensuring compensatory measures are taken) before formal review activities can be completed, follow guidance in sections 03.04 and 05.01(g).	All NRC stakeholders			
Conduct restart counterpart conference calls (RCCC), as needed (section 06.02).	NSIR EPD, NRR DLPM, and all stakeholders			
Communicate important highlights from the RCCC to DHS-FEMA HQ / REP.	NSIR EPD			
Participate in DHS-FEMA review of offsite preparedness, as necessary. Maintain awareness of plant situation, including onsite and offsite preparedness (dialogue with State/local officials regarding conditions around the plant and evacuation routes) and continuously provide that information to the NRC Region and DHS-FEMA RAC Chairpersons.	Regional State Liaison Officers			
Required Action	Responsible Party	Date Completed		
6. DHS-FEMA HQ assesses the need for a review of offsite EP adequacy and informs NRC HQ (including a schedule for the review).	DHS-FEMA HQ			
7. Conduct an RCCC to inform NRC stakeholders of DHS-FEMA's Disaster Initiated Review schedule. However, If DHS- FEMA determines no review is necessary, cease checklist activities.	NSIR EPD, NRR DLPM, and all stakeholders			
8. DHS-FEMA conducts review of offsite EP. DHS-FEMA provides interim reports of its findings to NSIR EPD. Upon completion of the review, DHS-FEMA HQ transmits results to NSIR EPD.	DHS-FEMA HQ			
9. Conduct an RCCC to inform NRC stakeholders of the results of DHS-FEMA's offsite preparedness review.	NSIR EPD, NRR DLPM, and all stakeholders			
10. NRC considers DHS-FEMA HQ input and review findings, in addition to status of onsite preparedness, to determine appropriate action (i.e., restart, order, CAL).	NRR Executive Team / NSIR senior management / Regional Administrator			

Required Action	Responsible Party	Date Completed
<ul> <li>11. NRC informs DHS-FEMA HQ of the NRC's decision and, if appropriate, licensee schedule for restart of the affected reactor(s). NRC updates DHS-FEMA HQ regarding changes, as necessary.</li> <li>If plant is not permitted to restart due to EP issues, return to step 10. Continue RCCCs and information exchanges until issues are resolved.</li> </ul>	NSIR EPD	
12. NRC Region informs licensee of restart decision.	Regional Administrator	
Plant Restart – Assessment Complete		