



U.S. Department of Energy
Office of Inspector General
Office of Audits and Inspections

Special Report

The Department's Implementation
of the "Energy Annex, Emergency
Support Function 12" to the National
Response Framework



Department of Energy
Washington, DC 20585

January 31, 2011

MEMORANDUM FOR THE SECRETARY

FROM: 
Gregory H. Friedman
Inspector General

SUBJECT: INFORMATION: Special Report on The Department's
Implementation of the "Energy Annex, Emergency Support
Function 12" to the National Response Framework

BACKGROUND

As required by the National Response Framework (NRF), the Department of Energy, in coordination with the Department of Homeland Security (DHS), plays an active role in responding to national-level disasters and emergencies. As described in the "Energy Annex, Emergency Support Function" (ESF-12) to the NRF, the Department is responsible for serving as the focal point to assist Federal, state and local governments, and private industry with the disruption, preparation and mitigation of damaged energy systems and components. Within the Department, the Office of Electricity Delivery and Energy Reliability (OE) executes the national preparedness mission. This office deploys response teams to affected areas to: 1) facilitate restoration of damaged energy systems and components; 2) conduct assessments; and, 3) provide energy status reports. The Department maintains and can dispatch up to 10 regional coordinators, supplemented by over 80 Federal and contractor employee volunteers, in response to incidents requiring a coordinated Federal Response.

In April 2009 the U.S. Government Accountability Office issued a report finding fault with the Federal Emergency Management Agency's (FEMA) (a component of DHS) national preparedness system. As a result, the Council of the Inspectors General on Integrity and Efficiency (CIGIE) asked that Inspectors General of agencies responsible for national response activities participate in a review to ascertain their respective agency's level of preparedness. Because of the importance of this program, we initiated an inspection to determine to what extent the Department is prepared to fulfill its emergency response roles and responsibilities. Our review focused on the Department's emergency response functions to include: training; Federal, state, and private energy sector coordination; readiness assessments; and, equipment procurement or maintenance.

RESULTS

We determined that the Department had completed a number of actions designed to prepare it to implement an effective response to incidents and disasters. Specifically, Departmental personnel had participated in major coordination efforts, made readiness assessments in response to

hurricane efforts, implemented short and long-term incident management and recovery efforts, and maintained financial accountability. However, we identified an opportunity to improve preparedness by ensuring that responders receive required training prior to participating in exercises or actual emergency situations. Training should improve the overall effectiveness of responders and enhance their ability to resolve problems encountered during incidents and disasters.

A summary of preparedness activities, as well as the training issues that we observed, are outlined in this report. Detailed results of our review have been provided to the CIGIE for inclusion in a government-wide "Lessons Learned" document.

Coordination Efforts and Readiness Assessments

We determined that the Department had conducted numerous coordination activities with various Federal, state, and private organizations before, during and after incidents. Additionally, we found that the Office of Infrastructure Security and Energy Restoration (ISER), an organization within OE, is responsible for executing the national preparedness mission. Specifically, ISER had completed assessments of energy deployments and exercises, activities that resulted in lessons learned, recommendations and corrective actions.

Coordination Efforts

ISER coordinates with primary and support agencies, including state and local government, and private industry, before, during and after incidents. In support of energy restoration efforts, ESF-12 requires that regional coordinators attend meetings, participate in exercises, and develop expertise on regional issues and infrastructure to ensure that they are adequately prepared in the event of a disaster or incident. From April 2007 to February 2010, ISER's regional coordinators participated in at least 35 working group meetings, partnership advisory council meetings, conferences, and regional and national level exercises sponsored by various Federal, state, and private industry groups.

Readiness Assessments

Based upon the information that we obtained, we concluded that ISER's conduct or participation in coordination and readiness assessment activities in preparation for future deployments was consistent with the requirements of ESF-12. ESF-12 requires that ISER participate in post-incident hazard mitigation studies to reduce the adverse effects of future disasters. OE and ISER have conducted situational and periodic readiness assessments to evaluate Federal, state, and local governments, and private industry's responses to major hurricanes and coal delivery disruptions to power plants. The Department is also tasked with participating in various best practices and lessons learned forums to ensure future disruptions are addressed in the most efficient manner possible. The results of the energy sector assessments included lessons learned and recommendations addressed to Federal agencies, state and local governments, and energy sector industries, including participants from ISER.

Planning for Short-Term and Long-Term Incident Management, Recovery, and Mission Assignments

ISER planning activities were also consistent with requirements established by DHS. Based on information we obtained, we determined that ISER had conducted planning for short-term and long-term incident management, recovery, and mission assignment activities in preparation for future deployments, activities consistent with the requirements of ESF-12.

In particular, we noted that catastrophic incident planning and critical infrastructure preparedness were well-documented. Specifically, ISER had established responder procedures in anticipation of a disaster or incident that included steps related to pre-activation and imminent activation. The ISER *Emergency Response Organization Plan* provides steps to include identification of staffing, roles and responsibilities of responders, necessary reports, reporting times, product input and output, and other information related to the event. ISER *Desk Instructions* also described the duties and responsibilities of responders while deployed for both short and long-term incidents, and recovery. Notably, the instructions include step-by-step guidance concerning the deployment process; public information media interface; operations room products safety plan development; field reporting; records management; status board maintenance; state industry interactions; and, travel coordination.

Additionally, to ensure effective coordination with private sector organizations and maximize the use of private sector resources in responding to a threat or incident, ISER maintains a database of energy and utility infrastructures that is available to responders for planning purposes. This database contains maps and descriptions for each state and FEMA region for various types of energy installations such as oil refineries; natural gas processing plants; liquid natural gas terminals; electric utilities; and, coal mines. The information provides specific locations, points of contact, and addresses and phone numbers of the energy systems within a particular region, which can assist responders in their mission to provide expert advice regarding energy restoration.

Training

While we observed that the Department generally provided trained staff to support interagency emergency responses to incidents and disasters, we found that certain required responder training may not have been completed. To ensure that the regional coordinators and volunteers are adequately trained, ISER established specific ESF-12 training requirements. Our examination, however, established that a number of coordinators and volunteers may not have received the required training prior to deployment. As such, the Department lacked assurance that its responders were adequately prepared to respond to incidents and disasters. A description of the training, delineated by position and range of expertise, is contained in Attachment 1.

ISER maintains a list of volunteers representing the Department and its contractors who deploy in the event of a sustained event. The ISER training database identified 81 volunteers, who, depending on training and expertise, may be able to work alone or under the direct supervision of a regional coordinator. The required training provides the coordinators and volunteers with familiarity of their specific functions, to include responsibilities within a coordination center, and

acquaints them with other personnel they will interact with while on site. Both regional coordinators and volunteers must complete initial responder training or annual refresher training (if applicable) prior to deployment. In addition to the initial and refresher courses, the regional coordinators and volunteers are also required to complete a number of other training courses.

During our review of the Department's training database, we determined that not all required training had been completed. For example, we found that while all 10 regional coordinators had completed the initial responder or annual refresher training, each of the 10 coordinators was missing at least one of the additional required training courses. Regarding the 81 volunteers, we noted that 95 percent had completed either the initial responder training or the annual refresher training. Contrary to ISER guidance, we identified a number of instances in which volunteers deployed prior to completing the required additional training. Specifically, six volunteers deployed to Hurricane Ike; seven volunteers deployed to Hurricane Gustav, and one volunteer deployed to an Ice Storm event in 2009, without the required additional training. We recognize that operational exigencies associated with these incidents likely played a role in the Department's decision to deploy these staff members prior to their completion of all required training. Although the possibility for problems exists, we did not identify specific instances where missed training caused any problems during the deployments.

We also identified issues with training database discrepancies that could impact training record integrity. As part of our testing, we compared the ISER training database to a separate ISER volunteer database which identified those volunteers available for call up in the event of a disaster. These tests disclosed that six responders on the available volunteer call up list were not listed in the training database. We discussed the database discrepancies with ISER officials who advised us that several corrective actions had been taken to resolve the discrepancies to include: 1) contacting individuals regarding training completion; 2) reassigning responders who had not received the required training to non deployment status; and, 3) updating responder training courses records.

Financial Accountability

We determined that the Department had procedures in place to ensure financial and property accountability for ESF activities. ISER has assigned a financial analyst whose responsibility is to track and maintain mission assignment documentation. We conducted interviews with the financial analyst and DHS staff, who indicated that the Department is not experiencing any concerns regarding financial and property accountability. In addition, ISER's internal guidance, identified as Desk Instructions, provides a step-by-step procedure for managing and controlling responder mission assignments. For example, Desk Instruction 7.5, "*Mission Assignment Tracking*," establishes guidelines for the ISER responders on how to track mission assignment numbers and costs to ensure that the costs associated with ESF-12 activation are linked with the correct Mission Assignment code. Further, Desktop Instruction 7.10, "*Payroll Management*," establishes guidelines for ESF-12 responders on how to document their deployment time to ensure that the costs associated with overtime are linked with the correct Mission Assignment code.

Procurement and Property Accountability

Although DHS requires that agencies conform to certain procurement and property accountability requirements, ISER officials told us that they did not believe the requirement was applicable to the Department. These officials explained that they were not required to execute contracts, procure goods and services, or conduct property accountability activities outside of the Department's normal, internal processes. They indicated that other than travel, in general, they did not procure goods and services to fulfill their primary function. As noted, ESF-12 assigns the Department's responders as information coordinators who receive and provide energy sector specific data to enable the timely restoration of energy. Therefore, other than information technology (such as, laptop computers and telephones purchased by the Department), ISER officials informed us that there was no need to procure goods and services to fulfill this function.

The Department indicated that it had initiated corrective actions to resolve the training issues we identified. As such, formal recommendations are not being made. While a formal response to this report is not required, we suggest that the Department closely monitor the status and progress of planned corrective actions.

Attachments

cc: Deputy Secretary
Acting Under Secretary for Energy
Assistant Secretary for Electricity Delivery and Energy Reliability
Deputy Assistant Secretary, Office of Infrastructure Security and Energy Restoration
Chief of Staff

Excerpt from the Office of Infrastructure Security and Energy Restoration Emergency
Response Organization Plan

**Energy Annex, Emergency Support Function ENERGY ASSESSMENT TEAM
TRAINING REQUIREMENTS**

REQUIRED TRAINING COURSES	DEPARTMENT ESF-12 POSITION Responder Level			
	Type I		Type II	Type III
	Regional Coordinator	Team Leader	Experienced Field Responder	Volunteer Field Responder
ICS-100 Introduction to ICS	✓	✓	✓	✓
ICS-200 Basic ICS	✓	✓	✓	✓
ICS-300 Intermediate ICS	✓			
ICS-400 Advanced ICS	✓			
IS-700 NIMS: An Introduction	✓	✓	✓	✓
IS-800 NRP: An Introduction	✓	✓	✓	✓
ESF-12 Initial Training	✓	✓	✓	✓
ESF-12 Refresher Training	✓	✓	✓	✓

- **ICS-100 Introduction to Incident Command System (ICS):** This course provides a basic introduction to the fundamentals of ICS. Entry-level first responders and other emergency management personnel are required by the National Incident Management System to complete this course. This course is completed only once; however, trainees shall complete ICS-100 prior to attending the Initial ESF-12 Training.

- ICS-200 Basic ICS: This course provides responders with more guidance on how to function within the ICS. ICS-200 is required for first line supervisors, single resource leaders, lead dispatchers, field supervisors, company officers, and entry-level positions on the Incident Management Team.
- ICS-300 Intermediate ICS: This course provides responders with more detailed hands-on training on performing leadership functions within the ICS structure. Personnel attending this course will learn how to apply the principles of the ICS to an expanding event and will also be required to respond to a simulated event. ICS-300 Intermediate ICS is required for middle management, strike team leaders, task force leaders, unit leaders, division/group supervisors, branch directors, and Multi-Agency Coordination System function roles.
- ICS-400 Advanced ICS: This course provides detailed instruction on the fundamentals for Command and General staff within the Incident Command System. The course material is meant to expand on the information covered in ICS-100 through ICS-300. The target audience for this course is senior staff who are expected to perform in a management capacity in an Area Command or Multi-Agency Coordination entity.
- IS-700 National Incident Management System (NIMS); An Introduction: This course provides an explanation of the NIMS components, concepts and principles. All personnel with a direct role in emergency preparedness, incident management, or response must complete this training.
- IS-800 National Response Plan (NRP); An Introduction: This course provides an outline of how the NRP correlates to NIMS and describes the roles and responsibilities of the coordinating structures within the NRP. All Federal, state, territorial and local personnel whose primary responsibility is emergency management must complete this course.
- Initial ESF-12 Responder Training: The purpose of this course is to provide first time responders with a description of the ESF-12 mission as outlined in the National Response Framework, ESF-12 Annex. This two-day course also includes instruction on the activation and deployment process, disaster management principles and communication and includes a review of the basic elements of the energy sector.
- Refresher ESF-12 Responder Training: Refresher training provides a more in depth review of the tasks associated with completing the ESF-12 mission. Responders will be given an opportunity to respond to a simulated energy emergency and demonstrate their ability to perform core ESF-12 functions. Any lessons learned or updates to the program that occurred during the previous year will be communicated during refresher training. Refresher training must be taken annually.

SCOPE AND METHODOLOGY

This inspection was performed between January and October 2010, and included emergency response activities by the Department of Energy's (Department) Office of Infrastructure Security and Energy Restoration. To accomplish the inspection objective we:

- Conducted interviews with Department and contractor officials;
- Reviewed coordination messages; trip reports; and schedules; incident after action and corrective action reports; training requirements; and databases;
- Accessed information from the Energy Sector Infrastructure databases;
- Reviewed Federal, Department, and local policies and regulations pertaining to emergency response; and,
- Obtained and reviewed prior Office of Inspector General and other related reports.

Our inspection did not address Office of Health, Safety and Security responsibilities as it pertains to emergency management in the Department. This inspection was conducted in accordance with the Council of the Inspectors General on Integrity and Efficiency's, *Quality Standards for Inspections*, issued by the President's Council on Integrity and Efficiency.

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