Emergency Support Function #12 – Energy Annex

ESF Coordinator:  
Department of Energy

Primary Agency:  
Department of Energy

Support Agencies:  
Department of Agriculture  
Department of Commerce  
Department of Defense  
Department of Homeland Security  
Department of the Interior  
Department of Labor  
Department of State  
Department of Transportation  
Environmental Protection Agency  
Nuclear Regulatory Commission  
Tennessee Valley Authority

INTRODUCTION

Purpose

Emergency Support Function (ESF) #12 – Energy facilitates the reestablishment of damaged energy systems and components when activated by the Secretary of Homeland Security for incidents requiring a coordinated Federal response under the Stafford Act.

The term "energy" includes producing, storing, refining, transporting, generating, transmitting, conserving, building, distributing, maintaining, and controlling energy systems and system components.

Scope

ESF #12:

• Provides technical expertise to energy asset owners and operators, other Federal agencies, and local, state, tribal, territorial, and insular area governments and conducts field assessments as needed

• Collects, evaluates, and shares information on energy system damage and provides estimations on the effect of energy system outages within affected areas, as well as the potential regional and national impact

• Through coordination with the Department of Energy (DOE) as the primary agency, assists government and private sector stakeholders in overcoming inherent challenges associated with reestablishment of the energy system

• Provides information, through coordination with DOE Headquarters, concerning the status of energy reestablishment efforts to include geographic data; projected schedules; stabilization and reestablishment tracking and completion percentages; and other information as appropriate.

RELATIONSHIP TO THE WHOLE COMMUNITY

This section describes how ESF #12 relates to other elements of the whole community.
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Local, State, Tribal, Territorial, and Insular Area Governments

- When activated, ESF #12 personnel may deploy to local, state, tribal, territorial, or insular area emergency operations centers.

- Assists local, state, tribal, territorial, and insular area governments with requests for energy-related emergency response actions as required to meet the Nation’s energy demands, and, through DOE, the Energy Sector-Specific Agency works to identify interdependencies and cascading impacts to other jurisdictions and critical sectors.

- Local, state, tribal, territorial, and insular area governments, in coordination with energy asset owners and operators, have primary responsibility for prioritizing the reestablishment of critical infrastructure. They are integrated into ESF #12 operations.

Private Sector/Nongovernmental Organizations

- Stabilization and reestablishment of normal operations at energy facilities is the responsibility of the facility owners and operators.

- Private sector energy asset owners and operators are primarily responsible for the stabilization of infrastructure-related services after an incident occurs.

- For Stafford Act events, ESF #12, through consultation with DOE Headquarters, is the Federal point of contact with the energy industry for information sharing and requests for assistance from private- and public sector energy owners and operators.

Federal Government

- ESF #12 helps coordinate Federal assistance and resources to enable timely reestablishment of energy services following an incident that requires a coordinated Federal response.

- Assigns regional coordinators to each of the 10 Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) Regions. Under steady-state conditions, these coordinators participate in exercises, coordinate with local, state, tribal, territorial, and insular area governments and organizations, and develop expertise on regional issues and infrastructure.

- Once activated by DHS/FEMA, deploys ESF #12 response teams as needed to affected area(s) to assist in response and reestablishment efforts; ESF #12 representatives deploy to the National Response Coordination Center (NRCC), and Regional Response Coordination Center (RRCC). The ESF #12 Team Leader at the RRCC coordinates assignments, actions, and other support until Unified Coordination is established and ESF #12 mission-execution responsibilities are transferred to the Unified Coordination ESF #12 Team Leader.
CORE CAPABILITIES AND ACTIONS

As described in the NRF, responsibility for achieving the objectives of each core capability rests with no single entity or level of government but, rather, is the responsibility of all members of the whole community. The ESF construct is an effective way to bundle and manage the portfolio of resources to deliver core capabilities to local, state, and other responders. ESF #12 is particularly suited to support the Infrastructure Systems, Public and Private Services, and Resources core capabilities.

ESF Role Aligned to Core Capabilities

The following table lists the Response core capabilities that ESF #12 supports, along with the particular ESF #12 actions related to each of these core capabilities. Though not listed in the table, all ESFs support the core capabilities of Planning, Operational Coordination, and Public Information and Warning.

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<tr>
<th>Core Capability</th>
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| **Infrastructure Systems**             | • Assists energy asset owners and operators and local, state, tribal, and territorial authorities with requests for emergency response actions as required to meet the Nation’s energy demands.  
• Identifies supporting resources needed to stabilize and reestablish energy systems.  
• Assists Federal departments and agencies by locating fuel for transportation, communications, emergency operations, and national defense, pursuant to the authorities available to the agency providing assistance.  
• In coordination with the Energy Sector-Specific Agency (DOE), addresses significant disruptions in energy supplies for any reason, whether caused by physical disruption of energy transmission and distribution systems, unexpected operational failure of such systems, acts of terrorism or sabotage, or unusual economic, international, or political events.  
• In coordination with the Energy Sector-Specific Agency (DOE), addresses the impact that damage to an energy system in one geographic region may have on energy supplies, systems, and components in other regions relying on the same system.  
• In consultation with energy asset owners and operators and the Energy Sector-Specific Agency (DOE), advises local, state, tribal, territorial, insular area, and Federal authorities on priorities for energy system reestablishment, assistance, and supply during response operations. |
| **Public and Private Services and Resources** | • Provides subject-matter expertise to the private sector as requested to assist in stabilization and reestablishment efforts.  
• Through coordination with DOE, (refer to Primary Agency Functions), serves as a Federal point of contact with the energy industry for information sharing and requests for assistance from private and public sector owners and operators. |
Core Capability | ESF #12 – Energy
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**Situational Assessment** | • Works with the DHS/FEMA Regions, the private sector, local, state, tribal, territorial, and insular area authorities to develop procedures and products that improve situational awareness to effectively respond to a disruption of the energy sector.  
• Coordinates preliminary damage assessments in the energy sector.  
• Identifies requirements to repair energy systems and monitors repair work.  
• Through coordination with DOE, ESF #12:  
  - Serves as a source for reporting of critical energy infrastructure damage and operating status for the energy systems within an impacted area, as well as on regional and national energy systems.  
  - Assesses the energy impacts of the incident and provides analysis of the extent and duration of energy shortfalls.  
  - Analyzes and models the potential impacts to the electric power, oil, natural gas, and coal infrastructures, and determines the effect a disruption has on other critical infrastructure.

**Linkages Between Disaster Response and Recovery**

ESF #12 is also closely linked with the Infrastructure Systems Recovery Support Functions (RSF) under the National Disaster Recovery Framework. The Infrastructure Systems RSF may stand up nearly as early as ESF #12, although initially only to focus on planning and information sharing. The ESFs and RSFs will coexist at some point and share information about impacts and assistance provided while focusing on their respective functions. There is necessarily some overlap between ESF and RSF missions, but, as the ESF requirements diminish, the RSFs take over the residual ESF activities that are associated with recovery. The timing of this transition depends on the scope of the disaster and the nature of the activities and tasks involved. From the earliest days after the disaster, ESF #12 will work closely with the Infrastructure Systems RSF Field Coordinator to coordinate the transition from emergency repairs to long-term recovery activities as seamlessly as possible.

**Agency Functions**

This section describes specific functions of the primary and support agencies.

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<tr>
<th>Primary Agency</th>
<th>Functions</th>
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| **Department of Energy (DOE)** | By legislative or presidential mandate, the Secretary of Energy’s responsibilities include but are not limited to:  
  • Providing information, in cooperation with local, state, tribal, territorial, insular area, and Federal governments and energy industry officials, on energy supply and demand conditions and on the requirements for and the availability of materials and services critical to energy supply systems (e.g., outages, reestablishment status, energy infrastructure status) |
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| DOE (continued) | • Carrying out the responsibilities set forth in the Federal Power Act, including but not limited to the authority to order the temporary interconnections or connections of facilities during times of war or national emergency for the generation or transmission of electric energy and such generation, delivery, interchange, or transmission of electric energy that will best serve the public interest and alleviate the emergency.  
• Authorizing purchases of natural gas and allocating supplies of natural gas—by any interstate pipeline, local distribution company served by an interstate pipeline, or person—during an existing or imminent severe natural gas shortage, endangering the supply of natural gas for high-priority uses, and other responsibilities as set forth in the Natural Gas Policy Act of 1978.  
• Carrying out the responsibilities as required by the Defense Production Act of 1950, as amended.  
• Establishing and operating the Strategic Petroleum Reserve and the Northeast Home Heating Oil Reserve, ordering the drawdown and sale from either reserve at the direction of the President, and exercising other authorities as specified in the Energy Policy and Conservation Act.  
• Conducting national security emergency preparedness planning, including capabilities development, and administering operational programs for all energy resources and conducting energy emergency exercises with the energy industry, Federal partners, and local, state, tribal, territorial, and insular area governments.  
• Performing due diligence, in coordination with other Federal departments and agencies, pertaining to the implementation of emergency waivers.  
• Analyzing and modeling the potential impacts to the electric power, oil, natural gas, and coal infrastructures; analyzing market impacts to the economy; and determining the effect a disruption has on other critical infrastructure.  
• Assisting local and state governments in the preparation of Energy Assurance Plans to improve the reliability and resiliency of the Nation’s energy systems.  
• Participating in post-incident hazard mitigation studies to reduce the adverse effects of future disasters and leading and participating in various best practices and lessons learned forums to ensure future disruptions are addressed in the most efficient manner possible.  
• For those parts of the Nation’s energy infrastructure owned and/or controlled by DOE, DOE undertakes all energy related prevention, protection, mitigation, response, and recovery activities.  
• Through DOE/National Nuclear Security Administration (NNSA), provides support in the areas of atmospheric dispersion modeling, environmental radiation monitoring, and medical management of radiation injuries in the event of an accident or incident involving nuclear or radiological materials.  
• DOE/NNSA, in consultation with applicable Federal partners (to include FEMA), as well as local and/or state agencies, conducts environmental radiological monitoring, which may include activating and operating the Federal Radiological Monitoring and Assessment Center and coordinating such monitoring. |
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<td>DOE (continued)</td>
<td>As the Energy Sector-Specific Agency, the responsibilities granted to DOE include but are not limited to:</td>
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<td>• Identifying and prioritizing critical energy infrastructure.</td>
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<td>• Leading coordination and information sharing efforts with the energy private sector and with local, state, tribal, territorial, and insular area entities.</td>
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<td>• Serving as the primary Federal interface for the prioritization and coordination of energy sector activities, including but not limited to security, situational awareness, planning, preparedness activities, risk assessments, sector and national reporting, and exercises.</td>
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<td>• Leading or supporting incident response activities pertaining to the energy critical infrastructure sector consistent with statutory authority and other appropriate directives.</td>
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<td>• Coordinating and sharing information with the Electricity and the Oil and Natural Gas Sector Coordinating Councils, the Electric Reliability Organization, and various associations that represent portions of the energy sector.</td>
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<tr>
<td>U.S. Department of Agriculture (USDA)</td>
<td>Rural Development (RD)</td>
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<td>• Provides technical support and access to both damage assessments and reestablishment efforts for electric power generation, transmission, and distribution in RD Utilities Program-financed systems.</td>
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<td>• Gathers and communicates information, as appropriate, from RD Utilities Program-financed systems to assess impacts and needs.</td>
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<td>• Provides information (location, type, owners, and/or management service) on available USDA-financed, habitable housing units in its inventory that are not under lease or under agreement of sale for response or emergency personnel and their organizations’ representatives to contact for housing during response activities.</td>
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<td><strong>Multifamily Housing:</strong> Identifies owners of available apartments in federally funded multifamily housing to provide shelter to emergency response personnel in the affected area.</td>
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<td>Department of Commerce</td>
<td>National Oceanic and Atmospheric Administration (NOAA)</td>
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<td>• Provides current and forecast weather information and dispersion model forecasts through its National Centers for Environmental Prediction and its local weather forecast offices and river forecast centers.</td>
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<td>• Provides public dissemination of critical event information over the NOAA All-Hazards Weather Radio System, NOAA Weather Wire Service, and Emergency Managers Information Network.</td>
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<td>Department of Defense</td>
<td>United States Army Corps of Engineers</td>
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<td>• Coordinates Emergency Power Team missions with power system stabilization and reestablishment activities to establish priorities for emergency generator installation.</td>
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<td>• Assists in reestablishing the energy infrastructure, when requested and upon approval by the Secretary of Defense.</td>
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| Department of Homeland Security | **Federal Emergency Management Agency**  
- Provides oversight and evaluation for the emergency preparedness of local and state response assets and planning for communities surrounding the 65 commercial nuclear power plants in the continental United States.  
- Advises government leadership and coordinating agencies during a radiological event.  
- Oversees the health and safety preparedness of citizens living around commercial nuclear power plants to ensure citizens would be adequately protected in the event of a nuclear power plant (NPP) accident.  
- Provides a post-disaster event technical review (Disaster Initiated Review) of preparedness as a requirement for an NPP restart or continued operation.  
- Informs and educates the public about radiological emergency preparedness.  
- Provides subject matter expertise on radiation during a radiological incident to the White House and coordinating agencies.  
| Office of Infrastructure Protection |  
- Provides overall coordination of the Nation’s Protection mission area.  
- Oversees the management and maintenance of the National Infrastructure Protection Plan.  
- Manages the National Infrastructure Coordinating Center, the National Asset Data Base, the National Infrastructure Simulation and Analysis Center, and the Homeland Infrastructure Threat Reporting and Analysis Center.  
- Manages a nationwide organization of Protective Security Advisors.  
- Trains and deploys Infrastructure Liaisons and Advisors to support incident management activities. (See the Critical Infrastructure Support Annex for further detail.)  
- Develops and maintains a critical infrastructure list of energy facilities.  
- Identifies and publicizes threats to specific energy facilities.  
- Coordinates with DOE and the private sector to conduct vulnerability assessments on energy infrastructure associated with terrorism and coordinates the implementation of protective measures.  
- Through the Infrastructure Liaison, provides situational awareness and prioritized recommendations concerning the stabilization and reestablishment of the associated critical infrastructure sectors supported by this ESF.  
| Office of Emergency Communications |  
- Through ESF #2, assists DOE in its efforts to aid the energy industry in providing new services or to reestablish existing services that are assigned Telecommunications Service Priority (TSP) reestablishment priorities.  
- Assesses damage to telecommunications identified by DOE as essential for energy system reestablishment (electrical service priorities).  
- **Science and Technology Directorate:** Provides coordination of Federal science and technology resources. |
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| **Department of the Interior**     | **Bureau of Land Management**  
• Provides information on energy production and supply on Federal lands.  
• Assesses damage to energy-related infrastructure.  
• Provides engineering and technical support as necessary.  
• Develops and maintains information on critical energy-related infrastructure on Federal and tribal lands.  
**Bureau of Reclamation**  
• Provides technical assistance for the assessment of hydroelectric facilities and flood control actions as they affect energy production.  
• Uses Bureau of Reclamation personnel to assist in the repair of damaged hydropower generation facilities.  
• Modifies operations at Bureau of Reclamation facilities to increase electrical generation to supplement losses in areas affected by an incident.  
• Uses hydroelectric plant internal restart capabilities to assist in reestablishing the power system if blackouts occur.  
**Bureau of Ocean Energy Management, Regulation and Enforcement**  
• For Outer Continental Shelf (OCS) facilities, provides energy production and well reserve information.  
• Assesses energy production damage and projected repair schedules for offshore facilities.  
• Assists operators in minimizing the disruption of energy production by expediting review and approval of repair procedures for damaged facilities and/or in the prompt review and approval of proposals to resume production through the temporary rerouting of oil and gas production until permanent system(s) repair can be affected.  
• Provides engineering and technical support as necessary.  
• Assists the U.S. Coast Guard in the development of critical asset list of OCS oil and gas facilities.  
• Monitors and updates critical asset list of OCS oil and gas facilities. |
| **Department of Labor**            | **Occupational Safety and Health Administration:** Implements processes identified in the Worker Safety and Health Support Annex to provide technical assistance during the reestablishment of the Nation’s energy systems. |
| **Department of State**            | • Coordinates with foreign nations and international organizations for assistance and information regarding energy supply and system damage.  
• Assists in implementation of emergency-related international energy agreements. |
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<td><strong>Department of Transportation</strong></td>
<td>Provides transportation infrastructure situational awareness and planning information to local, state, tribal, territorial, insular area, and Federal planners and response organizations through ESF #1.</td>
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<td><strong>Office of Pipeline Safety (OPS)</strong></td>
<td>• Serves as the Federal safety authority for the Nation’s natural gas and hazardous liquid pipelines and liquefied natural gas facilities.</td>
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<td>• Ensures the safe, reliable, and environmentally sound operation of the Nation’s pipeline transportation system.</td>
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<td>• In coordination with DOE’s Office of Electricity Delivery and Energy Reliability, coordinates activities and shares information needed to ensure that the sectors of the energy infrastructure subject to each agency’s jurisdiction or oversight can efficiently and effectively coordinate and integrate energy assurance activities.</td>
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<tr>
<td><strong>Office of Hazardous Materials Safety:</strong></td>
<td>Assists local, state, tribal, territorial, and insular area authorities with requests for special permits and approvals relating to the movement of hazardous materials in support of the Nation’s energy demands.</td>
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<td><strong>Federal Motor Carrier Safety Administration:</strong></td>
<td>May waive motor carrier safety regulations, such as Hours of Service Waivers, to meet emergency energy supply delivery requirements.</td>
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<td><strong>Maritime Administration:</strong></td>
<td>Acts as the center for information on the location, capacity, and availability of U.S. flag vessels suitable for the movement of energy supplies, including petroleum products and liquefied natural gas. Pursuant to a memorandum of agreement, coordinates with DOE and Customs and Border Protection on whether national defense considerations warrant waiver of the U.S. cabotage law for the movement of energy supplies.</td>
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<tr>
<td><strong>Environmental Protection Agency (EPA)</strong></td>
<td>• Responds to requests from local and state officials for EPA to exercise enforcement discretion to waive environmental requirements for motor vehicle fuel in order to address supply shortages, normally in the context of natural disasters or significant disruptions in the fuel production or distribution systems.</td>
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<td>• Coordinates the collection of motor vehicle fuel supply information necessary to evaluate an enforcement discretion request.</td>
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<td>• Assists in identifying critical water and wastewater systems requiring priority power reestablishment.</td>
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<td><strong>Nuclear Regulatory Commission</strong></td>
<td>• Regulates the Nation’s civilian use of nuclear fuels and materials to include commercial nuclear power plants.</td>
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<td>• Provides information and technical assessment regarding nuclear power plants.</td>
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<td><strong>Tennessee Valley Authority</strong></td>
<td>• Assesses supply, system damage, and repair requirements within the Tennessee Valley Authority.</td>
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<td>• Supplies surplus power as required to the power grid.</td>
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<td>• Supplies critical replacement parts and equipment as requested.</td>
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<td>• Supplies technical expertise as requested.</td>
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