Emergency Support Function #12 – Energy Annex

ESF Coordinator:

Primary Agency:

Support Agencies:

Department of Energy

Department of Energy

Department of Agriculture Department of Commerce

Department of Defense

Department of Homeland Security

Department of the Interior

Department of Justice

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 provides support to the Department of Homeland Security (DHS) by assisting local, state, tribal, territorial, and Federal government entities, nongovernmental organizations (NGO), and the private sector by coordinating government capabilities, services, technical assistance, and engineering expertise during disasters and incidents that require a coordinated Federal response.

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

Scope

Provides technical expertise to energy asset owners and operators, other Federal agencies, and local, state, tribal, and territorial 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 state, regional, and national impact.

Assists government and private sector stakeholders in overcoming inherent challenges associated with restoration of the energy system.

Provides information concerning the status of energy restoration efforts to include geographic data, projected schedules, restoration 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.

Local, State, Tribal, and Territorial Governments

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

Assists local, state, tribal, and territorial governments with requests for energy-related emergency response actions as required to meet the Nation's energy demands. Through DOE and the Energy Sector-Specific Agency, ESF #12 works to identify interdependencies and cascading impacts to other jurisdictions and critical sectors.

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

Energy Sector/Nongovernmental Organizations

Facility owners and operators are responsible for the stabilization and restoration of normal operations at energy facilities.

ESF #12 assists private sector energy asset owners and operators with the restoration of infrastructure-related services after an incident occurs.

As applicable, assists energy sector owners and operators with stabilization and restoration of normal operations at energy facilities.

For disasters and incidents that require a Federal coordinated response, ESF #12 will serve as the Federal point of contact with the energy industry for Federal government coordination, 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 restoration 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, the coordinators participate in exercises, coordinate with local, state, tribal, and territorial governments and organizations, and develop expertise pertaining to regional issues and infrastructure.

Upon activation by DHS/FEMA, ESF #12 response teams are deployed as needed to affected area(s) to assist in response and restoration efforts. ESF #12 representatives deploy to the National Response Coordination Center (NRCC), Regional Response Coordination Centers (RRCC), Joint Field Offices (JFO), Interim Operating Facilities (IOF), and Incident Management Assistance Teams (IMAT). 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 National Response Framework (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, and Public and Private Services and Resources core capabilities.

ESF Role Alignment with 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 following core capabilities: Planning, Operational Coordination, and Public Information and Warning.

Core Capability	ESF #12 – Energy
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 restore energy systems.
	 In coordination with ESF #7, 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.
	 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.
	 Consults with energy asset owners and operators and the Energy Sector-Specific Agency to advise local, state, tribal, territorial, and Federal authorities on priorities for energy system restoration, assistance, and supply during response and recovery operations.
Logistics and Supply Chain Management	Provides subject matter expertise to the private sector, as requested, to assist in restoration 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
Situational Assessment	Works with the DHS/FEMA Regions; the private sector; and local, state, tribal, and territorial 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.
	Coordinates with DOE to:
	 Serves as a source for reporting 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 some necessary 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 point following a 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

Primary Agency	Functions
Department of Energy (DOE)	By legislative or presidential mandate, the Secretary of Energy's responsibilities include but are not limited to:
	 Monitoring, collecting, assembling, evaluating, and analyzing energy information and exercising all information gathering and reporting authorities provided in the DOE Organization Act, Federal Energy Administration Act of 1974, and the Energy Supply and Environmental Coordination Act of 1974.
	 Providing information, in cooperation with local, state, tribal, territorial, and Federal governments and energy industry officials, on energy supply and demand conditions, as well as the requirements for and the availability of materials and services critical to energy supply systems (e.g., outages, restoration status, energy infrastructure status).
	• Executes 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.
	 Authorizes 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.
	Executes responsibilities as required by the Defense Production Act of 1950, as amended.
	Establishes and operates the Strategic Petroleum Reserve, the Northeast Home Heating Oil Reserve, and the Refined Petroleum Product Reserve; and orders the drawdown and sale from any at the direction of the President, and exercises other authorities as specified in the Energy Policy and Conservation Act.

Primary Agency	Functions
DOE (continued)	Conducts national security emergency preparedness planning, including capabilities development; administering operational programs for all energy resources; and conducting energy emergency exercises with the energy industry, Federal partners, and local, state, tribal territorial governments.
	Performs due diligence in coordination with other Federal departments and agencies pertaining to the implementation of emergency waivers.
	 Analyzes and models the potential impacts to the electric power, oil, natural gas, and coal infrastructures; analyzes market impacts to the economy; and determines the effect a disruption has on other critical infrastructure.
	Assists state and local governments in the preparation of Energy Assurance Plans to improve the reliability and resiliency of the Nation's energy systems.
	 Participates in post-incident hazard mitigation studies to reduce the adverse effects of future disasters; and leads and participates in various best practices and lessons learned forums to ensure future disruptions are addressed in the most efficient manner possible.
	 Undertakes all energy-related prevention, protection, mitigation, response, and recovery activities for those parts of the Nation's energy infrastructure owned and/or controlled by DOE.
	Through the Power Marketing Administrations (PMAs), assists with the development of a resource deployment process during Stafford Act and Non-Stafford Act events in which available DOE/PMA resources may be utilized; and assists with the development of a Federal resource integration strategy to augment local, state, tribal, territorial and non-government electricity restoration activities and resources during major disasters.
	Provides guidance through the PMAs on the maintenance and modernization of systems and infrastructure to increase the reliability, efficiency, and use of the electricity infrastructure.
	Assists with the development of a DOE/PMA Energy Advance Strike Team to support restoration efforts during energy emergencies; and actively participates in workshops, conferences, training, and planning forums to develop and identify processes, procedures, tactics, resources, and technologies to enhance DOE's preparedness activities for disasters and other related energy events.
	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.
	Conducts and coordinates environmental radiological monitoring through DOE/NNSA and in consultation with applicable local, state, tribal, territorial, and/or Federal agencies, including the activation and operation of the Federal Radiological Monitoring and Assessment Center.

Primary Agency	Functions
DOE (continued)	As the Energy Sector-Specific Agency, the responsibilities granted to DOE include but are not limited to:
	Identifies and prioritizes critical energy infrastructure.
	 Leads coordination and information sharing efforts with the energy private sector and with local, state, tribal, and territorial entities.
	 Serves 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.
	Leads or supports incident response activities pertaining to the energy critical infrastructure sector consistent with statutory authorities and other appropriate directives.
	Coordinates and shares 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.

Support Agency	Functions
U.S. Department of Agriculture (USDA)	 Rural Development (RD) Provides technical support and access to both damage assessments and restoration efforts for electric power generation, transmission, and distribution in RD Utilities Program-financed systems. Gathers and communicates information, as appropriate, from RD Utilities
	 Program-financed systems to assess impacts and needs. Provides information (e.g., 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. Multifamily Housing Identifies owners of available apartments in Federally-funded, multifamily housing to provide shelter to emergency response personnel in the
	affected area.
Department of Commerce (DOC)	 National Oceanic and Atmospheric Administration (NOAA) 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. Provides public dissemination of critical event information over the NOAA All-Hazards Weather Radio System, NOAA Weather Wire Service, and
	Emergency Managers Information Network.

Support Agency	Functions
Department of	Defense Logistics Agency – Energy
Defense (DOD)	Establishes a process in coordination with DOE for accessing product when needed using available transportation assets.
	Establishes a process in coordination with DOE to replenish fuel used to support disaster relief operations.
	Identifies a reporting method that allows timely system analysis that leverages information between each agency (e.g. HISM, BP COP, etc.) to perform critical node analysis to identify locations within the affected areas.
	Establishes a Liaison Officer (LNO) arrangement with DOE who will be activated when appropriate. The LNO will coordinate with DOE and serve as a liaison between DOE and DOD during disaster relief operations.
	Provides and receives training, as required, between DOE and DLA Energy personnel specific to the emergency relief efforts associated with DOE operations.
	Participates in DLA/DOE-planned training and exercises to assess the level of readiness in advance of an actual disaster.
	 Addresses waivers required for fuel use/management during disaster relief, such as the Jones Act (i.e., DHS authority) and the use of summer versus winter fuel mix versus reformulated gasoline as required (i.e., EPA authority).
	Encourages professional exchanges, collaboration, and formal liaison relationships between all DOE and DLA Energy components, including but not limited to, headquarters, operations centers, and military installations.
	United States Army Corps of Engineers
	Coordinates Emergency Power Team missions with power system stabilization and restoration activities to establish priorities for emergency generator installation.
	Assists in restoring the energy infrastructure when requested and upon approval by the Secretary of Defense.

Support Agency	Functions
Department of Homeland Security (DHS)	Federal Emergency Management Agency (FEMA)
	 Provides oversight and evaluation for the emergency preparedness of state and local 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 (i.e., 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 communicates threats to specific energy facilities.
	Coordinates with DOE and the private sector to conduct vulnerability assessments of energy infrastructure associated with terrorism; and coordinates the implementation of protective measures.
	Coordinates with DOE to augment and align Federal Government communication and outreach to the energy industry during an incident.
	Through the Infrastructure Liaison, provides situational awareness and prioritized recommendations concerning the recovery and restoration of the associated critical infrastructure sectors supported by this ESF.
	Office of Emergency Communications
	 Coordinates with ESF #2 – Communications to assist DOE in efforts to aid the energy industry in providing new services or to restore existing services that are assigned Telecommunications Service Priority (TSP) restoration priorities.
	Assesses damage to telecommunications identified by DOE as essential for energy system restoration (e.g., electrical service priorities).

Support Agency	Functions
DHS (continued)	Science and Technology Directorate
	Provides coordination of Federal science and technology resources.
	United States Coast Guard (USCG)
	Through the Marine Environmental Protection program, develops and enforces regulations to stop unauthorized ocean dumping and prevent oil and chemical spills.
	 Investigates maritime accidents, merchant vessels, offshore drilling units, and marine facilities.
	 Counters potential hazards and threats to America's coasts, ports, and inland waterways through numerous port security, harbor defense, and coastal warfare operations and exercises.
	United States – Computer Emergency Readiness Team (US-CERT)
	• Leads efforts to improve the nation's cybersecurity posture; coordinates cyber information sharing; and proactively manages National cyber risks.
	Shares and coordinates vulnerability information and threat analysis through information products and alerts.
	Industrial Control System – Cyber Emergency Response Team (ICS-CERT)
	 Reduces risks within and across all critical infrastructure sectors by partnering with law enforcement agencies and the intelligence community; and coordinates efforts among local, state, tribal, territorial, and Federal governments as well as control systems owners, operators, and vendors.
	Collaborates with international and private sector Computer Emergency Response Teams to share control systems-related security incidents and mitigation measures.
	Provides focused operational capabilities for defense of control systems environments against emerging cyber threats.
Department of the	Bureau of Land Management
Interior (DOI)	 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 restoring the power system if blackouts occur.

Support Agency	Functions
DOI (continued)	Bureau of Ocean Energy Management, Regulation and Enforcement
	 Provides energy production and well reserve information for Outer Continental Shelf (OCS) facilities.
	 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 USCG 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 Justice (DOJ)	Federal Bureau of Investigation National Cyber Investigative Joint Task Force (NCIJTF)
	 Serves as the focal point for all government agencies to coordinate, integrate, and share information related to all domestic cyber threat investigations.
Department of	Occupational Safety and Health Administration
Labor (DOL)	 Implements processes identified in the Worker Safety and Health Support Annex to provide technical assistance during the restoration of the Nation's energy systems.
Department of State (DOS)	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.
Department of Transportation (DOT)	 Provides transportation infrastructure situational awareness and planning information to local, state, tribal, territorial, and Federal planners and response organizations through ESF #1 - Transportation.
	In coordination with DOE's Office of Electricity Delivery and Energy Reliability, coordinates activities and shares information needed to ensure that the energy infrastructure sectors subject to each agency's jurisdiction or oversight can efficiently and effectively coordinate and integrate energy assurance activities.
	Office of Pipeline Safety (OPS)
	 Serves as the Federal safety authority for the Nation's natural gas and hazardous liquid pipelines and liquefied natural gas facilities.
	 Ensures the safe, reliable, and environmentally sound operation of the Nation's pipeline transportation system.
	Office of Hazardous Materials Safety
	 Assists local, state, tribal, and territorial authorities with requests for special permits and approvals relating to the movement of hazardous materials in support of the Nation's energy demands.

Support Agency	Functions
DOT (continued)	Federal Motor Carrier Safety Administration Waives motor carrier safety regulations, such as Hours of Service Waivers, to meet emergency energy supply delivery requirements.
	Maritime Administration
	 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.
Environmental Protection Agency (EPA)	Responds to requests from state and local officials for EPA to exercise enforcement discretion to waive environmental requirements for motor vehicle fuel in order to address supply shortages associated with natural disasters or significant disruptions in the fuel production or distribution systems.
	Coordinates the collection of motor vehicle fuel supply information necessary to evaluate an enforcement discretion request.
	 Assists in identifying critical water and wastewater systems requiring priority power restoration.
Nuclear Regulatory	Regulates the Nation's civilian use of nuclear fuels and materials, including commercial nuclear power plants.
Commission (NRC)	Provides information and technical assessment regarding nuclear power plants.
Tennessee Valley Authority (TVA)	Assesses supply, system damage, and repair requirements within the Tennessee Valley Authority.
	Supplies surplus power to the power grid as required.
	Supplies critical replacement parts and equipment as requested.
	Supplies technical expertise as requested.