Emergency Support Function (ESF) #12

Energy & Utilities

Primary Agency

Albuquerque Bernalillo County Water Utility Authority
### City of Albuquerque, New Mexico

**Emergency Support Function (ESF) #12**

**ENERGY & UTILITIES**

#### Purpose:
1. To respond to and recover from shortages/disruptions in the supply and delivery of electricity, potable water, natural gas, and other forms of energy and fuels.

#### Primary:
- Albuquerque Bernalillo County Water Utility Authority
- Albuquerque Environmental Health Department
- Albuquerque Police Department
- Utility Companies

#### Support:
- Staff ESF #12 Energy and Utilities within the City of Albuquerque Emergency Operations Center (EOC).
- Ensure operation of dispatch and reporting systems.

#### Likely Tasks:
- Determine present and future need for energy resources.
- Obtain, coordinate energy resources as requested by field incident commanders.
- Establish contact and coordinate with other utilities.
- Recommend priorities for utility restoration.
- Coordinate the provision of energy materials, supplies, and personnel.

#### Likely Tasks Continued:
- Determine condition, status of electricity, potable water, natural gas, and other forms of energy and fuels.
- Determine present and future need for resources to support:
  - Search and rescue.
  - Heavy rescue.
  - Debris clearance
  - Logistical support for field operations
- Establish contact and coordinate with other utilities.
- Recommend priorities for utility restoration.
- Coordinate the provision of energy materials, supplies, and personnel.

#### State of New Mexico

#### Primary:
- Energy, Minerals and Natural Resources Department

#### Support:
- Pipeline Safety Bureau, Transportation Division
- Bureau of Geology and Mineral Resources
- Environment Department
- Regulation and Licensing Department

#### Likely Actions:
- Energy infrastructure assessment, repair, and restoration.
- Energy industry utilities coordination.
- Energy forecast.

#### Federal Government

#### Primary:
- Department of Energy

#### Support:
- 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

#### Likely Actions:
- Assesses impacts.
- Maintains lists of energy-centric critical assets and infrastructures, and continuously monitors those resources to identify and correct vulnerabilities to energy facilities.

#### Likely Actions Continued:
- Focal point for receipt of information on actual or potential damage to energy supply and distribution systems and requirements for system design and operations, and on procedures for preparedness, prevention, recovery, and restoration.
- Assist with requests for emergency response actions as they pertain to the Nation’s energy supply.
- Assist with locating fuel for transportation, communications, emergency operations, and national defense.
- Recommend actions to conserve fuel and electric power.
- Provide energy supply information and guidance on the conservation and efficient use of energy.
- Advise on priorities for energy restoration, assistance, and supply.
EMERGENCY SUPPORT FUNCTION #12
ENERGY & UTILITIES

Primary Agency: Albuquerque Bernalillo County Water Utility Authority

Primary Coordinator: Albuquerque Bernalillo County Water Utility Authority Facility Plant Advisor

Support Organizations:
- Albuquerque Environmental Health Department
- Albuquerque Police Department
- Utility Companies

I. Introduction.

A. PURPOSE.

Emergency Support Function (ESF) #12: Energy and Utilities provides guidance on local assistance and resources to enable restoration of water systems and energy utilities in as soon as possible following a large-scale City of Albuquerque (CABQ) event. The purpose of this function is to identify energy systems and utility shortfalls, assist water system and utility providers with requests for emergency response assistance, and coordinate private and public sector response efforts to ensure timely restoration of water systems and utilities following a large-scale disaster or event.

B. SCOPE.

1. ESF #12 Energy and Utilities supports emergency response operations through the facilitation of assessment and restoration of water and other utility infrastructure systems within CABQ. This annex details the procedures, responsibilities, and concept of operations during a potential, imminent, or declared emergency.

2. The terms energy and utilities refers to and encompasses the production, transportation, generation, transmission, storage, distribution, and maintenance of all private and public sector systems to supply energy, fuels, communication, and water to the City.

   • “Energy” refers to the electricity, natural gas, and petroleum products transmitted through utility systems.
• “Utilities” refers to electricity, drinking water, waste water, and solid waste systems.

C. SITUATION.

1. A major or catastrophic event will severely damage and/or destroy power lines, telephone equipment, drainage systems, water and sewer lines, and gas mains. Emergency equipment in the affected areas may be inaccessible and / or damaged. Restoration of these services is essential and must begin immediately.

2. Emergencies may cause shortages in energy supplies or public utility services by disrupting transmission or fuel supply levels, or increasing energy use.

3. Public utility emergencies can include acute shortages caused by power outages and water, and wastewater flow disruptions and chronic shortages caused by panic buying of fuels and emergency stockpiling actions.

4. Fuel shortages can be caused by imbalances in supply and distribution.

5. A shortage of energy in one form can cause shortages in other sources.

6. Private sector organizations controlling critical infrastructure, key resources, systems, and networks providing essential functions and services play a key role before, during, and after an incident.

D. POLICIES.

1. During a declared emergency and/or disaster, the Mayor may establish energy allocation, use, and restoration priorities for the City.

2. During a declared emergency and/or disaster, the Mayor may establish and order energy conservation measures for the City.

II. Concept Of Operations.

A. GENERAL.

1. The ESF #12 Energy and Utilities Annex will be utilized by Albuquerque Bernalillo County Water Utility Authority (ABCWUA) and all supporting agencies during an event. Procedures pertaining to this function do not nullify existing ABCWUA functions as they operate within the Incident Command System (ICS).
2. This Concept of Operations will outline the following elements of the water and utilities function:

- Infrastructure Assessment, Repair, and Restoration.
- Energy Industry Coordination.
- Information Flow.

3. Infrastructure Assessment, Repair, and Restoration Primary Roles.

a. Infrastructure assessment, repair, and restoration includes repairing or replacing temporary and permanent infrastructures, as well as stabilizing or resuming operation of potable water, wastewater, oil/fuel pipelines, natural gas, electric, telecommunications, Internet, and cable services. During an event requiring support to the utilities infrastructure, ESF #12 may be activated in concert with other ESFs that have primary responsibility over specific infrastructure resources. As such, ESF #12 may coordinate with the following emergency support functional areas:

- ESF #1: Transportation.
- ESF #2: Communications.
- ESF #3: Public Works and Engineering.

4. Energy Industry Coordination

- Energy industry coordination requires the maximum use of resources, aids emergency response, implements recovery operations, and restores water and utilities to the affected area to pre-event conditions. During a disaster, the ESF #12 is the primary point of contact with the Energy and Utilities industry for information sharing and handling emergency requests for assistance from private and public sector owners and operators. Facility owners are responsible for the actual restoration of normal operations at water and energy utilities facilities. Energy facilities will provide technical expertise, and supporting agencies will assist them with energy restoration efforts.

- The types of New Mexico water system and utility providers are listed in Table 2-1 on the following page.
### Types Of Water System And Utility Facilities

<table>
<thead>
<tr>
<th><strong>Water/ Wastewater Utility</strong></th>
<th>• Water Authority has the power to “set policy and regulate, supervise and administer the water and wastewater utility.</th>
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</thead>
<tbody>
<tr>
<td><strong>Electric</strong></td>
<td>• PNM is an investor-owned energy holding company regulated by the New Mexico Public Regulation Commission.</td>
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<tr>
<td><strong>Natural Gas</strong></td>
<td>• The New Mexico Gas Company is a TECO energy company regulated by the New Mexico Public Regulation Commission.</td>
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<tr>
<td><strong>Petroleum Products</strong></td>
<td>• Liquid propane gas and crude oil pipeline vendors.</td>
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### B. RESPONSE ORGANIZATION & STRUCTURE.

1. **Organizational Chart**

   • ESF #12 is organized in accordance with NIMS, and the Operations Section, and is positioned within the Infrastructure Services Branch during a EOC activation, each ESF under Infrastructure Services Branch will be headed by a CABQ representative carrying out their ESF role.
C. PRIMARY DEPARTMENT RESPONSIBILITIES/TASKS BY PHASE.

<table>
<thead>
<tr>
<th>PRIMARY DEPARTMENT RESPONSIBILITIES/TASKS BY PHASE</th>
<th>ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY</th>
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<tbody>
<tr>
<td>Pre-Emergency</td>
<td>Primary and support departments will collaborate with the Office of Emergency Management to:</td>
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<tr>
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<td>• Maintain this Emergency Support Function (ESF).</td>
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<td>• Identify local energy systems and providers.</td>
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<td></td>
<td>• Establish, maintain resource inventories.</td>
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<td></td>
<td>• Develop database of critical facilities and whether or not they have emergency or standby power supplies.</td>
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<td>• Develop database of existing critical facility generators, noting type of fuel, quantity on hand, and generator load.</td>
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<td></td>
<td>• Develop database listing of reserve generators and develop procedures for acquiring and deploying same with personnel to critical facilities during power failures.</td>
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<td>• Develop listing of priorities with local energy providers for use in emergency restoration services.</td>
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<td></td>
<td>• Develop procedures for assessing damages to local utility distribution systems.</td>
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<td>• Encourage mitigation practices at utility distribution facilities to reduce the</td>
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</table>
# PRIMARY DEPARTMENT RESPONSIBILITIES/TASKS BY PHASE

## ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

- Potential effects of hazards on the utility’s ability to deliver energy to local users.
  - Participate in trainings and exercises.
  - Develop emergency action checklists.
  - Participate in drills, exercises.
  - Monitor public utility related issues to prevent a surprise public utility shortage.
  - Develop an operations plan for responding to public utilities shortages.

| Emergency Operations Center (EOC) |  
|-----------------------------------|---
| • Staff ESF #12 position in the EOC.  
| • Determine condition, status of City energy and utility systems.  
|   - Initiate damage assessment/recovery activities for local power, gas, water/wastewater distribution systems.  
|   - Determine possible affected areas, structures and resources needed for energy restoration.  
| • Establish contact and coordinate with appropriate utility entity(ies).  
| • Request that appropriate utility entity(ies) send a representative to CABQ EOC or provide liaison contact information.  
| • Coordinate with support departments/agencies, to establish priorities and develop strategies for the initial response and restoration of utilities.  
| • Coordinate the provision of energy materials, supplies, and personnel for the support of emergency activities being conducted by the CABQ EOC.  
| • Communicate with and monitor City and utility response actions.  
| • Maintain communication with utility representatives to determine emergency response and recovery needs.  
| • Contact electric, gas, telephone, and water utilities serving the emergency area to obtain information about damage and/or assistance needed in their areas of operation.  
| • Determine city’s generating capacity, expected peak loads; expected duration of emergency event, explanation of utilities’ actions; and recommendations of local agency actions in support of the utilities.  
| • Provide assistance to local providers in locating and acquiring equipment necessary to restore local electrical and gas capabilities, and to restore the water/wastewater systems.  
|   - Coordinate city government equipment and personnel as required to aid in this restoration.  
| • Coordinate needed resources to repair damaged energy systems. Such
### PRIMARY DEPARTMENT RESPONSIBILITIES/TASKS BY PHASE

#### ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

| resources could include transportation to speed system repair as well as logistical support for utility field operations   |
| • Work with local and state emergency organizations to establish priorities to repair damage to such systems. |
| • Monitor the procedures followed by individual utilities during energy generating capacity shortages to ensure City–wide action and communication. |
| • Determine present and future need for energy and utility resources. |
|   - Coordinate with ESF #6 Mass Care to identify emergency shelter power generation status/needs. |
| • Coordinate with support agencies and other ESF’s with assistance in providing resources for emergency power generation. |
| • Receive and assess requests for aid from City, state and federal agencies, energy offices, energy suppliers, and distributors. |
| • Obtain, coordinate energy and utilities resources as requested by incident commanders. |
| • Sources for resources can include: |
|   - State and federal agencies. |
|   - Private industry. |
| • Coordinate delivery of energy and utilities resources to affected areas. |
| • Update the Public Information Officer with accurate assessments of energy supply, demand and requirements to repair or restore energy systems. |
| • Inform Public Information Officer about generating capacity shortfalls. |
| • Maintain accurate logs and other records of emergency responses. |
| • Draft recommendations for after action reviews and other reports as appropriate. |
| • Maintain records of cost and expenditures to accomplish this ESF and forward them to the EOC Finance/ Administration Section Chief |

#### Recovery Actions

| Coordinate the provision for resources to assist local, state and federal agencies in restoring emergency power and fuel needs. |
| Review recovery actions and develop strategies for meeting local energy needs. |
| Continue to monitor local, state, and utility actions. |
| Coordinate restoring of utilities to all City buildings. |
| Participate in after–action briefings and develop after–action reviews. |
| Return organization and personnel to a state of operational preparedness. |

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**D. SUPPORT ORGANIZATION’S RESPONSIBILITIES AND TASKS.**
## SUPPORT ORGANIZATIONS’ RESPONSIBILITIES AND TASKS

<table>
<thead>
<tr>
<th>Organization</th>
<th>Responsibilities and Tasks</th>
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</table>
| **Albuquerque Environmental Health Department** | • Provide emergency public information and protective actions related to public health issues.  
• Coordinate the assessment and certification water portability.  
• Record costs and expenditures and forward them to this ESF’s Group Supervisor.  |
| **Albuquerque Police Department** | • Provide security of fuel storage facilities, retail stores and distribution facilities/vehicles                                                                                                                                 |
| **Utility Companies**             | • Provide an assessment report on the status of utility infrastructure systems and the impact of system outages.  
• Provide personnel, equipment, supplies, and other resources needed to restore power systems critical to saving lives, protecting health, safety, and property.  
• Provide an assessment report on the status of natural gas systems and the impact of system outages.  
• Provide personnel, equipment, supplies, and other resources needed to restore natural gas systems critical to saving lives, protecting health, safety, and property.  
• Upon request and when possible, provide an agency representative to the Emergency Operations Center.  
• Provide the Group Supervisor with timely and frequent updates as to the status of the power and natural gas systems in the City.  
• Maintain records of costs and expenditures to accomplish the Energy function and forward them to the Energy Group Supervisor. |
E. LIFE SAFETY-DAMAGE ASSESSMENT.

An initial EOC priority is to gather as much information about the extent of damage as soon as possible. The primary source for this will be the field response units providing information to the 911 communications center. As soon as possible, Energy and Utilities ESF designated personnel will report the need for rescue, the number injured and fatalities, damage to buildings, public facilities such as roads and bridges, and utilities. These reports will be compiled and immediately communicated to the EOC duty officer or directly to the EOC if activated.

F. EVACUATION.

1. Energy and Utilities officials will implement evacuation warnings due to unsafe buildings, fire danger, hazardous materials, or any other reason identified by competent authority. Officials will take all lawful actions necessary to save lives and property.

2. Evacuation activities will be coordinated with the EOC to ensure the evacuees are moved to an appropriate shelter, and the needs of special populations and individuals are provided for.

G. FIELD OPERATIONS.

1. Emergency actions may include:

   • Once notified of an emergency situation, sending response teams/personnel, equipment, and vehicles to the emergency site, staging areas, or other location, as appropriate.
   • Identifying an Incident Commander and establishing an Incident Command Post.
   • Assign appropriate personnel to staff.
   • Potentially performing IC duties at the emergency scene.
   • When requested, send a senior representative to the EOC, when the EOC has been activated during an emergency.
   • Notifying the EOC of the situation if the original notification did not come from the EOC.
   • Assisting, as appropriate, in the evacuation of people at risk in the immediate area in and around the emergency scene.
   • Alerting all emergency response organizations of the dangers associated with technological hazards and fire during emergency operations.

2. A strict policy of limited access to the emergency area will be rigidly enforced to ensure the safety and well-being of the community. All movement into and out of the secured area(s) will be requested and approved through the established command post(s).
3. Security will be provided for essential facilities if required, and law enforcement will assist the Energy and Utilities personnel in restricting access to unsafe buildings or areas.

   a. Energy and Utilities personnel responding to a potentially hazardous material environment will ensure that they have a full understanding of the Incident Commander’s assessment of the situation and that they take full and proper precautions to protect themselves.
   b. Only personnel having proper training should be deployed to a hazardous material incident.

III. Response Actions.

A. NOTIFICATION.
   1. Upon notification by Albuquerque OEM Director or designee of an incident, the primary coordinating department will notify support departments and organizations of potential need for ESF #12 response in accordance with ESF #12 procedures and checklists. Notification may occur via landline, cell phones, electronic means, and/or two-way radios.
   2. Notification will be issued through the most appropriate communications equipment for the event requirements, and will detail event information, reporting instructions, and any relevant coordination information.

B. ACTIVATION.

   Activation of ESF #12 will be determined by the OEM Duty officer, by the OEM Director, or by request of the ESF responding agency based on the needs of the incident.

C. INITIAL ACTIONS.
   1. ESF #12 departments and organizations participate in activities throughout the emergency management cycle:
      • Gather Information.
      • Verification of collected information should be confirmed after identifying corresponding utilities ‘status reports and determining the impact of the affected area.
• Secure a point of contact at each utility or infrastructure agency for situational updates.

• Confirm affected areas through reports from dispatched emergency units and utility company command centers.
  – Obtain preliminary infrastructure damage assessments.
  – Create a cursory outage/damage footprint on maps or computer software based on assessments.

D. ONGOING ACTIVITIES.

1. Coordinate and Analyze Information: Analysis includes, but is not limited to, the following:

   • Conducting an assessment of the situation based on current information.
   • Determining the impact of the event on the City of Albuquerque.
   • Identifying critical water system and utility needs in affected communities.
   • Identifying and recommending government actions necessary to assist water system and utility providers in restoring damaged systems and preventing disruptions in service.
   • Receiving and responding to information requests from municipal and non-municipal water system and utility providers.

2. Obtain Resources, Release of Public Information.

   • Request resources through the EOC, and supporting ESF #12 departments, to deploy to the field during an event.
   • Disseminate emergency information and guidance to the public, private, and government organizations. All press releases are to be coordinated through the ESF #15.
   • Initial public information includes, but not be limited to, the following:

     – Damage assessment and estimated/anticipated duration.
     – Actions the water system and utility providers are taking.
     – Actions businesses, industries, and residents should take.
     – A summary of the event.
     – Overall steps to be taken by the government and residents to return to normal operation after the event.
3. Continue to Monitor, Track, and Inform.
   - Serve as the point of contact for post-event damage reports to supply, distribution, and collection systems.
   - Coordinate with the Planning Section and provide situation updates, as necessary.

4. Notify and consult with subject matter experts from State, regional, and local authorities on priorities for water system and utility restoration processes, assistance, and supply.

5. Secure resources (e.g., fuel for transportation, natural gas services, generators, technical support, potable water, and communications) for requested emergency operations.

6. Recommend actions to jurisdictions regarding the conservation of water, utility, electricity, and natural gas resources.

7. Coordinate the collection and reporting of water and utility information to the public through ESF #15 PIO and/or Joint Information Center.

8. Resources and Assets.
   - Coordinate the deployment of resources as necessary to support emergency water system and utility restoration operations.

IV. Attachments And References.

A. ATTACHMENTS.

None.

B. REFERENCES.

None.

C. PROVISO.

1. This support annex has been prepared in accordance with the standards of the National Incident Management System and other Federal and State requirements and standards for emergency plans applicable of the plan’s preparation date.

2. The plan provides a broad planned framework for response and recovery; it is intended for use in further development for response capabilities, implementation of training and
exercises, and defining the general approach to incident response. The actual response to an incident is dependent on:

a. The specific conditions of the incident, including incident type, geographic extent, severity, timing, and duration;

b. The availability of resources for response at the time of the incident;

c. Decisions of incident command staff and political leadership;

d. Actions taken by neighboring jurisdictions, the State, and the Federal Government.

e. These and other factors may result in unforeseen circumstances, prevent the implementation of plan components, or require actions that are significantly different from those described in the plan.