

Massachusetts Emergency Support Function 12

ENERGY

Responsible Agencies

State Agencies

Primary State Agency

Massachusetts Department of Public Utilities

Supporting State Agencies

Massachusetts Department of Energy Resources

Supporting Federal Agencies

United States Department of Energy

Nuclear Regulatory Commission

Federal Emergency Management Agency

Supporting Organizations

Independent System Operators of New England (ISO New England)

Northeast Gas Association

New England Convenience Stores & Energy Marketers Association (NECSEMA)

MA Energy Marketers Association

Berkshire Gas

Blackstone Gas

Columbia Gas

Fitchburg Gas and Electric d/b/a Unitil

National Grid (Electric and Gas)

Northeast Public Power Association

NSTAR Electric d/b/a Eversource

NSTAR Gas d/b/a Eversource

Propane Gas Association of New England

Western MA Electric Company d/b/a Eversource

Entergy Corporation (Pilgrim Nuclear Power Plant, Vermont Yankee Nuclear Power Plant)

NextEra Energy Resources (Seabrook Station Nuclear Power Plant)

1.0. INTRODUCTION

1.1. Purpose

Massachusetts Emergency Support Function 12 (MAESF-12): *Energy*, provides a framework for energy coordination across state agencies and implementation of emergency procedures, policies and emergency response measures used by the Massachusetts Emergency Management Agency (MEMA), Department of Energy Resources (DOER), Department of Public Utilities (DPU), other state agencies, non-government organizations, and private utilities in responding to and recovering from fuel shortages, power outages, and capacity shortages caused by an emergency incident, major disaster, acts of war, terrorism (physical or cyber), or civil disturbance in the Commonwealth.

1.2. Scope

This annex is applicable to agencies and departments in the Commonwealth, as well as affiliated energy partners, with a role in fuel and power supply activities in response to an emergency incident or major disaster. MAESF-12 will coordinate the emergency supply and transportation of fuel and the provision of emergency power to support immediate response operations as well as the restoration of the normal supply of power. MAESF-12 will work closely with local, state, and federal agencies, energy offices, suppliers, generators, transmitters, and distributors.

The following are the objectives of MAESF-12:

- Establish a framework for state-level emergency related energy preparedness, mitigation, response, and recovery activities.
- Share information and coordinate response activities across pertinent state agencies regarding energy related requests for assistance in a manner that ensures consistency with established state policies and procedures.
- Monitor and mitigate potential effects of a disaster on critical state-level energy infrastructure before, during, and after an incident, with particular attention to problems that may threaten public safety or disrupt response activities.
- Provide situational awareness and expertise on the status of energy infrastructure and fuel supplies in Massachusetts and neighboring states.
- Assess energy system damage, energy supply, demand, and resources needed to restore such systems.
- Assist state and local agencies in obtaining fuel for transportation and emergency operations.
- Administer, as needed, statutory authorities for energy priorities and energy allocations.

- Coordinate with Federal Emergency Support Function 12 (ESF-12) and support agencies to assist energy suppliers in obtaining information, equipment, specialized labor, fuel, and transportation to repair or restore energy systems.
- Recommend local and state actions to save energy in response to an emergency incident or major disaster.
- Coordinate with local, state, and Federal agencies to provide emergency energy information, education, and conservation guidance to the public.
- Coordinate information with local, state, federal officials and energy suppliers about available energy supply recovery assistance.
- Recommend to the State Coordinating Officer (SCO) and the Federal Coordinating Officer (FCO) priorities to aid restoration of damaged energy systems.
- Process all fuel and power assistance requests from local Emergency Operations Centers (EOCs) and MAESFs received through the State Emergency Operations Center (SEOC).

1.3. Policies

MAESF-12 is an annex of the Massachusetts Comprehensive Emergency Management Plan (CEMP). As an incident requires, and at the direction of the MEMA Director, MAESF-12 will be activated to coordinate resources to support activities related to fuel and power supplies in the Commonwealth and will operate from the SEOC. MEMA and the SEOC will provide overall direction and control. As the situation develops, agencies within MAESF-12 will work collaboratively to provide coordination and support to local jurisdictions based on their agencies' or organization's unique areas of expertise, resources, and authorities, to include the following:

- The state, through the SEOC, will maintain overall direction, control, and coordination of the response and recovery efforts through coordination with all participating agencies, including any federal agencies tasked by the Federal Emergency Management Agency (FEMA).
- All agencies assigned responsibilities within MAESF-12 will develop and maintain the necessary plans, standard operating procedures, mutual aid agreements, and model contracts to successfully accomplish their tasks.
- State assistance provided to cities and towns may consist of personnel, equipment, facilities, materials and supplies, and/or subject matter expertise.
- State assistance through MAESF-12 will only be provided once a city or town has fully committed all available resources available to it, including resources available through existing mutual aid agreements and private-sector resources that the jurisdiction may have under contract.
- MAESF-12 supports, but does not supplant, local and federal plans or policies.
- Local assets will remain in the control of the respective jurisdiction.

- State assistance will be prioritized in the following manner:
 - Coordinate the supplying of fuel to emergency response organizations, critical infrastructure and key resources (local and state)¹, and in areas along evacuation routes.
 - Coordinate the supplying of technical personnel, equipment, materials, and supplies, in support of efforts by EOCs and MAESFs to repair or restore essential operating facilities and infrastructure.
 - Update emergency shelter power status and unmet needs in coordination with the American Red Cross (ARC) and MAESF-6 *Mass Care, Emergency Housing, Human Services*. Assist in providing resources for emergency power generation.
 - Provide emergency planning, data analysis, and forecasting of the energy situation and implementation of energy conservation measures.
- MAESF-12 agencies will coordinate with other state, local, and federal agencies, private utilities, industry, and through the Public Information Officer (the media) in carrying out their responsibilities.

2.0. SITUATION AND ASSUMPTIONS

2.1. Situation

MAESF-12 addresses significant disruptions, as determined by the SEOC Manager, in energy supplies for any reason, whether caused by physical or cyber disruption of energy transmission and distribution systems, unexpected operational failure of such systems, or unusual economic or international political events. Electric energy shortages may result from generation capacity shortages, transmission limitations, or fuel curtailment. Generation capacity shortfalls will likely occur during extreme weather conditions. However, they could also be the result of a higher-than-projected demand for energy during periods when generating units are normally unavailable due to scheduled maintenance or unplanned generating unit outages. Other energy shortages, such as interruptions in the supply of natural gas or other petroleum fuels for automotive transportation and other industrial uses, may result from extreme weather conditions, work stoppages, or international embargoes.

¹ For the purpose of this plan, “critical infrastructure and key resources” are defined as the assets, systems and networks, whether physical or virtual, so vital to the United States that their incapacitation or destruction would have a debilitating effect on security, national economic security, national public health or safety, or any combination thereof.

2.2. Planning Assumptions

- The impact of a major natural disaster or a technological or other man-made event affecting one or more areas of the state could result in an energy emergency when demand for electricity, fuel, or any other material related to energy production exceeds the available supply. The secondary effects of damage to energy systems in the state could render local support systems inoperable for a prolonged period.
- Dispersed and widespread damage from a disaster will hinder restoration of energy-distribution facilities, which can directly impact other critical facilities and systems such as transportation, communications, and utility systems. Failure of these systems has a direct effect on a community's ability to recover from a disaster, which is why timely restoration of energy supply systems is vital.
- Affected areas may not be readily accessible, except by air.
- Fuel hoarding will likely occur when prolonged fuel scarcities are anticipated.
- During periods of abnormal weather, or in the event of multiple unanticipated generating unit outages, there may be times when generating capacity falls short of customer demand.
- Widespread and prolonged electrical power failure may occur in the event of an emergency or major disaster. Without electric power, communications will be affected and traffic signals will not operate, causing gridlock. Public health and safety services will be impacted. Outages will impede the distribution of petroleum products to support emergency power generation.
- The restoration of normal operations at energy facilities and distribution systems is the primary responsibility of the facility/infrastructure owners. However, since the restoration of normal operations is critical to the recovery process, MAESF-12 through the SEOC may provide the appropriate supplemental state assistance and resources to facilitate restoration in a timely manner.
- Many incidents, such as power outages, are local in scope and can be addressed by local government or state agencies as part of normal day-to-day operations using resources readily available to them.
- Local governments have emergency management resources, plans, and procedures already in place.
- When an incident occurs, local governments will use their own response resources first, supplemented as needed by resources available through mutual aid or private sector contracts. Local governments will request state assistance when their ability to respond to the incident exceeds or is expected to exceed their own capacity.
- Demand on local resources in anticipation of or response to a major threat may overwhelm local energy capabilities and fuel availability.
- In a "no-notice" incident, local resources may be damaged and potentially unavailable to support local response efforts, requiring immediate state assistance.

- The state has resources and expertise that can be used to supplement local efforts. Federal assistance may be requested to support state and local efforts if an incident exceeds state and local capabilities.
- MAESF-12 responsible agencies have developed internal plans and procedures for implementation in the event of a disaster or emergency.
- MAESF-12 will communicate and coordinate with state and local support agencies, private industry, and the utilities to prioritize emergency support and energy restoration efforts.
- Coordination and direction of local efforts, including volunteer efforts will be required.
- Depending on the magnitude of the incident, resources from other states or the federal government may not be available for use in Massachusetts until as long as 72 hours after the incident occurs.

3.0. CONCEPT OF OPERATIONS

3.1. General

Upon request from MEMA, MAESF-12 agency liaisons will report to the SEOC or other appropriate designated location to coordinate resources to support the response to energy-related emergencies and requests for assistance. MEMA will notify MAESF-12 as the primary agency as a result of the needs of the incident and agency capabilities and expertise. The MAESF-12 primary agency will coordinate the efforts of other activated, responsible agencies to ensure that requests for assistance assigned to MAESF-12 are carried out in as efficient a manner as possible, with prioritization for the protection of life and property.

MAESF-12 reports to the SEOC Operations Section, with an indirect report to the Planning Section. Depending on the size, scope, and complexity of the incident, the SEOC organizational chart may be expanded, to ensure proper Span of Control is maintained. To accommodate this, the ESFs may be aligned in appropriate Branches, with similar MAESF's grouped together. In this scenario, MAESF-12 will be organized under the Infrastructure Branch, together with MAESF's 1, 2, 3, and 17.

3.2. Organization

- All personnel and activities associated with MAESF-12 will operate under the Incident Command System.
- The Department of Public Utilities (DPU) has been designated the primary agency for MAESF-12.
- MEMA is responsible for coordinating the functions of MAESF-12 and for bringing additional resources from other federal and state agencies, as needed.
 - Energy and fuel-related response activities will be provided upon mission assignment from MEMA only when local resources are deemed inadequate or potentially

inadequate, in responding to and recovering from the incident. Operations will continue at the SEOC until the SEOC returns to normal operations or as otherwise directed.

- Responsible agencies are assigned to MAESF-12 to support the restoration of energy services and resources, including fuel shortages, power outages, and capacity shortage after a major disaster or emergency. Although the composition of the responding agencies will likely change as a result of the nature of the event and planning process, it is anticipated that these agencies and the other supporting organizations will constitute the basis for providing energy related assistance.
- When electric utility operating reserves are nearly exhausted and there is an immediate possibility of curtailment or loss of firm load, or when other energy supplies (such as natural gas or automobile fuel) are disrupted, an appraisal of the situation will be made by designated authorities and personnel.
- Emergency organization personnel are mobilized to direct and coordinate relief efforts, communicate with the public and appropriate governmental agencies, and ensure restoration of normal service.

3.3. Notification

In the event of an emergency or disaster, responsible agencies will be notified by MEMA. The SEOC Manager will identify needed support for MAESF-12 and take the necessary steps to ensure that appropriate agencies are activated or placed on standby, as needed. All support agencies and organizations will be notified and expected to provide 24-hour representation as needed, in accordance with Massachusetts Executive Order 144. The agencies designated to report to the SEOC will notify their agency personnel of the impending or actual event. In addition, Chapter 164 of Massachusetts General Laws, Section 85B (e) requires investor-owned electric distribution, transmission or natural gas distribution companies to provide a representative to MEMA to support the SEOC.

3.4. Activities

Responsible agencies for MAESF-12 should conduct the following actions:

a. Prevention Actions

- Communicate and share information across agencies with energy responsibilities.
- Collaborate and coordinate on energy related reliability and security (physical and/or cyber) initiatives.
- Identify opportunities to collaborate on protection of critical energy and fuel related infrastructure and key resources in the Commonwealth
- Identify potential emergency energy issues and collaborate to develop or recommend protocols, procedures, and policies to prevent or mitigate their effects.

b. Preparedness Actions

- MEMA will convene regular meetings of MAESF-12 stakeholders and/or Emergency Support Function Team to review and update the MAESF-12 annex and standard operating procedures.
- Develop and maintain internal agency operational plans and procedures, resource directories, and emergency contact lists to support MAESF-12 activities.
- Ensure procedures are in place to access directory information and quickly notify personnel in support of this plan.
- Maintain current inventories of respective agency facilities, equipment, materials, supplies, special capabilities, and personnel throughout the state.
- Complete appropriate training and participate in exercises, as requested.
- Ensure that all responsible agencies have pre-designated staff available to support this annex and SEOC operations.
- Ensure that MAESF-12 stakeholders notify MEMA of staff changes.
- Participate in scheduled exercises and training in order to test, validate, and provide working experience for MAESF-12 liaisons on this annex and related procedures.

c. Response Actions

Pre-Impact

- Upon receiving notification to report to the SEOC in preparation of an incident, MAESF-12 agencies and organizations will complete the following actions commensurate with emergency priorities within the state and based on the availability of resources:
 - Provide appropriate representative(s) to the SEOC to support MAESF-12.
 - Maintain communications within the SEOC, obtain status reports, and keep the SEOC informed of progress of assigned tasks.
 - Notify the appropriate points of contact at each responsible agency and organization to pre-position resources and response personnel as needed.
 - Review existing plans and procedures.
 - Ensure responsible agency decision makers are kept informed of the situation.
- Coordinate information collection and summarization to verify energy damage assessment, restoration activities, capabilities, and inventories and report this information on a regular basis to the SEOC Planning Section.
- Provide situational awareness information for reports and/or statements to the SEOC Planning Section as needed.
- Coordinate with other MAESF Teams in anticipation of projected energy-related needs and coordinate appropriate response efforts.

- Identify available resources and coordinate the mobilization and pre-positioning of response resources, once it is apparent that state energy resources will be required or as requested by the SEOC Manager.
- As needed, coordinate with MAESF-15 *Public Information and External Affairs* on public messaging on assessments of energy supply, demand, and resources needed to repair or restore energy generation and distribution systems.

Initial Response

- If agency has not already done so, provide appropriate representative(s) to the SEOC to support MAESF-12.
- Designate appropriate staff to support response.
- Establish communications with appropriate agency field personnel to coordinate response efforts.
- Verify inventories of available resources and provide a summary listing to the SEOC Operations Section Chief.
- Establish and maintain communication with utility representatives and/or fuel suppliers to determine response and recovery needs.
- Provide situational awareness information for reports and/or statements to the SEOC Planning Section as needed. In addition, use information provided by the SEOC Planning Section to plan effective response actions.
- Develop and prioritize strategies to support initial response, to include the mobilization of resources and personnel.
- Ensure establishment of communications with the SEOC to coordinate the response and planning efforts for the emergency or major disaster.
- Implement pre-determined cost accounting measures for tracking overall MAESF-12 personnel, equipment, materials, and other costs incurred during emergency response actions (for potential federal reimbursement purposes).
- If not already completed, pre-position response personnel and equipment where state energy resources will likely be needed.
- Conduct an initial assessment of energy needs, and assemble and analyze energy data for forecasting future energy availability.
- Monitor the procedures followed by utilities during shortages of energy-generating capacity to ensure statewide action and communication.
- Determine the generating capacity in the Commonwealth, peak loads expected throughout the duration of the event, explanation of utilities' actions, and recommendations of state and local agency actions in support of the utilities.
- Coordinate with local governments, trade associations, industry, the media, and federal counterparts.

- Monitor procedures and activities of the petroleum industry regarding emergency fuel supplies.
- Coordinate with MEMA and the Governor's Office to obtain regulation waivers to assist in obtaining emergency supplies of petroleum and propane products.
- Coordinate with Federal Emergency Support Function counterpart as needed.

Continuing Response

- Monitor state, local, utility, and fuel oil organization response actions.
- Assess requests for aid from local, state, and Federal agencies, and energy offices, suppliers, and distributors.
- When requested, coordinate with responsible agencies to obtain needed resources to repair damaged energy systems. Coordinate with the SEOC Manager and state and local emergency organizations to establish priorities for repairing damage to energy generation and distribution systems beyond those already established between responsible agencies and local emergency organizations.
- Coordinate with MAESF-15 *Public Information and External Affairs*, to update news organizations with assessments of energy supply, demand, and resources available to repair or restore energy generation and distribution systems.
- Coordinate with ISO-New England on operating procedure action levels and any necessary public appeals for voluntary conservation.
- Keep accurate logs and records of emergency responses.
- As needed, continue to communicate and coordinate with MAESF-13 *Public Safety and Security*, for energy and utility-related traffic control needs and public safety and security.
- Coordinate with other MAESF Teams as appropriate to anticipate projected energy/fuel needs and/or coordinate appropriate response efforts.
- Provide information to the Planning Section as needed to update Situational Awareness Statements and SEOC Rosters.
- Document observations/ constructive criticism and recommendations for after-action reports and other reports as appropriate.

d. Recovery Actions

- As needed, coordinate resources to support energy-related requests for assistance during recovery.
- Provide assistance and technical expertise to MEMA damage assessment teams.
- Anticipate and prepare to coordinate and/or provide technical assistance, personnel, and resources to support ongoing restoration of utility and fuel infrastructure.

- Coordinate with support agencies to ensure financial tracking of all deployed assets and adequate cost accounting measures are being used. Generate summary reports and share with the SEOC.
- Participate in after-action reviews.

e. Mitigation Actions

- Identify potential emergency energy issues and collaborate to develop or recommend plans, protocols, procedures, and policies to prevent or mitigate their effects.
- As needed, conduct assessments of MAESF-12 capabilities to identify potential resource shortfalls.
- As needed, develop plans to mitigate identified shortfalls of resources.

4.0. RESPONSIBILITIES

4.1. MAESF-12 Primary Agency Responsibilities

- Regularly meet and coordinate with MAESF-12 supporting agencies, to:
 - Maintain a list of critical contacts, noting any changes to MEMA
 - Maintain the ESF-12 Toolkit
 - Report any unmet needs to MEMA
- Report to the SEOC, as directed, to staff the MAESF-12 work station.
- Identify and coordinate MAESF-12 staffing requirements at the SEOC.
- Maintain Situational Awareness, monitor weather conditions, and ensure a state of readiness for the ESF.
- Direct, coordinate, and integrate the overall state effort to provide resources needed for energy restoration.
- Contact electric and gas providers, fuel oil companies, and other essential components of the affected area to obtain information concerning damage and required assistance in their areas of operation.
- Monitor the actions taken by the individual utilities during generating capacity shortages and the actions taken by other utilities to ensure coordinated statewide action and communication.
- Coordinate with the Independent System Operator of New England (ISO New England) to compile the following information:
 - Electric generating capacity in the Commonwealth.
 - Expected electric peak load in the Commonwealth.

- Geographic areas and number of customers expected to be most severely affected, if available.
- Status of any major generating outages.
- Expected duration of event.
- Explanations of utilities planned actions.
- Recommendations of agency actions in support of the utilities.
- Administer statutory authorities for energy priorities.
- Implement energy emergency procedures for reducing demand when necessary.
- Allocate state-owned/ administered fuel when necessary.
- Communicate and coordinate with local, state, and federal agencies and organizations in coordinating resources to respond to any energy emergencies and work on energy restoration.
- In the event of a shortage of automobile fuel or fuels needed for other industrial purpose, the Primary Agency for MAESF-12 will coordinate with industry trade groups and associations to obtain essential fuel supplies.
- Ensure that necessary cost accounting measures are being used by all support agencies and that summary reports are generated, as needed, and shared with SEOC Command Staff.
- Coordinate with other MAESFs to obtain information related to vendors, volunteer groups, and other organizations that may be able to supplement local and state transportation resources.
- Provide regular updates on ongoing MAESF-12 operations to the SEOC Command staff.
- Coordinate with other responsible agencies to commit agency resources and prioritize needs, based on the protection of life and property.
- Develop written procedures to implement MAESF-12 responsibilities, as necessary.
- While Primary Agencies are designated in advance, this may be subject to change during an SEOC Activation, dependent on the specific circumstances and needs of the incident, and therefore the agency most appropriate to take the primary assignment.

a. Department of Public Utilities (DPU)

The Department of Public Utilities monitors the performance of utility distribution systems, restoration of utility services, pre-emergency mitigation activities such as tree pruning, and capability to respond to outages.

- Coordinate with private energy suppliers to obtain status information on a regular basis.
- Provide hourly outage information to the SEOC.
- Provide Outage and Accident Reporting (Table A) and Service Restoration Stage Reporting (Table B) information to the SEOC on a regular basis when electric utilities have declared a type 1, 2, or 3 event based on existing emergency response plan criteria.

4.2. MAESF-12 Supporting Agency Responsibilities

a. Department of Energy Resources (DOER)

The Department of Energy Resources develops and implements policies and programs aimed at ensuring the adequacy, security, diversity, and cost-effectiveness of the Commonwealth's energy supply within the context of creating a cleaner energy future.

- Provide a menu of emergency action options the state could implement to alleviate petroleum and propane supply/demand problems, including actions that help to increase available supplies, reduce demand, and allocate/ration supplies.
- Receive petroleum and/or propane industry requests for waivers to hours of service for energy industry truck drivers. Provide necessary energy information and statistics to MEMA, outlining energy shortfalls or product dislocations with DOER's recommendation on the need for the waiver, in accordance with MEMA/DOER/Public Safety agencies protocols, as necessary.
- Coordinate with other agencies and organizations, as necessary, with respect to emergency waivers.

4.3. Other Agencies

Other agencies not explicitly named in this annex may have authorities, resources, capabilities, or expertise required to support MAESF-12 activities. These agencies may be requested to support MAESF-12 activities as needed.

5.0. ADMINISTRATION AND LOGISTICS

5.1. Staffing

As required by Massachusetts Executive Order 144, all MAESF-12 responsible agencies must designate at least two personnel to act as SEOC liaisons. These liaisons should be knowledgeable about the resources and capabilities of their respective agencies and have access to the appropriate authorities for committing said resources and capabilities.

5.2. Mutual Aid

The process for requesting mutual aid from entities either within or external to Massachusetts is described in the "Mutual Aid" section of the State CEMP Base Plan.

Massachusetts electric and gas transmission and distribution utilities participate in regional and/or national mutual assistance groups. These groups aid in the rendering of assistance from inside and outside the Commonwealth during emergency incidents or major disasters.

The electric utilities are members in the North Atlantic Mutual Assistance Group (NAMAG), a collection of 21 utilities in 13 states, four Canadian provinces and one District. The NAMAG

coordinates the movement of resources within the group, as well as the procurement and distribution of resources external to the group. Additionally, the electric utilities are members in the Eastern Edison Institute (EEI), which assists in the movement of resources at the national level across multiple regional mutual assistance groups during a declared National Response Event (NRE).

The gas utilities are members in the Northeast Gas Association (NGA), a collection of 33 utilities in eight states. Among other responsibilities, the NGA coordinates the movement of resources within the group in response to an emergency incident. Additionally, the NGA coordinates with the American Gas Association (AGA), Southern Gas Association (SGA), and Canadian Gas Association (CGA) in the movement of resources across multiple regions.

Other assistance types include: Government Emergency Telecommunications Service (GETS) for wireless backup, Mutual Assistance Routing System (MARS) for call center support, and utilization of BASE Logistics as a contractor for field logistics.

5.3. Annex Review and Maintenance

This annex will be updated every two years at a minimum, in accordance with the Emergency Management Program Administrative Policy, and will ensure that appropriate stakeholder input is incorporated into updates. Additionally, the annex will be reviewed following any exercise or activation of the plan that identifies potential improvements. Revisions to this annex will supersede all previous editions and will be effective immediately.

6.0. AUTHORITIES, RESOURCES, AND REFERENCES

6.1. Authorities

See Authorities section of State CEMP Base Plan.

6.2. Resources

See Resources section of State CEMP Base Plan.

6.3. References

- Massachusetts Executive Order 144
- M.G.L. Chapter 164, Section 85B
- Massachusetts Comprehensive Emergency Management Plan
- Massachusetts Radiological Emergency Response Plan
- SEOC ESF SOP Guidance Document
- Threat Hazard Identification and Risk Assessment (THIRA)

- Hazard Identification and Risk Assessment (HIRA)
- State Hazard Mitigation Plan