

EMERGENCY SUPPORT FUNCTION #12
Energy

ANNEX COORDINATOR / PRIMARY AGENCY:

Thurston County Emergency Management (TCEM)

SUPPORT AGENCIES:

BNSF Railways
Bonneville Power Administration
BP-Olympic Pipeline
Federal Emergency Management Agency
Puget Sound & Pacific Railroad
Puget Sound Energy
Tacoma Rail
Thurston County Public Works
Union Pacific Railroad
United States Department of Energy
Washington State Department of Agriculture
Washington State Department of Commerce
Washington State Department of Transportation
Washington State Emergency Management Division
Williams Northwest Pipeline

I. INTRODUCTION

A. Purpose

The purpose of Emergency Support Function (ESF) #12 – Energy is to provide, in a coordinated manner, the damage assessment, response, and restoration/recovery of energy resources including, but not limited to: electric, natural and propane gas, coal, biofuels, and petroleum based fuels that are necessary for the life, health, safety and economic welfare of Thurston County during and after an emergency impacting Thurston County.

B. Scope

ESF #12 - Energy establishes the policies and procedures under which Thurston County and the local Jurisdictions of Bucoda, Lacey, Olympia, Rainier, Tenino, Tumwater and Yelm will operate in the event of a major impact or loss of energy resources. This plan is designed to prepare Thurston County and its political jurisdictions and subdivisions for incident response and to minimize the exposure to or damage from energy losses that could adversely impact human health and safety or the environment. This document outlines the roles, responsibilities, procedures and organizational relationships of government agencies and private entities when responding to and recovering from impacts to our energy resources.

ESF #12 includes the production, transportation, storage, and distribution of energy including natural gases (mainly methane but including butane and ethane), propane (refined and separated from natural gases), petroleum based fuels (jet fuel, gasoline, diesel, and crude oils), electricity (generated by hydro, wind, and solar), coal, and biofuels.

ESF #12 coordinates the collection, evaluation and dissemination of information on energy damage assessments, estimation on the system outages, assists in prioritizing repairs and restoration, and coordinates the distribution of information on restoration and recovery.

II. POLICIES

A. The [United States Department of Energy](#) (DOE) has the responsibility of working with the electric power industry to ensure maximum generation, transmission, and distribution of electric power to meet essential needs within the state of Washington, as well as other states which depend on common sources of electric power by virtue of interconnections.

B. The U.S. Department of Energy has the responsibility for working with the natural gas industry to ensure maximum production and for the release of natural gas in transmission systems to meet the most essential needs.

C. The [Washington State Administrative Code \(Chapter 194\)](#) covers plans and policies for the curtailment of electric power when insufficient supply exists. Such plans would be activated by the Washington State Department of Community Trade and Economic Development when emergency conditions require long term management of electric power.

D. Coordination and support of restoration of electric and natural gas service is a high priority of the Thurston County Emergency Coordination Center (TC ECC) especially when winter storms impact local residents.

E. Additional support materials and documents related to emergency emergencies are located in the “References and Support Plans” section of this document.

III. SITUATION:

A. Emergency/Disaster Conditions and Hazards

The Thurston County [Hazard Identification and Vulnerability Analysis \(HIVA\)](#) and [The Hazards Mitigation Plan for the Thurston Region – 3rd Edition](#) identifies the natural and technological emergencies or disasters that Thurston County may experience that could severely damage the production, transportation, storage, and distribution of energy. The most common natural and technological emergencies or disasters that impact energy supplies include wind storms, severe flooding, winter storms, earthquakes and landslide.

B. Planning Assumptions

1. Energy includes the production, transportation, storage, and distribution of energy including natural gases (mainly methane but including butane and ethane), propane (refined and separated from natural gases), petroleum based fuels (jet fuel, gasoline, diesel, and crude oils), electricity (generated by hydro, wind, and solar), coal, and biofuels.
2. Within Thurston County there is very little production or storage of energy. Tacoma Power and Centralia City Light produce hydroelectric power which is sent outside the county for use. TransAlta produces a small amount of hydroelectric energy which is fed to the Puget Sound Energy (PSE) grid. Otherwise there is small amounts of solar, wind and hydroelectric power generated by private homeowners which is fed into the PSE grid. The largest energy sites Thurston County are propane storage maintained by Ferrallgas Partners in Maytown and Amerigas Propane in Grand Mound.
3. Transportation and distribution of energy within Thurston County includes railroads, pipelines, transmission lines, and tank truck on roads.
4. Transportation and distribution processes are covered under [ESF #1 – Transportation](#) and spills and releases of oil and gas are covered under *ESF #10 – Oil and Hazardous Materials Response* and the Local Emergency Planning Committee (LEPC) *Hazardous Materials Response Plan*. General evacuation guidelines are outlined in *Appendix A: Evacuation of ESF #13 – Public Safety and Security*. In the event of evacuations, sheltering guidelines are covered in *ESF #6 – Mass Care, Emergency Assistance, Housing & Human Services*.
5. Based on past events, most incidents impacting energy are minor and handled by the impacted industry and/or coordinated with Thurston County and local jurisdiction Public Works Departments.
6. In larger events, the immediate need for energy for response and recovery activities will most likely exceed the capabilities of industry and county resources, requiring assistance from private, local jurisdictions, neighboring counties, state and federal agencies to support the local efforts.
7. The access and functional needs population may be especially impacted due to their reliance upon energy on a day-to-day basis.
8. It should be anticipated that people will be hesitant to evacuate and will seek confirmation of the need to evacuate from neighbors, friends and relatives and will attempt direct contact with authorities for confirmation.
9. Some population may not follow official instructions to evacuate an area of risk and some may evacuate an area prior to the issuance of official instructions.

10. It should be understood that there are a limited number of land, rail and pipeline transportation routes into and out of Thurston County from adjacent counties this impacts the movement of people, equipment and supplies to and from Thurston County, as well as response and recovery resources.

IV. CONCEPTS OF OPERATIONS

A. General

It is a concept of operations for response and recovery from events impacting energy production, transportation, storage, and distribution that the various energy industries activate and initiate their respective emergency plans for response and recovery. Thurston County Emergency Management (TCEM) will support those plans and activities by:

- Coordinating the assessment of damages including structures, transportation infrastructure, pipelines, electrical distribution lines, and power generation sites.
- Assessing energy supply and demand including identification of critical facilities.
- Coordinate with local jurisdictions, state and federal officials or organizations as well as private individuals and businesses to establish priorities for repair and restoration of energy systems.
- Coordinating temporary, alternate, or interim sources of emergency fuel and power.

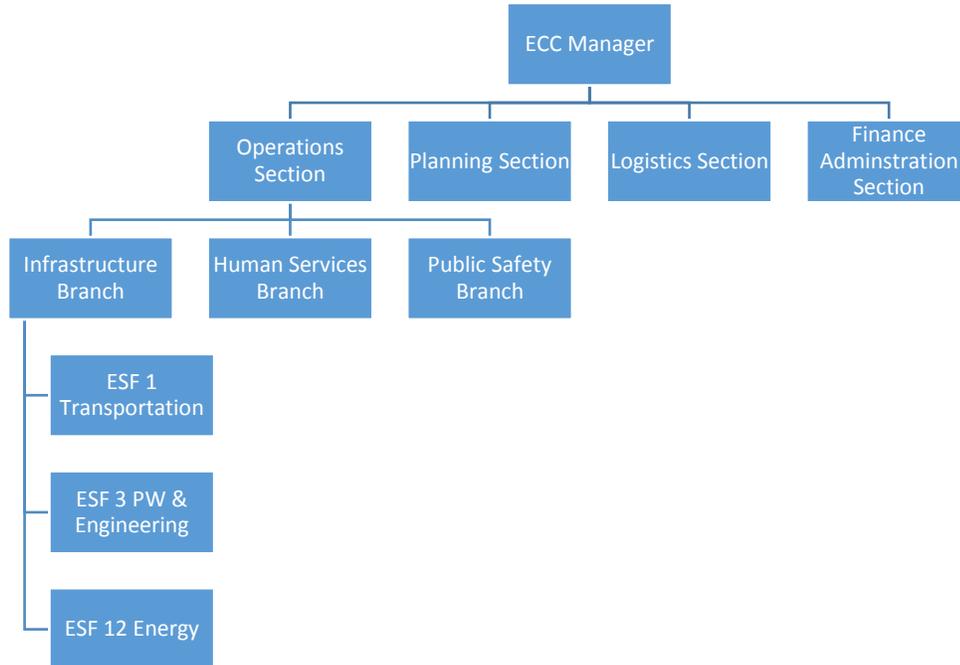
B. Organization

TCEM is the primary agency responsible for the coordination between local jurisdictions, state and federal agencies and the utilities and companies that produce, transport, store, and distribute energy. All involved entities are responsible for activation of their emergency plans and operations, again Thurston County Emergency Management will act as a coordinator for assessment of damages, response, and recovery of the within Thurston County.

Activation of ESF #12 may be for small, localized events or a widespread regional or catastrophic event. Because a wide range of emergencies or disasters may require ESF #12 activation, the lead agency or jurisdiction may shift depending on the particular emergency or disaster.

Coordination for damage assessment, response and recovery activities for energy will be under the Operations Section of the Thurston County Emergency Coordination Center (TC ECC) when activated.

Thurston County Emergency Coordination Center organizational structure.



C. Procedures

1. Utilities and companies that produce, transport, store, and distribute energy may send a liaison to the TC ECC to facilitate coordination and field communications. In large scale events the energy liaison may report to the Washington State Emergency Management Division (WA EMD) Emergency Operations Center (EOC) which will coordinate with the TC ECC.
2. Requests for assistance are primarily made by utility providers through existing mutual aid agreements with other providers or equipment companies. TC ECC may assist with coordination of outside resources, upon request.
3. Priorities for resources requests, the allocation of resources, prioritization of restoration sites, or procedures and location of fueling facilities will be determined in coordination with Disaster Policy Advisory Group (DPAG) and appropriate Mutual Aid Agreements or Memorandums of Understanding. These priorities will be established consistent with DPAG policies and procedures and the mission of this plan that call first for the protection of life, reduction in property loss or damage, protection of the environment, and sustainment of the economy.

D. Prevention and Mitigation Activities

It is the responsibility of each energy entity or utility to mitigate, when possible, to reduce disruption to their systems caused by hazards in the Thurston Region thus

making power and fuel infrastructure more disaster resilient.

[The Hazards Mitigation Plan for the Thurston Region – 3rd Edition](#) outlines prevention and mitigation activities associated to damage reduction and loss prevention that can be undertaken in Thurston County. The Hazard Mitigation Plan also contains Annexes for the individual jurisdictions within the county that outlines the prevention and mitigation actions of the jurisdictions.

Local jurisdiction and Thurston County Public Works departments, Washington State Department of Transportation (WSDOT), rail and pipeline carriers, and electrical providers have Capital Facility Plans and Six Year Maintenance Plans that include prevention and mitigation projects.

Examples of prevention and mitigation projects include, but are not limited to: landslide vulnerability assessments; seismic retrofit or replacement of structures, pipelines, bridges, placement of transmission lines underground, road realignments to avoid flooding areas, backup generator installation for fuel dispensing, and other critical facilities.

E. Preparedness Activities

Examples of preparedness activities include, but are not limited to: develop and maintain departmental standard operating procedures and checklists in accordance with this plan; develop an inventory of the entities involved in energy resources within Thurston County; and participate in emergency management or departmental training, drills, and exercises in support of this ESF or departmental operating procedures.

F. Response Activities

1. Coordinate the mobilization of personnel and equipment necessary for the assessment of energy systems between the various support agencies.
2. In coordination with ESF #1, conduct damage assessment to energy transportation routes and infrastructure. Identify and coordinate emergency transportation alternatives within Thurston County.
3. Activate ESF #12 when appropriate. Convene the Disaster Policy Advisory Group (DPAG) to establish priorities for resources requests and the allocation of resources and fuel when capabilities are exceeded during a disaster.
4. Forward information of damaged transportation systems and emergency response routes to other departments and support agencies.

E. Recovery Activities

1. Reconstruct, repair and maintain the energy system. ESF #10 and the EPC Plan provide the guidelines and procedures for responding and recovery from oil and hazardous material spills and releases.
2. ESF #1 provides the guidelines and procedures for damage assessment, response and recovery of energy transportation and distribution systems.
3. Provide documentation to the TC ECC or designated Applicant Agent for the county, of costs incurred for the response and recovery efforts of energy systems.

V. RESPONSIBILITIES

A. Annex Coordinator and Primary Agency

1. Thurston County Emergency Management (TCEM)
 - a. TCEM will serve as the primary agency of ESF #12.
 - b. TCEM is responsible for the development of the [Comprehensive Emergency Management Plan](#) (CEMP) and the associated ESF Annexes, the development and maintenance of the Hazard Mitigation Plan for the Thurston Region, and the development of the regional Training and Exercise Plan.
 - c. When appropriate TCEM will activate the ECC and staff the appropriate Incident Command System (ICS) and ECC positions.
 - d. TCEM will activate the appropriate Emergency Support Functions (ESFs) as requires by the incident.
 - e. TCEM will coordinate damage assessment, response and recovery activities in Thurston County and in support of the Thurston County Comprehensive Emergency Management Plan (CEMP).
 - f. When appropriate or necessary convene the DPAG to establish energy restoration priorities.
 - g. Facilitate recovery planning, and recovery activities.
 - h. Request additional resources as required through the TC ECC and mutual aid agreements as appropriate.
 - i. Coordinate information and activities with WA EMD.

B. Support Agencies

1. BNSF Railways
 - a. BNSF will activate and follow their Emergency Action Plan for damage assessment, response and recovery.
 - b. If the incident is local (within Thurston County) they will coordinate with Thurston County ESF #1, if the incident is more regional in scope they will coordinate with WA EMD. Where appropriate coordinate assessment, response and recovery with ESF #1 and provide personnel and equipment when requested to restore energy transportation systems.

2. Bonneville Power Administration (BPA)
 - a. BPA produces and transports regional electrical power. In a regional event BPA will activate their emergency plans and coordinate with the United States Department of Energy (US DOE) and WA EMD on damage assessments, response, recovery, and restoration activities.
 - b. BPA will coordinate directly with Puget Sound Energy on electrical power restoration in Thurston County.
3. BP-Olympic Pipeline
 - a. BP – Olympic Pipeline is an interstate pipeline system that includes a 14-inch and 16-inch pipelines that transport gasoline, diesel, and jet fuel through Thurston County. In the event of a disaster BP will activate their emergency plans and coordinate with the United States Department of Energy (US DOE) and WA EMD on damage assessments, response, recovery, and restoration activities.
 - b. Any spill response is outlined in both ESF #10 and the LEPC Hazardous Materials Plan and be managed under the [Northwest Area Contingency Plan](#).
4. Federal Emergency Management Agency (FEMA)
 - a. In the event of a regional disaster FEMA will support local jurisdiction PW and Thurston County by providing damage assessments and coordination with federal and state entities.
 - b. Work with the United States Department of Energy, BPA, WA EMD, and the Washington State Utilities and Transportation Commission to coordinate response and recovery efforts.
5. Puget Sound and Pacific Railroad (PS&P)
 - a. PS&P will activate and follow their Emergency Action Plan for damage assessment, response and recovery. If the incident is local (within Thurston County) they will coordinate with Thurston County ESF #1, if the incident is more regional in scope they will coordinate with WA EMD.
 - b. Where appropriate coordinate assessment, response and recovery with ESF #1 and provide personnel and equipment when requested to restore energy transportation systems.
6. Puget Sound Energy (PSE)
 - a. PSE will activate and follow their Emergency Action Plan for damage assessment, response and recovery.
 - b. If the incident is local (within Thurston County) they will coordinate with Thurston County ECC and Thurston County Public Works, if the incident is more regional in scope they will coordinate with BPA and WA EMD.
7. Tacoma Rail
 - a. Tacoma Rail will activate and follow their Emergency Action Plan for damage assessment, response and recovery and will coordinate with BNSF on appropriate rail line segments. If the incident is local (within Thurston County) they will

- coordinate with Thurston County ESF #1, if the incident is more regional in scope they will coordinate with WA EMD.
- b. Where appropriate coordinate assessment, response and recovery with ESF #1 and provide personnel and equipment when requested to restore energy transportation systems.
8. Thurston County Public Works (TCPW)
 - a. TCPW will activate ESF #1 to coordinate the establishment and reopening of transportation routes.
 - b. TCPW will coordinate with PSE, pipeline companies and railroads to support access to and restoration their energy resources.
 9. Union Pacific Railroad
 - a. Union Pacific Railroad will activate and follow their Emergency Action Plan for damage assessment, response and recovery and will coordinate with BNSF on appropriate rail line segments. If the incident is local (within Thurston County) they will coordinate with Thurston County ESF #1, if the incident is more regional in scope they will coordinate with WA EMD.
 - b. Where appropriate coordinate assessment, response and recovery with ESF #1 and provide personnel and equipment when requested to restore energy transportation systems.
 10. United States Department of Energy (USDOE)
 - a. In a regional event USDOE will activate their emergency plans and coordinate with BPA and WA EMD on damage assessments, response, recovery, and restoration activities.
 - b. USDOE will coordinate directly with BPA and PSE on electrical power restoration in Thurston County.
 11. Washington State Department of Transportation (WSDOT)
 - a. Activate and follow the *Washington State Department of Transportation Disaster Plan*.
 - b. Provide damage assessment to WA EMD or TC ECC where appropriate and support Thurston County with emergency management activities in the response and recovery of state transportation routes. This coordination will facilitate energy restoration with BPA, PSE, railroads and pipelines.
 12. Washington State Department of Agriculture (WADOA)
 - a. Washington State Department of Agriculture Division of Weights and Measures (<https://agr.wa.gov/inspection/weightsmeasures/>) is responsible for the recertification of fuel pump measuring devices (i.e. ensuring that a gallon of gas paid for is a gallon of gas). WADOA also certifies the meters on propane delivery trucks.
 13. Washington State Department of Commerce

- a. Washington State department of Commerce Energy Division will activate their ESF #12 and coordinate with WA EMD and energy providers to track power outages and restoration (also see ESF #12 Guidelines – Attachment A).
 - b. Will make sure energy shortages are controlled, reducing impacts on citizens, businesses, and the economy.
14. Washington State Emergency Management Division (WAEMD)
- a. Activate the Washington State Emergency Operation Center in support of the disaster or incident; follow procedures and processes identified in the *Washington State Comprehensive Emergency Management Plan*.
 - b. Provide coordination of damage assessment, response and recovery as appropriate; and provide additional resources as requested.
15. Williams Northwest Pipeline
- a. Williams Northwest Pipeline is an interstate pipeline system that provides natural gas through a bidirectional pipeline supplying and transporting through Thurston County. In the event of a disaster Williams Northwest will activate their emergency plans and coordinate with the United States Department of Energy (US DOE), WA EMD, and PSE on damage assessments, response, recovery, and restoration activities.
 - b. Any spill response is outlines in both ESF #10 and the LEPC Hazardous Materials Plan and be managed under the [Northwest Area Contingency Plan](#).

VI. RESOURCE REQUIREMENTS

All primary and support agencies have resources, equipment and personnel. The key to ESF #12 will be prioritization and coordination of available resources. Additionally, energy providers and transporters have programs and contracts in place to receive assistance from outside the region if needed. The Disaster Policy Advisory Group (DPAG) may be required to prioritize the use and allocation of resources.

Additional resources maybe required from neighboring jurisdictions, state and federal agencies and the private sector.

VII. REFERENCES AND SUPPORT PLANS

[Washington State Energy Assurance and Emergency Preparedness Plan](#)

The Thurston County [Hazard Identification and Vulnerability Analysis \(HIVA\)](#)

[The Hazards Mitigation Plan for the Thurston Region – 3rd Edition](#)

Thurston County [Comprehensive Emergency Management Plan](#) (CEMP)

Puget Sound Energy – Energy System Restoration Plan Sept. 2015

Washington State Emergency Management Emergency Support Function #12
<https://mil.wa.gov/uploads/pdf/PLANS/ESF12-Energy-August2012.pdf>

[Chapter 43.21F RCW, State Energy Office](#)

[Chapter 43.21G RCW, Energy Supply Emergencies, Alerts](#)

[Chapter 44.39 RCW, Joint Committee on Energy Supply and Energy Conservation](#)

WA Department of Commerce Energy Emergencies website:
<https://www.commerce.wa.gov/growing-the-economy/energy/energy-emergencies/>

Washington State Department of Commerce <https://www.commerce.wa.gov/wp-content/uploads/2016/05/Energy-Energy-Emergency-Plan-2013.pdf>

Washington State Department of Agriculture - Information for Owners and Operators of Weighing and Measuring Devices:
https://agr.wa.gov/inspection/weightsmeasures/info_own_operate.aspx

Ferrellgas Safety Tips: <https://www.ferrellgas.com/tank-talk/blog-articles/keep-these-10-things-in-mind-during-severe-thunderstorms/>
<https://www.ferrellgas.com/customer-support/safety/>

Propane vs Natural Gas
<http://www.propane101.com/propanevsnaturalgas.htm>

VIII. TERMS AND DEFINITIONS

BPA - Bonneville Power Administration
CEMP - Comprehensive Emergency Management Plan
DOE - United States Department of Energy
DPAG - Disaster Policy Advisory Group
EOC - Emergency Operations Center
ESF - Emergency Support Function
FEMA - Federal Emergency Management Agency
HIVA - Hazard Identification and Vulnerability Analysis
ICS - Incident Command System
LEPC - Local Emergency Planning Committee
PS&P - Puget Sound and Pacific Railroad
PSE - Puget Sound Energy
TC ECC - Thurston County Emergency Coordination Center
TCEM - Thurston County Emergency Management
TCPW - Thurston County Public Works
WADOA - Washington State Department of Agriculture
WADC - Washington State Department of Commerce

USDOE - United States Department of Energy
WA EMD - Washington State Emergency Management Division
WSDOT - Washington State Department of Transportation

IX. ATTACHMENTS

Attachment A: Washington State Department of Commerce ESF 12 Guidelines.