CALIFORNIA ENERGY COMMISSION

LOCAL GOVERNMENT EMERGENCY PLANNING HANDBOOK

April 2004 PUBLICATION #600-04-003



Arnold Schwarzenegger, Governor

TABLE OF CONTENTS

<u>Page</u>

SECTION I: INTRODUCTION	
Purpose of the Plan	1
Philosophy of the Plan	1
Use of the Plan	2
SECTION II: HOW TO PREPARE THE PLAN	
Step 1: Designate an Energy Emergency Coordinator	3
Step 2: Form a Task Force	3
Step 3: Write the Plan	4
Step 4: Test the Plan	12
SECTION III: EXAMPLES OF OPERATING GUIDELINES	
Energy Emergency Coordinator	14
Public Information Officer	16
SECTION IV: SCENARIOS	
Energy Emergency Scenario: Disaster	18
Energy Emergency Scenario: Supply Disruption	19

SECTION I: INTRODUCTION

The purpose of this Handbook is to provide instructions and guidance to local governments in preparing an energy shortage response plan. The plan encourages local officials to build upon their existing resources and authorities, and to integrate their management and communications systems with both the California Energy Commission (Commission) and the Office of Emergency Services (OES).

This handbook provides guidelines to assist local governments in developing a customized energy shortage response plan. The Handbook is divided as follows:

- Section II describes how to prepare the plan and includes instructions for laying the groundwork and developing the plan.
- Section III contains operating guidelines (checklists) to assist the Energy Emergency Management team in preparing for and managing energy emergencies.
- Section IV contains examples of two scenarios to assist the Energy Emergency Coordinator in testing the plan's applicability to possible energy emergency situations.

PURPOSE OF THE PLAN

The purpose of an energy shortage response plan is to help governments deal effectively with an energy supply disruption. The plan should be flexible enough to respond to emergencies which are the result of either a supply disruption (embargo) or a natural or man-made disaster. Both types of emergencies can significantly affect the supply of petroleum, electricity, and natural gas.

In its response to each type of energy crisis, the plan should provide:

- An energy emergency management system and communications plan consistent with existing state and federal energy emergency response plans.
- Identification of critical energy needs for operation of essential public services during an energy supply disruption.
- Situation monitoring and information exchange, (a primary role of government).
- A menu of energy conservation strategies with options to reduce demand for petroleum, natural gas, or electricity.

PHILOSOPHY OF THE PLAN

The philosophy of the plan calls for:

- Reliance on market mechanisms to the fullest extent possible in balancing supply and demand.
- A phased approach which limits government intervention to a level corresponding to the shortage severity.

Table 1 USE OF APPLICABLE PLANS		
Location of Disaster	Local Energy Disruption	Applicable Plan
Local	No	Multi-Hazard Plan
Local	Yes	Multi-Hazard Plan (supported by Energy Shortage Response Plan)
Another Region	Yes	Energy Shortage Response Plan
None	Yes	Energy Shortage Response Plan

- Compatibility with state and federal emergency plans and policies.
- Cooperation between government and industry in information exchange and in the use of demand reduction measures.
- Use of existing response mechanisms without duplicating government programs.

USE OF THE PLAN

It is important to understand when to use the energy shortage response plan and to distinguish between an energy disruption and a disaster. The type of emergency determines the applicable emergency plan. Table 1 displays this relationship.

There is a need for a response network between local government officials and state agencies during a disaster and a supply disruption. If there is an energy supply disruption accompanying a disaster, the energy emergency function is a sub-task of the overall response. Specifically, the fuel needs of the disaster response are communicated to the local Director of Emergency Services to ensure that there is sufficient fuel/energy to support the transportation of personnel and distribution of essential supplies.

If, however, there is an energy disruption apart from a disaster, or as a secondary result of a disaster in another region (e.g., a Bay Area earthquake causes a gasoline shortage in Fresno), then your energy shortage response plan is operational even if the multi-hazard plan is not. The energy shortage response plan and procedural operations should be accessible independent of the multi-hazard plan.

SECTION II: HOW TO PREPARE THE PLAN

STEP 1: DESIGNATE AN ENERGY EMERGENCY COORDINATOR

The County Board of Supervisors, the City Council, or the appropriate government body in your local jurisdiction, should designate an Energy Emergency Coordinator (or title of your choosing). This usually does not mean creating a new position within the local government or emergency structure. Rather, designate energy emergency responsibilities to existing personnel who have a working knowledge of emergency services, a broad-based knowledge of local government infrastructure, and established working relationships with all levels of government and the private sector. Examples of existing Energy **Emergency Coordinators include:**

- ✓ Ventura County: Assistant Director, Sheriff's Office of Emergency Services
- Sacramento County: Coordinator, Emergency Operations, General Services
- City and County of San Francisco: Director, Bureau of Energy Conservation, City Public Utilities Commission

After designating an Energy Emergency Coordinator, preparation of the plan can begin. The remaining sections of this handbook provide instructions and suggestions for creating an energy shortage response plan that best suits the local jurisdiction's needs. In addition to the handbook, the preparer of the plan may receive help and sample plans by contacting the Commission's Contingency Planning staff at (916) 654-4628. Staff that developed this handbook are interested in helping with the local response planning process.

STEP 2: FORM A TASK FORCE

You may wish to form a task force composed of members from both the public and private sectors to help during the plan development process. This task force may already exist within your local government as another type of planning committee such as a disaster council or an emergency preparedness committee. Table 2 lists some potential sources for task force members.

The purpose of the task force is to provide:

- General input, direction, and information on departmental functions.
- Identification of the general nature of vulnerabilities to an energy shortage.
- County policies which may affect the development of the plan, including the local government's specific policies to assist in the mitigation of

Table 2 POTENTIAL TASK FORCE MEMBERS	
Public Sector	Private Sector
General Services - Fleet Management - Facilities Management Fire Law Enforcement Public Works/Engineering Utilities Health Services/Emergency Management System Transportation Emergency Management Energy Conservation/Management	Electric Utilities Natural Gas Utilities Petroleum Industry Transit Operators Pipeline Operators

an impending or actual energy shortage.

Examples of the types of policies that may be appropriate include:

- Interagency emergency fuel agreements within the jurisdiction or neighboring jurisdictions. An example would be the agreement between a city and its unified school district to share motor fuel during shortages.
- Mandatory implementation by jurisdictional personnel of energy conservation measures such as carpooling to work, telecommuting, or working staggered hours.
- Voluntary or incentive based energy conservation measures.

STEP 3: WRITE THE PLAN

Now you are ready to begin writing your energy shortage response plan. This section contains five elements you may wish to include in your plan in some form:

- 1. Legal Authorities and References
- 2. Management System
- 3. Emergency Response Phases
- 4. Information and Communication System
 - 1. Energy Conservation Strategies

1. Legal Authorities and References

You should include references to the appropriate legal authorities for your jurisdiction. This documents exactly what authority your jurisdiction has to implement the strategies you will outline in your plan. Your plan should include the local legal authorities and references which provide the framework and necessary legal authority for your plan.

2. Management System

Your energy emergency management system should identify in advance the reporting order and duties to be followed in your jurisdiction. You will probably want to make maximum use of existing management structures and communi-cation links. The energy management system should accomplish the four tasks outlined below.

Establish the Lines of Authority: You

may want to develop an organization or flow chart indicating the person to whom the Energy Emergency Coordinator reports and any other members of the Energy Emergency Management Staff, including the Public Information Officer.

Describe the Duties of the Energy

Emergency Coordinator: The Energy Emergency Coordinator will have the overall responsibility of coordinating essential fuel supplies during an energy supply disruption, and provide energy support operations during a disaster. You will need to develop Operating Guidelines (see Section III for samples) for the Coordinator, incorporating such duties as:

- Monitoring the progress of the energy emergency and obtaining information from the California Energy Commission via established communication lines.
- Preparing an analysis of the probable effects.
- Maintaining contact and liaison with energy supply providers.
- Assisting in procuring and distributing essential energy

resources to support emergency operations, applying to the Petroleum Fuels Set-Aside Program if appropriate.

- Monitoring the distribution of essential energy supplies.
- As required, coordinating energy suppliers to support emergency restoration of disrupted services.
- Providing accurate information for release to the public.

Disseminate Information: The Energy Emergency Coordinator and the Energy Emergency Management Staff (if any) should be able to gather and send information among a broad spectrum of public agencies, energy suppliers, and the local community.

The Public Information Officer must maintain working relationships with local media representatives to provide information on the shortage and the responses being implemented. Through the Public Information Officer, local governments can minimize public confusion and elicit positive public response to appeals for voluntary conservation.

Coordinate with Other Agencies: Your management system should also include a list of various agencies (i.e., federal, state and local) which would be involved in an energy shortage. The list should include a contact person as well as the resources and services each provides. In addition to the local agencies you will be identifying, you may want to include the following:

Federal:

- U.S. Department of Energy's Office of Energy Emergencies (DOE)
- Federal Emergency Management Agency (FEMA)

State:

- California Energy Commission
- OES Utilities Coordinator
- California Public Utilities Commission (CPUC)

3. Emergency Response Phases

Your plan should have phases corresponding to the severity of the emergency. This handbook uses as examples the three Energy Commission phases: Verification, Pre-Emergency and Emergency. The corresponding OES Multi-hazard phases are also noted. You may choose the designations most appropriate to your jurisdiction.

Each phase designates the responses and activities appropriate for government officials in managing the shortage and mitigating the impacts. Described below are suggestions from which you may choose for your local plan. You may also refer to the

Verification Phase

The purpose of the Verification Phase is to determine the nature, extent, and duration of a potential or impending shortage of petroleum, natural gas, or electricity. Local government staff, in accordance with the designated management structure, will assess energy prices and supplies, recommending to the decision makers what action, if any, is to be taken by the local jurisdiction. During the Verification Phase, the local government may implement public information programs.

Note: For counties using the OES Multi-hazard format, the Verification Phase corresponds to the Pre-Emergency Period's "Increased Readiness Phase."

Suggested responses appropriate for the Verification Phase are described below.

Petroleum Shortage

- State and local government operations will rely on a free market to set prices of petroleum products during a shortage.
- The primary role of state and local government is monitoring the situation and information exchange, rather than direct intervention in industry efforts to restore service and satisfy customer requirements. It may be necessary to determine if critical service providers have enough fuel to ensure that essential public services are maintained.
- Encourage voluntary reduction in petroleum demand.
- Identify essential services which may need back-up fuel.

Natural Gas Shortage

 Monitor the natural gas supply through established contacts within the natural gas industry, the California Public Utilities Commission (CPUC), or the Energy Commission.

- Utilities follow established priorities in curtailing service to their customers during a natural gas shortage. The Energy Emergency Coordinator may coordinate with local gas utility company representatives to understand the impact of these service curtailments.
- Encourage voluntary reductions in nonessential natural gas use.
- Identify essential services which may need back-up fuel.

Electricity Shortage

- The Energy Emergency Coordinator may coordinate with local electric utility company representatives to understand the impact of these supply disruptions on the local economy and service infrastructure.
- Encourage voluntary reduction in electricity demand.
- Electric utilities have established plans for curtailing electric service to their customers during a supply shortfall. It is the responsibility of the Energy Emergency Coordinator to understand the local impacts of these curtailment programs on critical facilities and services within the jurisdiction.

Pre-Emergency Phase

The transition to the Pre-Emergency Phase involves an increased level of government activity if the energy supply disruption worsens. As the state increases its monitoring of the energy supply and distribution systems, the local jurisdictions will receive information on the crisis and will provide assessments of local impacts. Based on these accurate assessments, the local government will anticipate the need for additional public appeals for conservation and the implementation of specific demand reduction measures, consistent with those of the state and federal governments.

If voluntary conservation measures have mitigated the anticipated impacts of the energy supply disruption, there is no need for additional government action. If, however, information indicates that the crisis is becoming more severe, the Governor may proclaim a State of Emergency. This proclamation would activate the Emergency Phase of the Commission's Contingency Plan.

Note: For counties using the OES Multi-hazard format, the Pre-Emergency Phase corresponds to the Emergency Period's "Pre-Impact Phase."

Suggested responses appropriate for the Pre-Emergency Phase are described below.

Petroleum Shortage

- Increase monitoring of petroleum inventories, consumption patterns, and price.
- Implement voluntary rideshare, public transit, and alternative work pattern programs.

- Activate local gasoline shortage plans.
- Issue public appeals for voluntary conservation.

Natural Gas Shortage

- Increase monitoring of natural gas supplies, deliveries, demand and alternate fuel availability.
- Issue public appeals for voluntary conservation.

Electricity Shortage

- Increase monitoring of electricity demand, supplies, and alternate power source availability.
- Issue public appeals for voluntary conservation.

Emergency Phase

The Emergency Phase includes activities initiated during the Pre-Emergency Phase, but may add mandatory programs needed to respond to a worsening energy shortage. If the state imposes mandatory energy demand reduction measures, the local government should assist in implementing those measures. In addition, the emergency proclamation may provide the local governments with access to the state's Petroleum Fuels Set-Aside Program implemented to ensure adequate fuel supplies for emergency and essential services. Economic assistance

programs may be available during this phase.

Note: For counties using the OES Multi-hazard format, the Emergency Phase corresponds to the Emergency Period's "Immediate Impact Phase" and "Sustained Emergency Phase."

Suggested responses appropriate for the Emergency Phase are described below.

Petroleum Shortage

- Governor proclaims a State of Emergency, mandatory demand reduction programs may be implemented.
- If priority petroleum users are unable to acquire sufficient fuel at any price, and the Governor proclaims a State of Emergency, the state's Petroleum Fuels Set-Aside Program may be implemented upon order of the Governor.

This program will be administered by a Fuels Allocation Officer appointed by the Chairman of the Energy Commission. The program is designed to interfere minimally with the market, using set-aside volumes which are sufficient only to satisfy hardship and emergency cases.

The Fuels Allocation Officer in consultation with the Energy Commission Chairman, the Fuels Planning Committee Member, and the state OES Director will designate the set-aside volume up to a maximum of five percent of the total monthly supply of each fuel type available within the state. The percent volume will be determined according to the severity of the supply shortage.

All fuel delivered through this program will be purchased at the market price. The Fuels Allocation Officer will notify all oil companies who supply California when the set-aside program will be implemented.

- In the event that the petroleum shortage is part of a larger emergency, such as a catastrophic earthquake, the state's lead agency will be OES with the support of the Energy Commission.
- Economic assistance made available during a petroleum shortage will be administered by the California Department of Economic Opportunity through existing programs.

The Commission's Contingency Plan recognizes that, while the use of market mechanisms is efficient in balancing supply and demand, it may result in a disproportionate share of impacts on low-income households.

To compensate for this inequity, economic assistance may be available using existing mechanisms, such as the Low-Income Home Energy Assistance Program (LIHEAP) for home heating and cooling, and Community Service Block Grants (CSBG) for transportation assistance.

- Intensify analysis of natural gas supplies, deliveries, demand, and alternate fuel availability.
- Implement mandatory demand reduction programs.

Electricity Shortage

- Intensify analysis of electricity demand, supplies, and alternate power source availability.
- Implement mandatory demand reduction programs.

4. Information and Communication System

As the agency responsible for California's energy emergency response planning, the Energy Commission serves as a central clearing house for gathering and disseminating information during an energy shortage.

The local Energy Emergency Coordinator monitors the information gathered by the Energy Commission and distributed through OES established communication lines. The Coordinator also monitors similar categories of information at the county and local level in order to make informed decisions during the crisis. Working together with the Public Information Officer, they will develop press releases and other means of

Natural Gas Shortage

information dissemination within the jurisdiction so that the public will understand the reasons behind the crisis mitigation measures being used.

Implementation of this plan involves continuous two-way communication with all levels of government, private industry, and the public.

Situation Analysis

During an energy emergency, a major problem for decision makers is the collection and analysis of information regarding the nature, severity, and extent of the problem.

In order for the local Energy Emergency Coordinator and the rest of the Emergency Services staff to coordinate the response to an interruption in energy supplies, they must assess the impact of shortages on the local economy and service infrastructure. Depending on the specific situation, this assessment will be accomplished using one or more of the following methods:

Ground Surveys: Provide information on direct damage to energy production, transportation, storage, and related facilities. This information will also include assessments of levels of energy usage within the damaged area.

Aerial Reconnaissance: Provides an additional method of assessing energy usage and facility damage to determine the extent of electrical outages, damage to dams, transmission towers and lines, substations, transportation routes, pipelines, refineries, etc.

Operational Information: Consists of operational problems and immediate fuel and energy needs of emergency service providers. This information is the most important during the Emergency Phase, and therefore will be given high priority. Collection will be accomplished through a variety of types of communications equipment and an established reporting procedure.

Economic Impact Information: This information includes specific dollar amounts of the economic impacts from the energy disruption. This is necessary to assist state and local officials in determining which demand reduction strategies will be most effective and appropriate.

Recovery Planning Information: Short and long range efforts should consider priority restoration of the energy infrastructure, such as production and storage facilities, pipelines, and transportation routes.

Monitoring

The local Energy Emergency Coordinator is to maintain contact with local energy suppliers (petroleum, natural gas and electricity) to determine if local supply problems are likely to occur. He should also exchange information with the Energy Commission via established communication lines.

Information Gathering and Dissemination

In order to assess the impact of an energy shortage and implement mitigation strategies, the Energy Emergency Coordinator must have access to a variety of types of information gathering and dissemination equipment. Given the frequent incompatibilities among radio frequencies and other types of communications equipment, it is important for all communications links to be worked out prior to the onset of an emergency. In addition to compatibility issues, all communications equipment should be backed up by emergency power which will last through the duration of the event. The communications equipment should link all levels of emergency management and provide a bridge to energy suppliers and the community at large. Some communications system elements to consider include:

Telephone System: A telephone system with priority emergency service lines for communicating with key individuals, the media and the public. It should be easily expandable and capable of accommodating toll free (800) numbers if appropriate. Cellular telephones and electronic paging equipment should be considered for key individuals.

FAX and Computer Systems: FAX machines and computers equipped with modems to allow access to electronic mail systems.

Satellite Television System: A satellite television broadcast receiving system to provide continuous access to network and cable news broadcasts. Relying solely on cable systems or local network television affiliates creates vulnerability to localized power outages at the cable company or local network affiliates.

Radio: A radio system that allows the Energy Emergency Coordinator to monitor and interact with all emergency service and utility company radio frequencies through local communications and dispatch points.

Back-up Power Systems: Emergency back-up power systems to support the operation of essential facilities and equipment during sustained electric power outages.

5. Energy Conservation Strategies

After completing the basic plan elements, it is strongly recommended that the menu of energy conservation strategies in the Technical Appendix be reviewed and evaluated, and the measures which would have the greatest impact within the local jurisdiction be identified. Energy shortage response planning can lead to energy conservation. Preparing to reduce energy use during a shortage, and knowing how much reduction can be achieved, can encourage ongoing conservation.

The Technical Appendix contains more than 60 energy conservation/load management strategies designed to reduce energy consumption in the following sectors: government, transportation, residential, commercial, industrial, and agriculture. These measures address energy shortages resulting from local and remote disasters and market disruptions. There are measures applicable to long- and short-term shortages in urban, suburban, and rural localities. Many of the measures are applicable in non-shortage times as well, and can decrease a local jurisdiction's overall vulnerability to the impacts of energy shortages.

In the Technical Appendix each energy demand reduction measure is described in a one-page Technical Brief. The basic requirements for implementing each measure are described, and the energy savings potential as a function of public participation in the measure is defined. The methodology for quantifying the energy savings potential as a function of public participation in the measure is also shown. For the purpose of applying the methodology to a model and calculating an example of estimated energy savings, data was created to represent a fictitious county. References, assumptions, and supplemental information about the measures are contained in the Appendix.

STEP 4: TEST THE PLAN

After preparing an energy shortage response plan, you should test its applicability to possible energy emergency situations. Two sample energy emergency scenarios are provided at the end of this handbook (Section IV) to assist you in testing your plan.

SECTION III: EXAMPLES OF OPERATING GUIDELINES

This section contains examples of operating guidelines (checklists) to assist the Energy Emergency Coordinator and the Public Information Officer in the management of energy emergencies. The guidelines are divided into the following three sections, which reflect the emergency response phases discussed in Section II:

Verification Pre-Emergency Emergency

You may wish to prepare comparable guidelines for any additional members of your energy emergency team.

EN	ENERGY EMERGENCY COORDINATOR		
~	TASKS		
VE	VERIFICATION PHASE		
	Review Pre-Emergency operating guidelines.		
	Obtain and analyze information provided by the California Energy Commission and the Office of Emergency Services via established communication lines.		
	Obtain and analyze any local information on the potential energy emergency.		
	Coordinate with representatives of the local energy providers regarding the potential energy emergency.		
	Brief the Director of Emergency Services (or other appropriate title for your jurisdiction).		
	Coordinate information releases with the Public Information Officer.		
PRI	E-EMERGENCY PHASE		
	Attend all emergency staff briefings regarding energy emergency.		
	Continue to monitor and review informational updates from the California Energy Commission and the Office of Emergency Services via established communication lines.		
	Continue to obtain the appropriate information to analyze the potential impact of a local energy emergency.		
	Brief the Director of Emergency Services on the energy emergency situation.		
	Develop and maintain activity logs.		
	Assist Public Information Officer with the development of energy emergency public information messages and briefings.		
EM	ERGENCY PHASE		
	Attend all emergency management staff briefings.		
	Collect and analyze all available information on the energy emergency.		
	Prepare and disseminate summary reports on the emergency situation.		
	Review and recommend the appropriate energy conservation strategies.		
	Assist in the selection and implementation of energy conservation strategies.		

ENE	ENERGY EMERGENCY COORDINATOR	
~	TASKS	
	Coordinate with all emergency management staff to ensure the availability of energy for critical facilities and emergency response vehicles.	
	Coordinate with the Public Information Officer on the development and dissemination of energy emergency public information messages and briefings.	
	Assess the energy needs of the private sector.	
	Assist in the implementation of federal and state energy emergency mitigation programs (such as the Petroleum Fuels Set-Aside).	
	Monitor the use and progress of energy emergency conservation strategies.	
	Advise the California Energy Commission and the Office of Emergency Services of the impact of the local energy emergency and the progress and effectiveness of mitigation measures.	
	As the energy emergency situation decreases, develop appropriate after- action reports.	

PU	PUBLIC INFORMATION OFFICER		
~	TASKS		
VE	VERIFICATION PHASE		
	Work with the Energy Emergency Coordinator to review and update the information and communications portion of your Energy Shortage Response Plan.		
	Attend all energy emergency information briefings.		
	Arrange for inspection and installation of communications equipment and other supplies/equipment necessary for public information functions, including television, radio, maps, automatic telephone answering equipment, display charts, and status boards.		
	Respond to media and public calls.		
	Initiate use of activity log and media/public contact log.		
	Monitor, record and file media coverage. Provide timely situation reports to the Emergency Services Director, Energy Emergency Coordinator, and other management staff.		
PR	E-EMERGENCY PHASE		
	Continue to maintain activity log and media/public contact log.		
	Continue to monitor and record media coverage; provide updates to the Emergency Services Director, Energy Emergency Coordinator, and other management staff.		
	Expand media support staff as necessary.		
	Attend all energy emergency information briefings and policy meetings.		
	Ensure all media releases and press briefing packages are reviewed and approved by the Emergency Services Director and the Energy Emergency Coordinator.		
	Intensify level of coordination with state and local government PIOs.		
	At the direction of the Emergency Services Director, assist with the preparation of television and radio messages calling for public cooperation with the implementation of energy conservation measures.		
EM	ERGENCY PHASE		
	If appropriate for arriving media, open Media Center. Maintain Media Center status boards and maps. Post hard copy of news releases.		

PU	PUBLIC INFORMATION OFFICER	
~	TASKS	
	Provide updates on media and public inquiries to Emergency Services Director and Energy Emergency Coordinator.	
	Request PIO staff support from the next higher level of government or from among other community PIOs, or arrange to hire temporary personnel as necessary.	
	Continue to maintain activity log and media/public contact log.	
	Release emergency instructions/information to the public as necessary through the media. Release "media only" telephone numbers. Record telephone messages for media and public hotlines and update as the situation changes. Release hotline numbers.	
	Produce news releases as required.	
	Respond to media/public inquiry.	
	Consider additional methods of distributing emergency instructions as required.	
	As the energy emergency situation decreases, develop appropriate after- action reports.	

SECTION IV: SCENARIOS

Before finalizing your plan, you may want to test its applicability to possible energy emergency situations and locate any weaknesses or inconsistencies. Two energy emergency scenarios have been included: a disaster and a market disruption.

ENERGY EMERGENCY SCENARIO: DISASTER

Your jurisdiction has been involved in emergency operations due to an earthquake that struck 48 hours ago. The disaster caused widespread power interruptions from downed power lines, ruptured gas mains, damaged and toppled propane tanks, and sheared underground pipes.

Emergency response crews have been responding to fires, collapsed buildings, landslides, subsidence, and multiple medical emergencies. Utility crews are working around the clock in an effort to restore power outages. However, it is estimated that some areas will be without natural gas and electricity for several days to several weeks. Additional utility emergency crews have been brought in from other parts of the state to assist with the emergency.

Some underground gasoline tanks and pipelines have been ruptured. They have been shut down for inspection. Shortage of gasoline and other fuels is anticipated due to uncertainty of damage to supplies and lack of power to pumping facilities. Most major freeways into the jurisdiction are closed due to damaged roadways, fallen trees, and debris. CalTrans and the CHP are inspecting these roadways for repairs needed to restore transportation access into the local jurisdiction.

Many critical facilities (such as hospitals and fire stations) are operating on auxiliary power. Their supplies of generator fuel are nearly exhausted.

Hundreds have been evacuated from dangerous areas. Many people are isolated and unable to move freely around the jurisdiction. There is general restlessness to resume normal activities, creating public pressure on local officials and the utility companies to restore basic services.

Suggested Topics for Discussion

- Do you know to whom you should report and the staff people available to you?
- Explain your agency's emergency roles and responsibilities.
- How will you expect to get reliable information regarding the situation and its impact on available fuel supplies?
- Do you rely on emergency power in a disaster?

- Do you have procedures for providing emergency power and
- How long would your emergency power last?

ENERGY EMERGENCY SCENARIO: SUPPLY DISRUPTION

Tensions in Indonesia are on the rise. A Communist-backed rebel movement is seizing control of island after island. The United States, concerned about the potential for loss of oil fields operated by U.S. oil companies, delivers large amounts of military aid to assist the Indonesian government in putting down the revolt. Colonel Kadafy in Libya decides to come to the aid of this rebel movement and attacks all U.S. tanker traffic in the Mediterranean Sea. Lloyds of London refuses to insure any tankers that are operating in the Mediterranean, thus reducing oil shipments to 25 percent of normal levels.

Prices of all forms of energy throughout the country are rising as continuing demand strains shrinking supplies. Events in the Mediterranean and Indonesia have driven up the price for 60-day North Sea Brent Crude Oil futures by \$32.00 per barrel over the past four weeks. Market analysts predict that oil prices will continue to rise as long as this worldwide uncertainty persists.

Consumers in the U.S. are encountering gasoline pump prices averaging \$2.50 per gallon for unleaded regular gasoline, as well as similar increases in the retail cost of heating oil. Fears of shortages, accompanied by still higher prices, are apparent as American consumers vehicle fuel during an emergency?

keep their tanks filled with fuel. This causes temporary unavailability of gasoline at some stations resulting in gas lines and validating the rumors of a fuel shortage.

Suddenly, the rebels in Indonesia seize control of all the oil fields. This effectively denies the U.S. of an additional 20 percent of its daily supply of crude oil. Due to the sudden loss of Indonesian crude oil, inquiries are continuing to come in as gasoline availability is becoming a problem in California and surrounding states.

Suggested Topics for Discussion

- At what point in the crisis do you, as a public official, become concerned about the impending shortage of oil?
- Do you know to whom you should report and the staff people available to you?
- Do you have a plan for ride-sharing or other conservation measures?
- How do you expect to get relevant information regarding the international energy supply situation and its impact on your jurisdiction?
- Do you have access to programs providing economic assistance for low income residents likely to be disproportionately affected by the continuing energy shortages?
- Do you have a communications system which enables you to inform

the public and appeal for voluntary conservation?