Energy Assurance and Emergency Operations Plan

June 2013

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Energy Assurance and Emergency Operations Plan

Prepared by:

OFFICE OF THE GOVERNOR

OFFICE OF ENERGY

Recovery Act – Energy Assurance Planning – State of Nevada

June 2013

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Energy Assurance and Emergency Operations Plan Revision/Review Record:

DATE OF REVISION	ITEMS REVISED
June 2008	Plan Revision & Update
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June 2013	Plan Revision and Update
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Table of Contents

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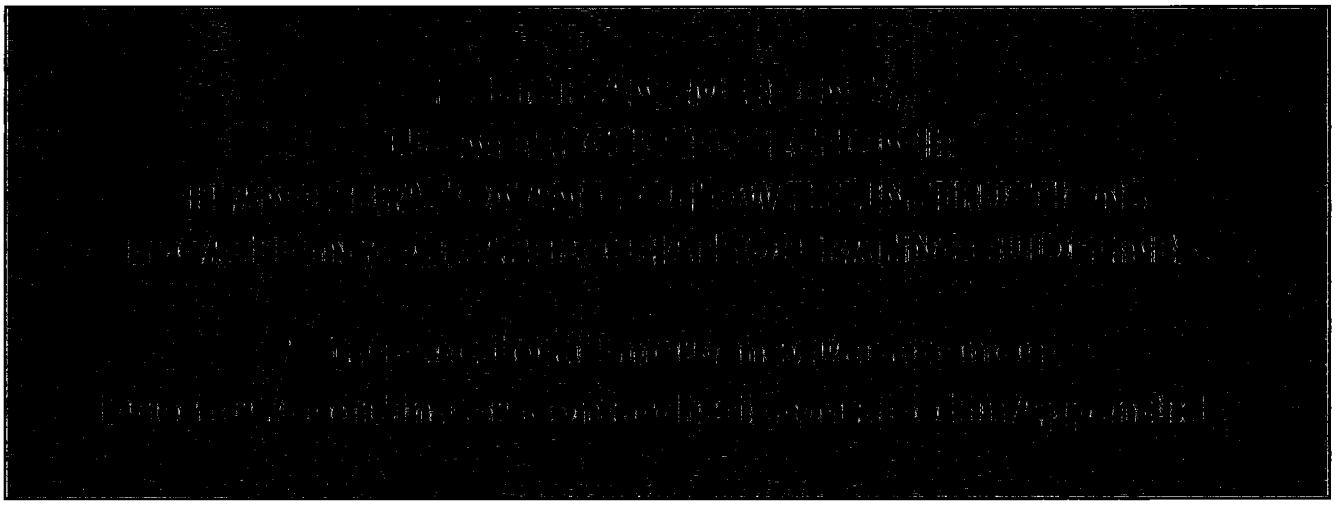

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Introduction

PURPOSE AND PHILOSOPHY

The 2013 Nevada Energy Assurance and Emergency Operations Plan (Plan) outlines the state's response to a shortage of energy. For planning purposes, the Office of Energy considers a shortage to mean an actual or potential loss of supply which significantly impacts the state's energy systems, including rapid increases in energy prices. A shortage can be caused by natural disasters such as earthquake, fire or flood, or geopolitical events such as war, terrorism, civil disturbance or embargo. This plan is a response to NRS 416.030 (2) and federal requirements of the Dept. of Energy's State Energy Program (SEP) Formula.

Since each energy shortage is unique, it is impossible to envision every event or combination of events which might qualify as, or lead to, an energy emergency. Instead of developing a separate response plan for every type of shortage, one flexible plan has been developed to work in any energy emergency, based on a review of the National Association of State Energy Officials (NASEO) Energy Assurance Guidelines and plans of neighboring states. The Plan provides a management structure that identifies the working relationships among people and a process to make those relationships work in a crisis. The Plan represents a dynamic planning process with the flexibility to evaluate and define a potential emergency and to respond adequately to any shortage situation.

The Plan relies upon a mixed strategy response to an energy shortage, using a free market approach with government intervention only to the extent necessary to protect the interests of public health, safety and welfare. Activation of the management and information system and the implementation of specific programs described in the Plan occur only when an energy shortage substantially disrupts Nevada's economy and normal operation.

During the early stages of a shortage, the primary role of state government is monitoring and information exchange, rather than direct intervention in industry efforts to restore services and satisfy customer requirements. The Office of Energy serves as a central source of credible and timely information on how a shortage impacts the state as a whole. The Plan is intended to lessen the potential adverse impacts of a shortage by providing the Governor, Legislature and policy makers, including the Nevada Division of Emergency Management within the Department of Public Safety (hereafter referred to as NDEM), with accurate and timely information for decision making.

If the shortage impacts transcend the boundaries of a single service territory or region, or if a shortage is likely to cause public controversy or attract widespread media attention, the Office of Energy intensifies its monitoring and public information activities. If a shortage continues or worsens, the Office of Energy may implement voluntary or mandatory conservation and other mitigation programs as appropriate.

The Plan has been designed around concepts compatible with the National Incident Management Systems (NIMS) practices which are utilized by NDEM in carrying out the State Comprehensive Emergency Management Plan, and by the Nevada Department of Homeland Security (NDHS), the Federal Emergency Management Administration (FEMA), and the federal Department of Homeland Security (DHS). The Plan approval is the responsibility of the Director of the Office of Energy and the Governor. Distribution of the Plan will be to NDEM, the State Library, the Legislative Counsel Bureau

(LCB), PUCN, the Federal Department of Energy and NASEO. The Plan will be on the Office of Energy web page, www.energy.nv.gov, except for Appendix A which is the confidential contact list. The Plan and appendices will be reviewed and updated, as necessary. The Appendix A contact list will be reviewed and updated every six months.

This revision is issued in accordance with American Recovery and Reinvestment Act, Department of Energy, Energy Assurance Grant DOE-OE-0000068. Follow-on support for the Energy Emergency Plan is provided by the State Energy Program Formula grant funding, Grant DE-EE-0003761.

OVERVIEW

Section I describes the components of the energy shortage contingency plan which include management and coordination, energy emergency phases, and response actions. The management and coordination discussion outlines all relevant agencies to coordinate with during an energy event, relationships between agencies, specific roles within agencies, and the responsibilities required to be carried out by those positions. The section includes the list of legal authorities for the Office of Energy to develop and implement the Plan. The energy emergency response phase discussion explains how activities will be implemented to correspond with the level of severity. The emergency response action discussion identifies those tools that will be implemented during each phase of an energy event including: coordination, planning and analysis; reporting communication programs; mitigation and conservation programs; and economic assistance programs.

Section II outlines the Plan operating guidelines, which include check lists to be carried out by each role identified with responsibilities within the Office of Energy and the Governor's office.

Section III details the Plan operations that are the responsibility of the Office of Energy during an energy event. The operations section contains tools regarding coordination, planning and analysis, communication programs, mitigation and conservation measures, and economic assistance programs.

Section IV details the cyber security for the smart grid and steps for developing cyber security for other situations.

Appendices include supplemental detailed technical resource data supporting issues covered in the Plan. Most appendices detail issues to consider when planning and preparing for an energy emergency, but Appendix A, Industry and Government Contacts List, is a critical tool and component of this Plan. Appendix A contains the key list of designated agency and industry contacts to coordinate with preceding and during an emergency. This list is to be regularly utilized and maintained by the Office of Energy staff in their efforts to monitor and coordinate energy events. This list is classified as "**Confidential**" and, as such, is not for public disclosure.

Section I - Plan Description

EMERGENCY RESPONSE MANAGEMENT AND COORDINATION

MANAGEMENT AND LEGAL AUTHORITY

This Plan is authorized to be developed pursuant to Nevada state law and is designed to be complementary to the framework of the National Incident Management Systems (NIMS) described in the next few pages. In accordance with the State Comprehensive Emergency Management Plan, the NDEM has the lead coordination role in any state emergency. The Office of Energy has the lead operations role in any energy emergency and, in accordance with the State Emergency Plan, shall provide assistance and coordinate efforts with the NDEM.

The staff, with any supplementary staff assigned by the Governor, shall serve as the primary agency responsible for any energy emergency or for the energy management of any other emergency. Whatever the emergency situation and degree of government involvement, the Office of Energy serves as the central clearinghouse for energy information and is responsible for assessing energy impacts in Nevada during an event that impacts energy price and supply; developing recommendations to address the situation; coordinating with the NDEM and reporting to the DOE Office of Energy; delivering status messages and direction to the public; performing any resource supply responsibilities such as energy-related aid and support; and carrying out any other functions identified by the NDEM.

The following Nevada Revised Statutes (NRS) under Chapter 701 grant authority to the Office of Energy in the preparation of the Plan. NRS Chapter 416 delineates the handling of emergencies concerning water or energy.

NRS 701.160 orders the Director to prepare and submit to the Governor a report concerning the status of energy in the state.
NRS 701.190 orders the Director to prepare a comprehensive state energy plan which provides methods for conserving and improving efficiency in the use of energy resources.
NRS 701.200 orders the Director to establish standards for energy conservation and for carrying out the Comprehensive State Energy Plan.
NRS 701.210 orders the preparation of petroleum allocation and rationing plans.
NRS 416.030 and 416.040 delineates the power of the Governor in dealing with energy emergencies.
NRS 416.050 identifies the procedure for the proclamation of an energy emergency by the Governor. To declare an energy emergency, or an impending energy emergency, pursuant to NRS 416.050, the Governor must file a proclamation with the Secretary of State following a proper notice for a public hearing on such proclamation. The proclamation will take effect immediately upon being filed.
NRS 416.060 details the powers of the Governor upon proclamation of emergency.
NRS 416.070, 416.080, 416.090 and 416.100 outline operational details of the emergency proclamation, including penalties for violations.

Federal authority for energy resilience is as follows:

- ✓ Federal Authority for the Office of Energy – 1 ESF-12 Energy Annex
- ✓ Homeland Security Presidential Directive (HSPD) – 5
- ✓ Presidential Policy Directive (PPD) – 21
- ✓ 6 U.S.C. 101
- ✓ 42 U.S.C. 5195c(e)

NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)

The NIMS is the national approach to incident management and has been incorporated into the State of Nevada Emergency Management operations. The components of the system follow:

COMMAND AND MANAGEMENT

The incident management structures employed by NIMS can be used to manage emergency incidents or non-emergency events such as celebrations. The system works equally well for small incidents and large-scale emergency situations. The system has built-in flexibility to grow or shrink depending on current needs. It is a standardized system, so personnel from a variety of agencies and geographic locations can be rapidly incorporated into a common management structure.

Incident Management System (ICS): The ICS has a number of features that work together to make it a real management system. Among the primary attributes of ICS are:

- Common Terminology – ICS requires the use of common terminology, such as the use of standard titles for facilities and positions within an organization, to ensure efficient and clear communications.
- Organizational Resources – All resources including personnel, facilities, major equipment, and supply items used to support incident management activities must be "typed" with respect to capability. This typing will minimize confusion and enhance interoperability.
- Manageable Span of Control – Span of control should ideally vary from three to seven. Anything less or more requires expansion or consolidation of the organization.
- Organizational Facilities – Common terminology is used to define incident facilities, the activities conducted at these facilities, and the organizational positions that can be found working there.
- Use of Position Titles – All ICS positions have distinct titles.
- Reliance on an Incident Action Plan – The incident action plan, which may be verbal or written, is intended to provide supervisory personnel a common understanding of the situation and direction for future action. The plan includes a statement of objectives, organizational description, assignments, and support material such as maps. Written plans are desirable when two or more jurisdictions are involved, when state and/or federal agencies are assisting local response personnel, or there has been significant turnover in the incident staff.
- Integrated Communications – Integrated communications includes interfacing disparate communications as effectively as possible, planning for the use of all available systems and frequencies, and requiring the use of clear text in communications.
- Accountability – ICS is based on an orderly chain of command, check-in for all responders, and only one supervisor for each responder.

Unified Command

- Unified Command is a variant of ICS used when there is more than one agency or jurisdiction with responsibility for the incident or when personnel and equipment from a number of different agencies or jurisdictions are responding to it. This might occur when the incident site crosses jurisdictional boundaries or when an emergency situation involves matters for which state and/or federal agencies have regulatory responsibility or legal requirements.
- ICS unified command is intended to integrate the efforts of multiple agencies and jurisdictions. The major change from a normal ICS structure is at the top. In a Unified command, senior representatives of each agency or jurisdiction responding to the incident collectively agree on objectives, priorities, and an overall strategy or strategies to accomplish objectives; approve a coordinated Incident Action Plan; and designate an Operations Section Chief. The Operations Section Chief is responsible for managing available resources to achieve objectives. Agency and jurisdictional resources remain under the administrative control of their agencies or jurisdictions, but respond to mission assignments and direction provided by the Operations Section Chief based on the requirements of the Incident Action Plan.

Area Command

- An Area Command is intended for situations where there are multiple incidents that are each being managed by an ICS organization or to oversee the management of large or multiple incidents to which several Incident Management Teams have been assigned. Area Command becomes Unified Area Command when incidents are multi-jurisdictional.
- The organization of an Area Command is different from a Unified Command in that there is no operations section, since all operations are conducted on- scene, at the separate ICPs.

Multi-Agency Coordination Systems: Multi-agency coordination systems may be required for incidents that require higher level resource management or information management. The components of multi-agency coordination systems include facilities, equipment, EOCs, specific multi-agency coordination entities, personnel, procedures, and communications; all of which are integrated into a common framework for coordinating and supporting incident management.

Public Information: The NIMS system fully integrates the ICS Joint Information System (JIS) and the Joint Information Center (JIC). The JIC is a physical location where public information staff involved in incident management activities can co-locate to perform critical emergency information, crisis communications, and public affairs functions. More information on JICs can be obtained at: https://www.fema.gov/nimscast/.

PREPAREDNESS

Preparedness activities include planning, training, and exercises as well as certification of response personnel, and equipment acquisition and certification. Activities would also include the creation of mutual aid agreements and Emergency Management Assistance Compacts. Any public information activities such as publication management would also be preparedness activities.

RESOURCE MANAGEMENT

All resources, such as equipment and personnel, must be identified and typed. Systems for describing, inventorying, requesting, and tracking resources must also be established.

COMMUNICATIONS AND INFORMATION MANAGEMENT

Adherence to NIMS specified standards by all agencies insures interoperability and compatibility in communications and information management.

SUPPORTING TECHNOLOGIES

This would include any technologies that enhance the capabilities essential to implementing the NIMS. For instance, voice and data communication systems, resource tracking systems, or data display systems.

ONGOING MANAGEMENT AND MAINTENANCE

The NIMS Integration Center (NIC) provides strategic direction and oversight in support of routine review and continual refinement of both the system and its components over the long term.

Due to limited resources at the Office of Energy, the NIMS approach will be followed in a modified form through the Readiness, Verification and Pre-emergency phases and reverts to NIMS in full as an Energy Support Function 12 responder to NDEM when an emergency is declared. Training of personnel will be the responsibility of the Director following the NDEM NIMS training guidelines.

Prior to an energy emergency, agencies such as NDEM, local governments, the PUCN, other state agencies, other states, industry and the federal government will be kept informed specifically as an energy situation is unfolding. The Office of Energy will evaluate the energy event as to the scope of the problem, the duration (how long to correct), the effect on storage, and the impact on the public with the information being directed through the Director to the Governor and NDEM. The Governor's Press Secretary or Public Information Officer will be used to issue press releases concerning the event, but there may be times that public announcements may be delayed to prevent a run on a commodity that may exasperate the situation.

COORDINATING AGENCIES

This Plan recognizes the need for multi-agency coordination. Effective communication with other state agencies, federal agencies and local jurisdictions is essential to a coordinated state response to an energy shortage. (The following entities will coordinate with each other through the management of the Office of Energy in accordance with NDEM emergency coordination protocols.) Each entity's responsibilities are detailed in the following paragraphs. Contact information for each entity referenced in this section is reflected in the Industry and Government Contacts List in Appendix A, which is deemed 'confidential' and is not included in this version. Contact information for area, county and city emergency officials is found in Appendix E.

Coordination with the Division of Emergency Management: The NDEM is the operational entity within Nevada that coordinates all emergency responses within Nevada state government, administering the SCEMP, which is modeled after and compatible with NIMS. During a disaster, the NDEM is the lead agency and other state agencies (including the Office of Energy) provide support through Emergency Support Functions (ESF), as defined and prescribed in the SCEMP. Various ESFs are defined within the State Emergency Plan related to a particular resource; the Office of Energy is the primary agency for Emergency Support Function 12 – Energy (ESF-12).

The NDEM will notify the Office of Energy if its ESF-12 role has been activated. Regardless of the type, scale, or cause of the emergency, the Office of Energy and the NDEM will work in cooperation on matters involving energy. The Office of Energy will use its expertise and contacts to provide accurate information and to coordinate resource requests with the NDEM to ensure a coordinated statewide response effort.

Coordination with State and Local Governments: The line of communication for local jurisdictions, particularly to request resources during an energy event is from city to county to the NDEM. The NDEM will contact the Office of Energy to coordinate information. The NDEM will notify the Office of Energy if its ESF 12 role has been activated, and the Office of Energy may coordinate its efforts with the NDEM and any local government agency who is overseeing the response to the disaster on energy related responses.

The Office of Energy will also coordinate with the Legislature, through the Governor's Press Secretary, to provide status updates and requests for support in promoting energy conservation and mitigation measures to constituents around the state. The Office of Energy may also coordinate with local governments, including Regional Transportation Commissions and public and private transit entities before and during an event to develop and implement transportation conservation strategies to minimize petroleum usage.

Coordination with the Public Utilities Commission: The Public Utilities Commission of Nevada (PUCN) is the regulatory agency that regularly monitors energy suppliers and distributors on a statewide basis. The Office of Energy will maintain regular communication with PUCN staff in an effort to provide current status reports on energy reliability within the state. During an actual or impending energy emergency, the Office of Energy will coordinate with, and draw resources from, the PUCN staff to meet the needs of the state and/or local jurisdictions in providing information and resources and support of the ESF-12 function as required.

Coordination with Other State Agencies: The Division of Welfare and Supportive Services (DWSS): The DWSS administers a broad range of programs to reduce the incidence of poverty, assisting low-income Nevada residents to become self-sufficient. The Office of Energy, in conjunction with the DWSS, has identified programs that could be augmented in an emergency. The DWSS existing network of resources and service organizations can provide for the implementation of programs during an energy emergency. Upon the activation of the Emergency Phase, the Director will appoint an Economic Assistance Coordinator to act as a liaison with ESF-6, Mass Care, which would take on those responsibilities.

During times of petroleum shortages, the Office of Energy will work with the Nevada Department of Transportation (NDOT) to develop and implement conservation measures as described in the relative mitigation and conservation sections and appendices of this document. In a fuel emergency, NDOT sites will be used to fuel emergency and first responder vehicles. Their sites are fenced and if necessary, the National Guard will be activated to provide security.

Coordination may also occur with any of the following agencies the Nevada Department of Homeland Security, Nevada Department of Agriculture Weights and Measures, Nevada Department of Environmental Protection (NDEP), Clark County Division of Air Management and Quality, Washoe County Air Quality Management District, Department of Public Safety, and the Department of Military.

Coordination with Other States: The United States is divided into Petroleum Administration Defense Districts or PADDs. The states within PADD V (Alaska, Arizona, California, Hawaii, Nevada, Oregon and Washington) are closely linked by their oil supply network. PADD V is essentially a self-contained oil supply system, and, because of this isolation, recognizes the need for cooperation and coordinated actions. The Office of Energy staff will notify any PADD V states of events that have the potential to affect energy supplies to that state. In addition, coordination with the State of Utah will be required as they provide fuel to Northeastern Nevada and Las Vegas.

Cooperation and coordination with other states, particularly California, is of utmost importance as the majority of petroleum fuels are imported into Nevada from California via pipeline and truck. Additionally, the California Energy Commission (CEC), with substantially greater resources, is capable of tracking events and developing information in advance of the Office of Energy. Since Nevada is so dependent upon petroleum from California, many events, including disasters or facility emergencies in California, could impact the supplies in Nevada; therefore, coordination is essential. The CEC coordinates monthly calls on fuel issues with Arizona, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming.

Coordination with other Affected ESF Functions:

The ESF functions that comprise the DEM support are as follows:

ESF 1	Transportation	ESF 9	Search & Rescue
ESF 2	Telecommunications	ESF 10	Hazardous Materials (HazMat)
ESF 3	Public Works	ESF 11	Agriculture & Natural Resources
ESF 4	Fire Fighting	ESF 12	Energy
ESF 5	Emergency Management	ESF 13	Public Safety & Security
ESF 6	Mass Care	ESF 14	Recovery/Mitigation
ESF 7	Purchasing	ESF 15	Public Information
ESF 8	Public Health & Medical	ESF 16	Military
ESF 8.1	Mental Health & Developmental Services		

The Office of Energy acting as ESF-12 (whether activated as such or not) will utilize the Division of Public Safety, Division of Emergency Management, State Emergency Operations Center contact list for phone and e-mail contacting of ESF functions. Also the State of Nevada Department and Agencies matrix lists the agencies that coordinate with ESF-12.
The Office of Energy is the lead agency for ESF-12 with the following agencies for coordination:

- Board for Regulation of LPG – LPG information
- Department of Administration – finances
- Department of Agriculture – fuel specifications and variances
- Department of Conservation & Natural Resources – air quality issues
- Department of Public Safety – Highway Patrol
- Department of Information Technology – cyber security
- Department of Transportation – fueling sites
- Division of Emergency Management – lead agency
- Welfare Division – funding for energy costs for those unable to pay
- Office of the Military – protection of energy infrastructure

Coordination with the Federal Government: This Plan is designed to be compatible with federal emergency planning activities. The U.S. Department of Energy (U.S. DOE), through its Office of Electricity Delivery and Energy Assurance is charged with protecting national interests in the event of foreign or domestic oil supply disruptions and designated as the federal ESF-12 within the federal emergency management systems carried out by FEMA. The Office of Energy staff will respond to U.S. DOE-OE requests for information. In coordinating with the NDEM and the U.S. DOE-OE in its role as the federal ESF-12, the Office of Energy staff will remain knowledgeable about the role of FEMA and the resources they provide in a natural disaster. The NDEM is involved in ongoing planning meetings conducted by FEMA and coordinates, as appropriate, with the Office of Energy.

The U.S. DOE-OE assists states, through coordination with industry associations, to develop energy assurance plans and utilize a network of contacts and an informational internet bulletin board to stay apprized on industry events. Users of the systems are designated Energy Emergency Assurance Coordinators (EEAC). EEACs are designated within each state and can access information through a password protected website.

Numerous other federal agencies play roles during energy emergencies and can be contacted or monitored to extract valuable information and data. A comprehensive list of such agencies is included in the Industry and Government Contacts List (Appendix A).

Coordination with Industry Contacts: Before and during an energy event, it is critical to draw on information and resources of those entities that own or operate energy resources which make up the supply side of Nevada's energy profile. Nevada's major electric and natural gas utilities include NV Energy, Southwest Gas, Valley Electric Association, the Colorado River Commission of Nevada, Wells Rural Electric Company, CO-OPS, municipal electric companies, and general improvement districts. Designated representatives and contact information for each are contained in the Industry and Government Contacts List (Appendix A). (The Appendix A contact list is confidential.)

Furthermore, regional industry associations can also provide valuable information before and during an energy event. Specific entities include the California Independent System Operator, Western Electricity Coordinating Council (WECC), and Western Regional Transmission Association. Each entity identified is included in Appendix A, but contact would be through the investor-owned utility in Nevada (NVEnergy).

SOURCES FOR MONITORING ENERGY SUPPLIES IN NEVADA

Monitoring Energy Supply: Energy supply monitoring should take place regularly. The Office of Energy and Public Utility Commission keep track of energy developments pertaining to Nevada, its region, and the nation through industry contacts, trade publications, and statistical reports. The EIA website (http://www.eia.doe.gov/) provides an abundance of reports and statistics on all types of energy, arranged in a variety of ways to make the data easy to find. The monitoring data gleaned from these data is basically historical data. For current data during an emergency, the contacts listed in Appendix A would be utilized.

Electricity

A. General Information

Day-to-day electricity supply and demand are monitored on a routine basis by operating companies. Utilities generally prepare annual forecasts estimating demand for electricity and the means to satisfy it for the following five years. Other forecasted information includes:

- expected price for fuel and other necessary purchases;
- expected fuel and purchased power availability; and
- plant status and similar data.

B. Reporting to the DOE

Utilities are also required to report to the DOE Emergency Operations Center any of the following events:

- loss of firm system loads;
- voltage reductions;
- requests to the public to reduce usage;
- vulnerabilities that could impact system adequacy or reliability; and
- fuel supply emergencies (see Power System Emergency Reporting Procedures, May 1989, U.S. DOE).

C. Data Sources

1. Electricity Sales
   Monthly sales of electricity are published by state, month, and sector by the EIA in the Electric Power Monthly found at:
   http://www.eia.doe.gov/cneaf/electricity/epm/epmsum.html).

D. Electricity Production by Fuel Source

This information is published in the EIA Electric Power Monthly (http://www.eia.doe.gov/cneaf/electricity/epm/epm_sum.html) that includes, in English units (tons and barrels):

- the quantity of fuel used;
- kilowatt-hour produced;
- fuel costs by state.

The source of this information is the Monthly Report of Cost and Quality of Fuels for Electric Plants, FERC-423.

E. Levels of Fuel Inventories Available for Generation

Coal inventories and prices are published in the EIA Quarterly Coal Report (http://www.eia.doe.gov/cneaf/coal/quarterly/qcr_sum.html), which lists the amount of coal consumed in each state and the price paid by each sector. Levels of fuel inventories will be estimated by each utility and reported by the number of days of supply on hand at each location for coal and oil-fired plants.

F. Generation Capacity and Plant Availability

This information can be obtained from the Inventory of Power Plants in the United States (http://www.eia.doe.gov/cneaf/electricity/ipp/ipp99_sum.html) published by the EIA.

G. Regional System Reliability Forecast

NERC (http://www.nerc.com/) publishes annual reports of regional system reliability. These reports assess regional reserve margins by comparing net system availability with peak load projections and system-pool reserve availability.

H. Coal Distribution

This data is published in the EIA Quarterly Coal Distribution Report (http://www.eia.doe.gov/cneaf/coal/quarterly/qcr_sum.html), and is a source of information regarding the origin and method of shipping coal.

I. Cooling and Heating Degree Days

Cooling and heating degree day data are available from the National Weather Service and National Oceanic and Atmospheric Administration (NOAA).
http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/cus/degree_days/
This data may be used to describe extreme weather conditions that create peak loads on the electrical generation system.

Natural Gas

A. Complexities in Monitoring Natural Gas

Natural gas markets have become more complex to monitor in recent years as a result of the direct purchase agreements between large users and wellhead producers. This decentralization has resulted in a significant decrease in available data. Adequate monitoring of natural gas requires information covering:

- the quantity of interstate deliveries to local distribution companies (LDC);
- storage levels;
- gas injection rates into storage;
- projected system send-outs;
- spot market and contract prices;
- curtailment notices; and
- heating degree days.

B. Data Sources

1. Interstate Deliveries to LDC

Natural gas deliveries by sector are shown in the EIA Natural Gas Monthly (http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_monthly/ngm.html), that shows the amount of natural gas delivered into the state for sale.

2. Storage Levels and Injection Rates

State natural gas inventories are reported in the EIA Natural Gas Monthly, (http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_monthly/ngm.html). From this information, the percentage of storage capacity being used at any time can be calculated.

3. Projected System Send-Outs

Natural gas demand and supply projections are provided by the LDC as part of their annual GCR filings. These projections include storage field inventory balances. Potential shortages can be identified when long-term supply is inadequate to meet projected demand.

4. Spot and Contract Prices

Average city gate prices (price to the LDC as gas is received) and prices by sector, for each state are published in the EIA Natural Gas Monthly, (http://www.eia.doe.gov/oil_gas/natural_gas/data_publications/natural_gas_monthly/ngm.html). Price is an indicator of aggregate supply. When short-term prices are lower than long-term contract prices, supplies are generally judged to be in excess of demand. Conversely, when long-term contract prices are lower, spot markets are assumed to be tight, indicating that demand may be exceeding supply.

5. Curtailment Notices

Interstate pipelines provide notices of curtailments to FERC. Notices of curtailment are early indicators of reduced supply. The supplementary supply required to offset the reduction in deliveries may need to be calculated and perhaps satisfied from other in-state supplies, depending upon the current levels of storage volumes, actual system send outs, and inter-tie exchanges.

6. Heating Degree Days

Heating degree-day information is provided the National Weather Service on a daily and monthly basis:

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/cdus/degree_days/. Statistics can often be obtained through local or regional weather stations. These values indicate periods of extreme cold weather that bring on increases in demand for natural gas for space heating.

Petroleum

Monitoring Petroleum Markets

Petroleum markets are monitored continuously by marketers and commercial buyers. Statistical organizations such as the EIA maintain databases containing information used to determine recent market behavior and anticipate supply disruptions. The American Petroleum Institute (API) (http://www.api.org/statistics/) is another source of information. While it is relatively easy to obtain aggregate petroleum data, the nature of the petroleum market, and the lack of regulation, makes learning about individual companies relatively difficult unless you have a confidentiality agreement.

1. Motor Gasoline Consumption

The total number of gallons of gasoline used is provided on a monthly and annual basis of motor gasoline sales revenue by the Federal Highway Administration. The data can be found at: http://www.fhwa.dot.gov/index.html.

2. Petroleum Product Demand

Monthly deliveries of petroleum products to states by primary suppliers are reported in the EIA Monthly Report of Petroleum Products Sold into States for Consumption at: (http://www.eia.doe.gov/oil_gas/petroleum/info_glance/consumption.html)

3. Form EIA-782C

This report contains actual delivered volumes for the month for each petroleum product supplied and projected deliveries for the upcoming month. This information is necessary in order to determine the severity of a petroleum shortage and to calculate the amount of petroleum product to be set aside for emergency hardships. Monthly historical sales of all petroleum products by state are also reported in the EIA C-007 Report, First Sales of Petroleum Products into States for Consumption.

4. Wholesale and Retail Prices

Wholesale and retail prices are available on the EIA web site at: http://www.eia.doe.gov/oil_gas/petroleum/info_glance/prices.html. The data include weekly and monthly prices such as the EIA Petroleum Marketing Monthly, that provides monthly information regarding wholesale and retail prices at the state level and the Weekly Petroleum Status Report that provides information on national and international prices and inventory information. In an emergency, more timely information is needed and may be obtained through industry publications such as Oil Price Information Service's OPIS-Alerts or the Oil Daily. Special state-conducted telephone surveys of petroleum distributors and retailers are also conducted.

5. Inventories and Production

Inventory (stocks) and production data can be found on the EIA web site at: http://www.eia.doe.gov/oil_gas/petroleum/info_glance/stocks.html and http://www.eia.doe.gov/oil_gas/petroleum/info_glance/exploration.html. Data are presented weekly and monthly by region. Data are reported by regional areas known as Petroleum Administration for Defense Districts (PADD). Nevada is in PADD V. State level monthly inventories are also published in this report. Weekly data are also available through the API Weekly Statistical Bulletin at: (http://www.api.org/statistics/) at PADD level aggregation.

6. Infrastructure Information

Relevant information includes a listing of refineries serving the state, their production and storage capacities, the location and capacities of pipelines and terminals, and marine terminals. This information is compiled from various sources including state, industry and other private sources. A list of operable refineries can be found in EIA Petroleum Supply Annual at: http://www.eia.doe.gov/pub/oil_gas/petroleum/data_publications/petroleum_supply_annual/psa_volume1/current/pdf/table_38.pdf.

7. Source of Crude Oil

The source and volumes of crude oil supply used by regional refineries may be found in the EIA Petroleum Supply Monthly at: (http://www.eia.doe.gov/oil_gas/petroleum/data_publications/petroleum_supply_monthly/psm.html). This information is needed to estimate the extent to which refiners may need to shift supplies if any given source of crude oil is disrupted. For example, when crude oil was embargoed from Iraq and Kuwait in 1990, the effects of this action on Midwest supplies was able to be determined.

8. Heating Degree Days

Heating degree-day information is provided by the National Weather Service on a daily and monthly basis, http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/cdus/degree_days/. Statistics can often be obtained through local or regional weather stations. These values indicate periods of extreme cold weather, which bring on increases in demand for heating fuels for space heating.

PROTECTING CRITICAL ENERGY INFRASTRUCTURE

The state plan for Critical Infrastructure Protection is under the jurisdiction of Homeland Security and our three fusion centers (Carson City, Las Vegas and Reno). The energy sector is covered in the plan in the same manner as other infrastructure issues and the public and private sector plans are coordinated by Homeland Security and the fusion centers.

The roles and responsibilities of the state agencies involved with Critical Infrastructure Protection are:

- The protection segment is centered with Homeland Security and the fusion centers.
- The Division of Emergency Management brings state agencies together to respond to emergency situations. Prior to the state of emergency, the Energy Office monitors energy issues, but is not responsible for protection.

Description and prioritization of critical state energy infrastructure and key assets:

- These items are identified in classified documents under the jurisdiction of Homeland Security and the fusion centers

Assessing risk, vulnerabilities, criticality, and the nature of the threat:

- These items are identified in classified documents under the jurisdiction of Homeland Security and the fusion centers that identify protective measures.
- This again is the responsibility of Homeland Security and the fusion centers. The Energy Office only monitors disruptions regardless of how the disruption takes place.

Policies and procedures for protecting sensitive information:

- The information that the office of energy controls are in locked cabinets, are marked confidential and are under lock and key when the office is empty. These items are basically contact lists. We do not keep maps or other information in the office. We have access to these types of information on a need to know basis at the utility, fusion center, emergency management or homeland security.

  Further information on the overall state response to an emergency may be found in the State Comprehensive Emergency Management Plan (SCEMP), which this plan supports. For access to the state Comprehensive Emergency Management Plan, please contact the Department of Emergency Management at (775) 687-0300.

EMERGENCY RESPONSE PHASES

Consistent with the philosophy of "free market approach" and minimum government intervention, the Plan is structured in five levels, or phases, of increasing activity. The five phases are:

- Readiness
- Verification
- Pre-emergency
- Emergency
- After Action Assessment

During an energy shortage, the activities prescribed in each phase intensify depending on the severity of the shortage. The point of transition from one phase to the next is not an absolute. To a large degree, it is qualitative, the implementation of each phase is an Office of Energy decision, recognizing public perception of the seriousness of the energy emergency. Specific operational details related to carrying out any of the below activities are described under Section III, Office Operations.

READINESS PHASE

Encompasses the ongoing activity of the Office of Energy staff under normal operating conditions. The staff routinely monitors Nevada, regional and world events that have the potential to cause an energy supply disruption. Specific staff will have the designated responsibly to carry out regular contingency planning operations, which will include:

- Update and maintain a network of public and private-sector contacts, attached as Appendix A Industry and Government Contacts List. (This list is confidential and not available for public distribution.)
- Monitor international and domestic events,
- Notify the Director of any data which could significantly impact energy supply and prices, and
- Conduct periodic testing training of the Plan (usually in conjunction with NDEM)

VERIFICATION PHASE

Marks the activation of a more formal communication network as established in this Plan to contact designated credible sources of information to verify the energy situation. The Director will designate an Energy Program Manager to oversee verification activities. Coordination is initiated with the NDEM, the U.S. DOE-OE, other states, Nevada state agencies, local governments, and private industry, as appropriate.

The Office of Energy will rapidly determine the nature, extent and duration of a potential or impending energy shortage. The Office of Energy Contingency Planning Staff will assess the potential impacts of anticipated petroleum, natural gas, propane (LPG), coal, ethanol or electricity shortages on energy prices and supplies, and recommend further action to the Director. This assessment serves as the basis of a formal Verification Report for submission to the Governor by the Director. (The reporting form is shown as Figure 3.) If the Director determines the existence of a protracted energy problem, he or she may recommend transition to the Pre-Emergency or Emergency phase of the Plan. Ongoing activities will be contact suppliers identified in Appendix A.

PRE-EMERGENCY PHASE

Involves an increased level of government activity as the energy shortage or supply disruption worsens. The Office of Energy will begin to establish additional resources and convene to the Office of Energy Energy Emergency Center. Media contacts will be through the Director and Governors' press secretary.

The Governor, upon recommendation by the Director, may appeal to the public to begin voluntary conservation measures to mitigate the impacts of an energy supply disruption. The Office of Energy staff will assess the effectiveness of these voluntary demand reduction measures.

If the Director determines that voluntary action has mitigated the expected impacts of the shortage, no need will exist for additional state action, unless such action is directed by the federal government. If, however, the crisis becomes more severe and warrants implementation of mandatory emergency measures, the Director may recommend that the Governor proclaim a state of emergency, activating this Plan's Emergency Phase.

EMERGENCY PHASE

Involves all activities initiated during the Pre-Emergency phase, plus any additional voluntary or mandatory programs which may be needed to respond to a worsening energy shortage. The initiation of an Emergency Phase signifies the development of a widespread or prolonged problem that may not improve through normal market functions, and therefore actions designed to interfere minimally with the market may be implemented to alleviate the situations. Such actions include mandatory conservation programs, fuel set-aside programs and economic assistance programs. Office of Energy staff will notify the Director who will notify the Governor and NDEM.

To impose mandatory programs, the Governor must first proclaim an energy emergency or impending energy emergency pursuant to NRS 416.050, and then sign Executive Orders necessary to implement mandatory conservation programs. All mandatory measures automatically cease when the Governor rescinds the proclamation of energy emergency or impending energy emergency. With the activation of the Emergency Order, Office of Energy will be activated as ESF-12 under NIMS as the NDEM takes over the lead.

AFTER ACTION ASSESSMENT

After an energy shortage has diminished or been resolved at any emergency phase level, an "After Action Assessment" will be conducted to review and evaluate the performance of the Plan and implementation activities. An After Action memo will be developed and delivered to the appropriate representatives. Any observed and necessary modification to the Plan and implementation activities can be addressed at that time. This activity will be as an ESF-12 function under NDEM.

EMERGENCY RESPONSE ACTIONS

The emergency response actions will be performed under the direction of NDEM with the Office of Energy activated as an ESF-12 responder. Actions necessary to respond to any potential event can be described generally in four broad categories:

- Coordination, planning and analysis
- Communication program
- Mitigation and conservation programs
- Economic assistance programs

COORDINATION, PLANNING AND ANALYSIS

Before and during an energy event, it is the responsibility of the Office of Energy to stay involved in activities to monitor, report, and assess energy supply issues affecting the state. Monitoring activities require coordinating and maintaining relationships with all surrounding industry contacts, in an effort to be adequately informed about all energy-related issues. In maintaining those relationships with industry contacts, planning activities may take place to better understand the resources essential to Nevada. Such planning activities include the development of this Plan and the testing and training of its use by all coordinating Nevada energy industry groups.

Additionally, information regularly collected through coordination and planning activities is analyzed to evaluate any potential impacts to energy supply in Nevada. The Office of Energy will regularly review Nevada's energy profile and assess vulnerabilities and potential impact to its supply. These same evaluation and assessment processes, which are implemented by the Office of Energy on a regular, day-to-day basis to evaluate the energy supply in Nevada, will be utilized and carried out as an emergency verification assessment during an event or impending event.

Planning and analysis activities are detailed in Section III and in the appendices of this Plan. Existing energy profile data is compiled and accessible in the Status of Energy Report at: www.energy.nv.gov.

PUBLIC COMMUNICATION PROGRAM

A public communication plan is an essential part of an emergency response plan in order to consistently and accurately inform the public about the status of a situation, as well as to educate and coordinate participation in mitigation programs which help to alleviate the situation. It is critical to develop clear lines of communication and reporting mechanisms to assure consistency in information distributed. To that end, throughout this Plan, protocols are provided for communication between all parties identified in this Plan and tools to report information are described. Additional detail is discussed in Section III of this Plan. In a non-emergency activity the communications will be from Office of Energy staff to the Director to the Governors' Press Secretary (Information Officer). During an emergency, the NDEM NIMS organization will issue public information.

CONSERVATION AND MITIGATION PROGRAMS

In the event of an energy supply shortage or disruption, a strategy for reducing energy demand is critical. Two broad types of demand reduction measures are:

- Public appeals for voluntary energy conservation
- Mandatory mitigation measures for use in the Emergency Phase

The NDEM, with input from the Office of Energy staff, will identify those measures appropriate to the situation and the perceived duration of the disruption. Mandatory measures should be applied in a coordinated manner statewide. Specific measures, both voluntary and mandatory, are contained in Section III of this Plan.

Suggested voluntary measures are a compilation of conservation options, sorted by energy type including electricity, natural gas, propane (LPG), heating oil, coal, transportation fuels (including aviation fuel), ethanol and other petroleum products. These measures address energy shortages resulting from both local and remote disasters and market disruptions. Measures are applicable to long- and short-term

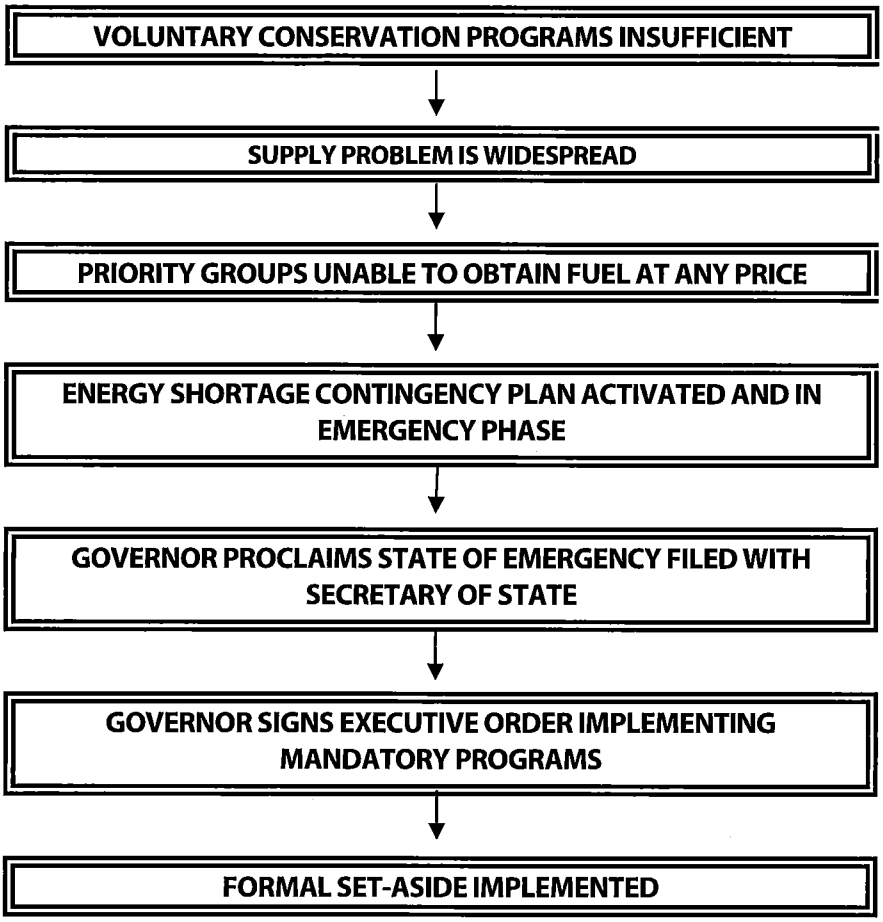
shortages in urban, suburban and rural localities. Many of the measures are also applicable in non-shortage times and can decrease the overall vulnerability to energy shortages.

After implementation of voluntary conservation measures, the Office of Energy will evaluate the results. This information will be used to develop recommendations to the Governor either to continue current programs or to begin emergency programs. Emergency programs may include mandatory implementation of previous voluntary measures and other measures such as Emergency Fuel Allocation Program or Economic Assistance.

The Emergency Fuel Allocation Program has two components: first, the disaster support function for use during a specific, isolated event; and second, the Petroleum Fuels Set-Aside program for use during a more widespread or prolonged shortage. Specific measures are contained in Section III of this plan. The criterion for implementation of any set-aside program is outlined in **Figure 1**.

The program implementation and application processes are contained in the Fuels Allocation Office Operations Manual discussed in Section III and attached as Appendix B. This manual is designed to assist the Fuels Allocation Officer, appointed by the Director, in establishing the Fuels Allocation Office. It is conceivable that both the disaster support function and the set-aside function are operating at the same time. For example, an earthquake in the Las Vegas area could damage the transportation fuel pipeline and roadways leading to the Las Vegas area and cause a temporary fuel shortage throughout Southern Nevada. In this case, the Office of Energy would continue to ensure adequate fuel supplies are available to those responders directly involved in the disaster. At the same time, the Office of Energy may allocate fuel to help mitigate the shortage outside of the disaster area. However, the amount to be allocated outside of the disaster would be limited by a maximum 5 percent volume further discussed in Section III.

Figure 1
CRITERIA FOR IMPLEMENTATION OF SET-ASIDE



ECONOMIC ASSISTANCE PROGRAMS

Although the use of market mechanisms is usually efficient in balancing supply and demand, the result in disproportionate economic impacts on low-income households may occur during energy events. In recognition of this problem, the Office of Energy and the DWSS have identified programs that could be augmented in an emergency.

The three main energy programs are:

1. The Community Services Block Grant.
2. The Low-Income Home Energy Assistance Program, which contains two components, Energy Crisis Intervention Program and Home Energy Assistance Program.
3. The U.S. DOE Office of Energy Weatherization Assistance Program (DOE Office of Energy-WX).
4. In addition, some utilities maintain programs to assist with or defer payment of utility bills for eligible parties. Detailed measures are contained in Section III of this Plan.

The DWSS works with a network of community-based organizations, providing the resources needed to break the poverty cycle. These agencies include local governments and other community-based organizations servicing low-income people. Because of the existing network, there is flexibility in place to implement energy emergency assistance.

During an energy event in the Emergency Phase, the Office of Energy appointed Economic Assistance Coordinator would work with the ESF-6 to implement and administer available programs. Most payments are delivered to low-income residents by the ESF-6. The ESF-6 depends primarily on federal funding for the programs it administers. These funds may need to be augmented to respond to an energy emergency due to reductions that have been experienced in some programs. Details are contained in Section III of this Plan.

Section II - Plan Operating Guidelines

MANAGEMENT STRUCTURE

The management structure listed herein applies to the pre-emergency activities. If an emergency is enacted, the organizational structure would follow NIMS and NDEM would be the lead agency. The importance of the management system is knowing who is in charge, the lines of authority, and the process for providing essential information to those who need it to direct appropriate responses. Successful implementation of the Plan in an emergency depends upon the management structure and understanding by staff of their operational responsibilities.

The Office of Energy Energy Response Organizational Chart and the Operating Guidelines provide the structure and specific responsibilities. Both the management structure and the assigned tasks were developed to closely reflect the usual day-to-day roles of those positions. **Figure 2** displays the relationships, lines of authority, communication and points of cooperation between the Director and staff involved in implementing the Plan. Specific reporting and review procedures are included in the individual operating guidelines.

ROLES AND RESPONSIBILITIES

Upon notification of an impending energy emergency, persons in the positions listed below are to review the operating guidelines contained in this section and begin activities as directed and as appropriate to the situation. A summary follows that describes the general responsibilities of each position.

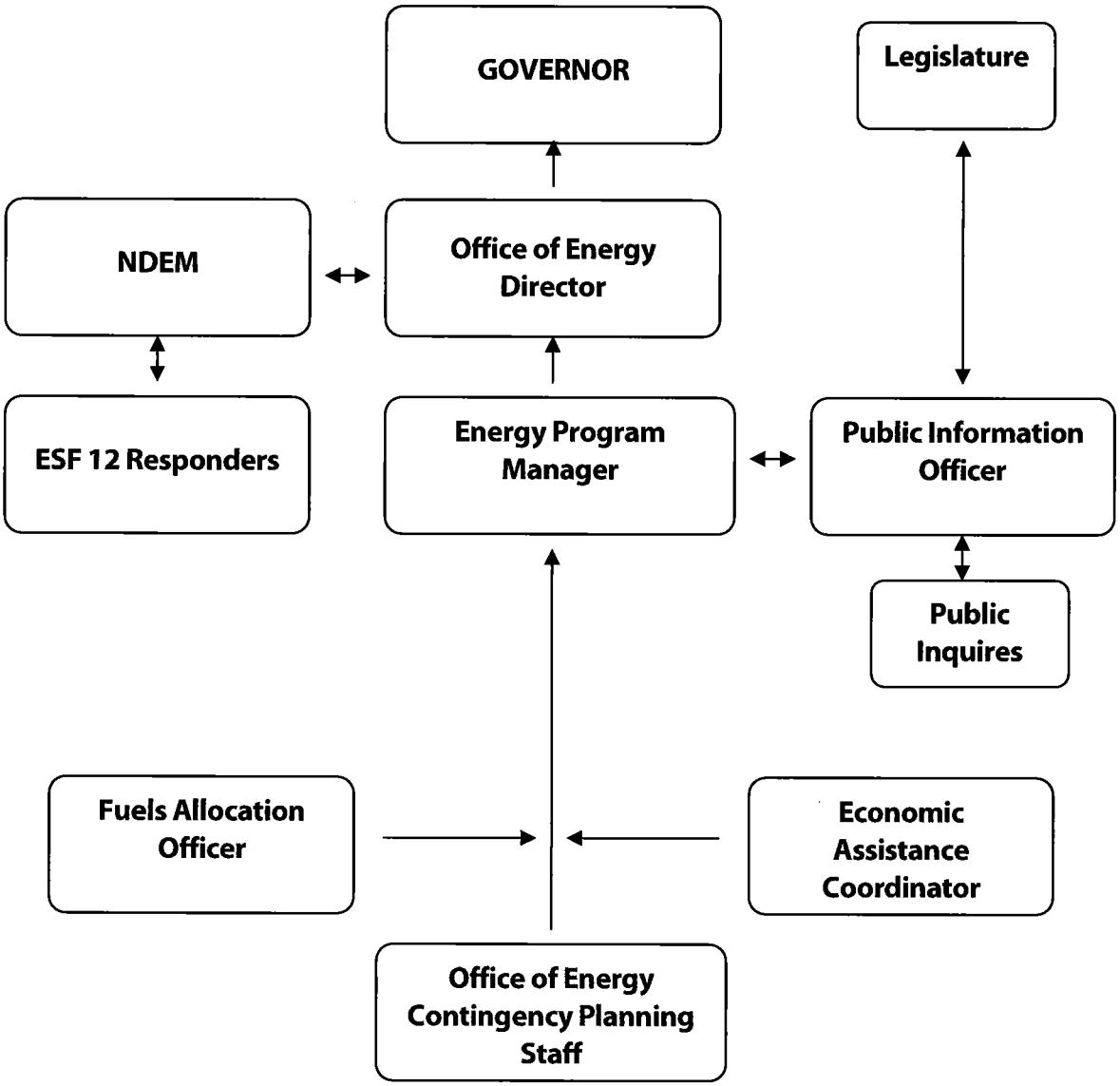
Governor: Directs the public, as well as all state government agencies, in voluntary energy conservation measures. When appropriate, proclaims a State of Emergency and signs proclamations necessary to implement mandatory conservation programs deemed necessary upon recommendation of the Director.

Director-Office of Energy: Directs staff to proceed with specific elements of the Plan. Using the data and analysis provided by staff, the Director will present recommendations to the Governor on how best to respond to the energy event. The Director facilitates the role of the EEAC as designated by the U.S. DOE-OE. If, for any reason, the Director is unavailable, the Office of Energy Deputy Director will be responsible for implementing the Plan. The Director will be responsible to make sure the appropriate staff will be trained in compliance with NIMS training requirements such as ICS-100, -200, -300, etc.

Energy Program Manager: The Energy Program Manager, when designated by the Director, is responsible for specific staff assignments. The Energy Program Manager initiates multi-level communications with government and private industry. The Manager provides frequent briefings to the Director and other staff on the results of staff's information gathering and analysis.

Public Information Officer (Governor's Press Secretary): The Director schedules and prepares briefings for the Governor's Office, Legislature, and the media, as well as responding to inquiries from state and local officials. The Public Information Officer (PIO) is responsible for disseminating accurate information approved by the Director and the Governor to the general public, advising them on the status of the situation and providing guidelines for energy demand reduction.

Figure 2
ENERGY RESPONSE ORGANIZATION CHART



Office of Energy Contingency Planning Staff: Under the direction of the Director and the Energy Program Manager, monitors situations, analyses impacts, plans responses, prepares reports, and implements programs. The staff will maintain a network of contacts with other government levels and private industry.

Economic Assistance Coordinator: Appointed by the Director in an Emergency Phase of an event, and with direction from the Energy Program Manager, works with the DWSS to prepare options for revenue assistance and program implementation. Much of this activity is done by ESF-6 during an emergency, but there are needs for support for excessive energy costs and LIHEAP and HEAP coordination to mitigate energy cost hardship in non-emergency events.

Fuels Allocation Monitor: Appointed by the Director in an Emergency Phase of an event, if a petroleum fuel set aside program needs to be implemented and at the direction of the Energy Program Manager, administers the set aside program and reviews and grants applications for additional fuel based on specific criteria detailed in Section III of this Plan.

OPERATING GUIDELINES

Operating guidelines provide the general responsibilities and specific duties, by phase, of the people involved in implementation of the plan. Guidelines were developed for the following positions and are intended to be reviewed and followed, as appropriate, during an energy event.

GOVERNOR

Directs the public, as well as all state government agencies, in voluntary energy conservation measures. When appropriate, the Governor proclaims an energy emergency and signs Executive Orders necessary to implement mandatory conservation programs deemed necessary upon recommendation by the Office of Energy.

Verification

- Receives periodic reports from the Office of Energy on the status of Nevada's energy price, supply and distribution systems.
- Obtains briefings from the Director.
- Alerts Governor's Office Press Secretary to coordinate with the Director, or Deputy Director if the Director is unavailable, for any news releases or response to media inquiries.

Pre-Emergency

- Issues public appeal for voluntary energy demand reduction.
- Meets and confers with the NDEM Emergency Operations Executive Council.
- Directs all state government agencies to reduce energy consumption.
- If the energy shortage level increases, prepares to proclaim a state of emergency.

Emergency

- Reviews emergency response recommendations submitted by the Office of Energy.
- Issues public appeals for increased energy conservation efforts.
- Files proclamation and signs Executive Orders as necessary to implement mandatory energy conservation programs.
- Directs all state government agencies to increase energy demand reduction efforts.
- If energy shortage level increases and becomes widespread, requests a Presidential declaration of emergency.

- Requests federal assistance and aid, where needed, to ensure order and protect the health, safety and essential services of the citizens of Nevada.

DIRECTOR - OFFICE OF ENERGY

Directs staff to proceed with specific elements of the Plan. Using the data and analysis provided by staff, presents recommendations to the Governor on how best to respond to the impacts of the energy problem.

Readiness

- Oversees staff operations to regularly monitor energy events, conduct periodic emergency testing and training, and maintain the list in Appendix A.
- Reviews and considers any reports from staff notifying of events which are likely to have impacts on energy supply and price.
- Regularly monitors and distributes information obtained from the EEAC carrying out the role of the Energy Emergency Assurance Coordinator.
- Communicates regularly with other relevant agencies (NDEM, PUCN, etc) as necessary.

Verification

- After notification of a potential shortage, designates an Energy Program Manager and instructs staff to confirm reports and monitor the situation.
- Establishes a briefing schedule with the Energy Program Manager to evaluate the situation.
- Meets with Energy Program Manager and Governor's Press Secretary to review news releases.
- Directs preparation of a Verification Report and Situation Report for submittal to the Governor's Office.
- If the probability of an energy shortage is likely or the situation worsens, go to the Pre-Emergency Phase.
- If the situation is resolved, directs staff to prepare After-Action Memo and returns to Readiness Phase.

Pre-Emergency

- Increases briefing schedule to discuss current situation and strategy.
- Confers with Energy Program Manager and the Governor's Press Secretary to coordinate press releases with the NDEM Public Information Officer.
- Reviews press release and media briefing packages.
- Directs Energy Program Manager to prepare regular reports containing major energy events and recommendations for further action.
- If energy shortage increases to serious, prepares a recommendation for the Governor to proclaim an energy emergency, coordinating with the NDEM Chief.
- If the situation is resolved, directs staff to prepare After-Action Memo and return to Readiness phase.

Emergency

- Confers with the staff regarding status of the situation and supports activation of ESF-12.
- Ensures that the Governor receives regular Situation Reports.
- Discusses possible mitigation strategy with the Energy Program Manager.

- Directs the Energy Program Manager to draft emergency response recommendations.
- Meets with the Energy Program Manager and staff to review mandatory programs and other options.
- Presents emergency response recommendations to the Governor.
- If the Petroleum Fuels Set-Aside Program is implemented, appoints the Fuels Allocation Officer.
- If low-income assistance is required, directs the designation of an Economic Assistance Coordinator to serve as liaison to ESF-6.
- If energy shortage level increases to severe, recommends that the Governor request a Presidential Declaration of Emergency.
- If the situation is resolved, directs staff to prepare After-Action Memo and return to the Readiness phase.

ENERGY PROGRAM MANAGER

The Energy Program Manager, when designated by the Director, reports to the Director and is responsible for specific staff assignments. The Energy Program Manager initiates multi-level communications with government and private industry. The Energy Program Manager regularly briefs the Director on the results of the staff's information gathering and analysis.

Verification

- Prepares and coordinates regular briefings of the Director.
- Directs Contingency Planning Staff to monitor, collect and analyze data, maintaining an activity log.
- Reviews staffing, resources and equipment needs; directs requests to the Director.
- Contacts NDEM and U.S. DOE-OE for information and coordination.
- At the instruction of the Director, directs staff to prepare Verification Report for the Governor's Office.
- If the probability of an energy shortage is likely, prepares to implement the Pre-Emergency Phase.
- If the probability of an energy shortage diminishes, confers with the Director to discontinue Verification Phase.

Pre-Emergency

- Instructs the staff to set up the Energy Emergency Center.
- Meets with the Director for regularly scheduled briefings.
- Ensures that an adequate level of staffing is maintained.
- Ensures that adequate communication systems and appropriate visual aids are available to the Director.
- Confers with the Director to coordinate press releases and plan briefings with Governor's Press Secretary for the Legislature and the public.
- If energy shortage level increases to serious, assists the Director with transition to the Emergency Phase.
- If energy shortage diminishes, reduces activity to Verification or Readiness Phase; directs staff to prepare After-Action Memo.

Emergency

- At the instruction of the Director, manages staff in the implementation of Emergency Phase activities as ESF-12.
- Reassesses staff, equipment and communication needs in the Energy Emergency Center.
- Directs staff to prepare regular updates and attend briefings with the Director.
- Directs staff to monitor impact of shortage on local jurisdictions.
- Ensures that staff works closely with NDEM.
- At the instruction of the Director, drafts emergency response recommendations and implements mandatory demand reduction programs.
- If the Petroleum Fuels Set-Aside Program is implemented, assigns support staff for the Fuels Allocation Officer as instructed by the Director.
- If low-income assistance is required and at the instruction of the Director, designates an Economic Assistance Coordinator to serve as liaison to ESF-6.
- If energy shortage level increases to severe, directs staff to intensify all programs and activities as directed.
- If energy shortage level decreases to less than serious, directs staff to reduce monitoring and mandatory programs. Upon instruction by the Director, has staff prepare an After-Action Memo and return to Readiness Phase.

GOVERNOR'S PRESS SECRETARY (PUBLIC INFORMATION OFFICER)

At the instruction of the Director or Governor, schedules briefings for the press. The Governor's Press Secretary delivers copies of Situation Reports to Legislators, prepares briefing packages for the Director to present to the Legislature, and responds to inquiries from state and local elected officials. The Press Secretary is also responsible for disseminating accurate information obtained from the Director, and approved by the Governor, to the general public and state and local representatives, advising them on the status of the situation and providing guidelines for energy demand reduction and mandatory programs.

Verification

- Determine staffing and equipment needs for response to media and public inquiries.
- Establish and maintain an activity log and legislative, media, and public contact log.
- Attend briefings, as needed, with the Governor, Director and Energy Program Manager
- Establish lines of communication with the NDEM Public Information Officer and U. S. DOE-OE Public Information Officer.
- Develop press releases and media briefings for review by the Director and Energy Program Manager and approval of the Governor.
- Provide continuous updates on media coverage to the Director and Energy Program Manager.
- Deliver Situation Reports to the Legislature.
- Monitor the development of new information.
- Respond to inquiries from elected officials, informing the Director of such responses.

Pre-Emergency

- Sets up and staffs Media Center to monitor and record media coverage.
- Attends briefings with the Governor, the Director and Energy Program Manager to report media coverage.
- Attends operations briefings as appropriate.
- Assists the Director and Energy Program Manager with preparation of the Governor's voluntary conservation message.
- Coordinates Legislative inquiries with the Director, Energy Program Manager and the Governor.

Emergency

- Evaluates the need for additional staff and equipment; directs requests to Director.
- Intensifies the level of coordination with state and local government representatives.
- With instruction from the Governor, assists the Director and the NDEM Public Information Officer with public messages on emergency conservation measures, requesting public cooperation.
- Distributes press releases to energy suppliers, and state and local government representatives.
- Continues to provide updates on media and public inquiries to Director and Energy Program Manager.
- Prepares briefings for the Legislature, coordinating with the Director, and the Energy Program Manager.
- Continues to respond to appropriate inquiries.
- When the shortage is resolved and Emergency Phase is discontinued by the Director/Governor, forward activity log to assist in preparation of After-Action memo.

OFFICE OF ENERGY CONTINGENCY PLANNING STAFF

Under management of the Director, or at times of Verification Phase or higher, of the Energy Program Manager, responsible for situation monitoring, analysis of impacts, response planning, report preparation, and program implementation. The staff will maintain a network of contacts with other government levels and private industry.

Readiness

- Monitor international and domestic events that have possible impacts on energy price and supply.
- Conduct periodic testing and training.
- Update and maintain a network of public and private-sector contacts, attached as Appendix A – Industry and Government Contacts List. (This list is confidential.)
- Immediately notifies the Director of events that are likely to have impacts on energy supply and price.

Verification

- Using the Industry and Government Contacts List of designated industry contacts, collect and analyze data, prepare preliminary fact sheets, and brief the Energy Program Manager.

- Continue information collection and analysis, providing periodic updates, coordinating with the NDEM.
- Prepare the Verification Report, and Situation Reports, following approval process.
- Maintain status boards, ensuring confidentiality of sensitive data.
- Provide information to the Director for Situation Reports, press releases and inquiries.

Pre-Emergency

- Intensify data collection process; respond to requests for additional staff from Energy Program Manager.
- Activate a pre-emergency work location at the Office of Energy.
- With Energy Program Manager, prepare recommendations for voluntary demand reduction measures.
- Evaluate results of voluntary measures; prepare recommendation for continuation or need for additional resources.

Emergency

- Request support staff and equipment from the Energy Program Manager, as needed, to activate ESF-12 at the Emergency Operations Center.
- Continue to provide frequent information updates and Situation Reports.
- If ordered by the Governor, and at the instruction of the Director, implement energy conservation programs.
- Work closely with the Director to ensure that press releases and media briefing packages contain a description of each emergency program being implemented, along with the rules for compliance.
- If the Petroleum Fuels Set-Aside Program is implemented, provide necessary information to the Energy Program Manager.
- If Economic Assistance Coordinator is assigned as liaison with ESF-6, provide information and coordinate activities.
- If the energy shortage diminishes, reduce level of activity; discontinue mandatory programs as soon as practical.
- At the conclusion of energy shortage, assist Energy Program Manager with response evaluation and preparation of After-Action Memo.

ECONOMIC ASSISTANCE COORDINATOR

With direction from the Energy Program Manager, the Economic Assistance Coordinator will work with the ESF-6 to prepare standby options for revenue legislation and program implementation.

Emergency

- Reviews Situation Reports and attend briefings by the Energy Program Manager.
- Notifies ESF-6 of the status of the energy shortage and transition to the Emergency Phase. Determine additional support required from ESF-6.
- Provides information to ESF-6 on the potential extent and duration of economic impacts caused by the energy supply disruption.

- Works with ESF-6 in preparing stand-by options for implementation; assist with finalizing stand-by legislation for funding.
- Briefs Energy Program Manager and the Director regarding proposed legislation and programs, and action necessary for implementation of low-income assistance programs.
- Assists ESF-6 in preparing public announcements of program availability and the application process; coordinates with the Director.
- Assists ESF-6 in preparing energy saving tips for distribution to recipients and applicants of economic assistance programs.
- In conjunction with ESF-6, prepares an evaluation of the program results.
- As the energy shortage diminishes, prepares a program evaluation and assists in the preparation of the After-Action Memo.

EMERGENCY MANAGEMENT DIRECTORS/COORDINATORS

Other contacts and resources during an emergency may be found in the contact listing in Appendix E. These contacts are local, county and state contacts that may be affected during an emergency.

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Section III
Office of Energy Operations

As introduced in the Section I Plan Description, action with the Office of Energy necessary to respond to any potential event can be described generally in four broad categories:

- Coordination, planning and analysis
- Communication program
- Mitigation and conservation programs
- Economic assistance programs

Office operational details are provided in this section.

COORDINATION, REPORTING, PLANNING AND ANALYSIS

Coordination, planning and analysis are divided into two separate subsets:

- A set of activities regularly conducted by the staff in daily operations to monitor the state's energy supply, including the implementation and daily monitoring of the Energy Supply Disruption Tracking Process, and
- Activities conducted in a more formal manner upon an impending energy emergency. Guidelines to conduct regular coordination and planning activities are detailed in Appendices B, C and D.

DAILY MONITORING AND IMPLEMENTATION OF THE ENERGY SUPPLY DISRUPTION TRACKING PROCESS

The Preliminary Nevada Energy Disruption Supply Tracking Process Plan (the Plan) was prepared and submitted in accordance with U.S. Department of Energy (DOE Office of Energy) Grant DE-OE-0000068 "Energy Assurance Planning" issued to the Office of Energy. Identified as Task 4 "Develop Energy Supply Disruption Tracking Process" within the grant, the purpose of the Plan is (1) to provide guidance for gathering real-time energy availability data during a shortage, and (2) to collect, evaluate, and utilize lessons learned from emergency events that affect Nevada's energy consumption. The Energy Disruption Plan as submitted to DOE-OE has been integrated into this Energy Assurance and Emergency Operations Plan in the following narrative.

Section III describes the process by which data from energy supply disruption events will be recorded and tracked by the Office of Energy. A template of the Energy Supply Disruption Event report is provided in **Figure 3**. Appendix A contains the list of entities that will be requested to provide energy supply disruption data. This list is to be regularly utilized and maintained by the Office of Energy staff in their efforts to monitor and coordinate energy events. This list is classified as "Confidential" and is not available for public disclosure. The sources of data for monitoring the Nevada energy supply are provided in Section I, pages twelve through sixteen.

Figure 3
ENERGY SUPPLY DISRUPTION REPORT

Case #	**Date and Time Reported to the Office of Energy: (within 2 hrs of incident)**
Reporting Entity:	
Person filing the report: Name, Address, Phone, Fax, Cell (if applicable) and Email:	
Date and Time of Disruption:	**Location and Site of Disruption:**
Description of Disruption:	
Affected Entities:	
Any other agencies notified? **If yes, who contacted and when:**	
Will any agency be providing assistance? **If so, which ones:**	
Actions taken:	
Recovery time:	
Report Revised by Office of Energy by: (Date and Time)	**Entered in database on:**

ACTIVITIES UPON RECOGNITION OF IMPENDING ENERGY EMERGENCY

The recognition of an impending energy emergency may be realized either through the monitoring of day-to-day events through the energy disruption tracking process, described previously, or may be catastrophic events that require immediate response. Part of the analysis would be to evaluate the need to activate the Continuity of Operations Plan described in Appendix D. Emergency operation activities are outlined below.

Incoming Notification: Office of Energy staff may receive notification of an event with impending or probable energy impacts from a number of sources including:

- Office of the Governor
- NDEM
- DHS
- PUCN
- U.S. DOE-OE
- Energy Industry Contacts, or
- the Media

Action Planning and Preliminary Assessment: Immediately following notification, staff will decide on a course of action to make a preliminary assessment. The action plan should include:

- What information is required, using the technical appendices?
- What sources are to be used from Appendix A, Industry and Government Contacts List?
- What questions are to be asked, using the technical appendices?
- Specific staff assignments

Staff will maintain a contact log of who was called, the phone number, the date and time, and a summary of the conversation. In addition, status sheets or a status board will be maintained so that current information is readily available to all Office of Energy staff. The process of planning and briefing will be repeated as necessary to ensure coordination and accuracy.

Staff will gather information initially to determine if the notification is valid, and if there is a possible or probable impact on energy. The staff will then determine the nature, extent and duration of the event which is likely to impact energy supply, price and distribution. Assessment guidelines can be found in Section I, pages nine through thirteen.

To ensure credible data, staff will use the established primary liaison for industry and government sources, as listed in Appendix A. Sources of information must be reliable, established and verifiable. In any event, and particularly during a natural disaster, make immediate contact with NDEM to determine if Office of Energy staff is needed at the State Emergency Operations Center, and what energy impact analysis is needed.

Outgoing Notification: After making a preliminary assessment, the staff will immediately notify the Director or Energy Program Manager. The Energy Program Manager will then notify the following (as appropriate to the situation):

- Director
- Governor
- Governor's Press Secretary
- NDEM
- PUCN
- U.S. DOE-OE

PUBLIC COMMUNICATION AND REPORTING PROGRAM

Depending on the nature and urgency of the situation, staff will prepare written reports reflecting the analysis of energy impacts. Four basic types of reports may be used at the instruction of the Director:

1. **Verification Report:** A verification report will be developed upon the direction of the Director by Office of Energy staff to assess and confirm any energy information received that may be considered to cause impact to the energy supply in Nevada.
2. **Situation Report:** To distribute a situation report, follow the Situation Report Procedures Checklist Verification in **Figure 4**. The distribution list usually will include the NDEM, U.S. DOE-OE, the Governor and the Legislature, PADD V states and industry contacts, as appropriate. Confidential situation reports for the Governor will be delivered only to the Governor.
3. **Press Release:** Used upon inquiry and proactively when necessary to calm public fears.
4. **After Action Memo:** Drafted when an energy event has diminished to document and evaluate the performance of the Plan and implementation activities. An After-Action Memo will be developed and delivered to the appropriate representatives.

Additionally, the public information communication needs to be truthful, as accurate as possible and couched in terms that will not panic the populace into actions that would be counter-productive to mitigating the emergency.

CONSERVATION AND MITIGATION PROGRAM IMPLEMENTATION

The Office of Energy Contingency Planning Staff, with direction from the Energy Program Manager, will determine the most appropriate mitigation and conservation strategies to be implemented. All program implementation must be coordinated with other appropriate state and local agencies. The staff will also evaluate and assess the results of the programs implemented to make recommendations to the Governor for continuation of voluntary programs, a need for additional voluntary programs, or the need for mandatory programs. To impose mandatory programs, the Governor must first proclaim an energy emergency and sign Executive Orders to implement programs. The Executive Order will take effect immediately upon being filed. All mandatory programs automatically terminate when the Governor rescinds the emergency proclamation, or the order expires. Draft proclamations for energy emergencies are maintained by the Office of Energy as part of the Fuels Allocation Office Operations Manual attached as Appendix B.

Figure 4
SITUATION REPORT PROCEDURES CHECKLIST

Title/ Date of Report:	Task
	Give draft copy to Energy Program Manager for review.
	Give draft Situation Report and cover memo to the Director for review.
	Once all changes have been made, print final version (first page of Situation Report is printed on letterhead).
	Cover memo signed by Director.
	Make 25 copies of complete package.
	Hand carry original and 3 copies to Governor's Office.
	ONLY AFTER GOVERNOR HAS RECEIVED IT, distribute to: Director (EEAC) Governor's Press Secretary NDEM (Nevada Division of Emergency Management) NDHS (Nevada Department of Homeland Security) PUCN (Public Utilities Commission of Nevada) Office of Energy Staff
	Make additional copies of the **Situation Report only** for internal distribution to interested agency staff.
	Place a copy in file.

SUGGESTED VOLUNTARY MEASURES (Natural Gas and Electricity)

The Office of Energy will work with the utilities to identify the measures most appropriate for the particular situation and to explore cooperative mechanisms for encouraging conservation.

Residential customers can:

- Adjust thermostat settings.
- Implement load management measures.
- Use appliances at off-peak times (early morning or late evening).
- Clean or replace heating and air conditioning air filters at least once a month.
- Close off unused rooms, and close heating and cooling ducts in these rooms.
- Close off openings which could be a source of unconditioned air.
- Use energy intensive appliances (dryers, washers, dishwashers) in early morning or late evening.
- Turn off lights and appliances such as radio and TV when not in use.
- Minimize use of nonessential electric labor-saving devices.
- Reduce outdoor lighting to essential use only.
- Reduce wattage and number of bulbs whenever possible.
- Replace less efficient incandescent lights with high efficiency incandescent lights, CFL or LED.
- Lower the thermostat setting on the hot water heater.
- Minimize the use of hot water; use cold water where possible.
- Install flow restrictors in shower heads to reduce water flow.
- Take short showers rather than baths.
- Repair leaky faucets.
- Air-dry dishes by turning off the dry cycle on the dishwasher.
- Run the dishwasher only when full.
- Clean the condenser coils on the refrigerator.
- Avoid frequently opening the refrigerator and freezer doors.
- Remove clothes from dryer as soon as dry (don't over dry) or line dry.
- Keep the lint screen clean on washers and dryers.
- Use oven for several items at a time.
- Select the right size burner for the size of the pan.
- Avoid using self-cleaning cycle on oven.
- When cooking on burner, use glass or ceramic pans with tight fitting lids.
- Avoid frequently opening oven door or lifting cooking utensil lids to check cooking progress.

Commercial and industrial customers can [1]:

- Make sure equipment is turned off overnight and weekends. Use the energy saving feature on printers, monitors, copiers, and keep the thermostat at 78-80 degrees when people are in the building, 85 degrees at night and on weekends during the cooling season. In the heating season, keep the temperature at 68 degrees when people occupy the building, 55-60 degrees at night and on weekends.
- Turn down the water heater to 120 degrees.

[1] http://www.nevadapower.com/conservation/commercial/tips/no_cost/

- Make sure outdoor lighting is turned off during the day.
- Do not use screen savers - they prevent CPUs and monitors from going into power-saver mode.
- Make sure equipment is turned off overnight and weekends. Use the energy saving feature on printers, monitors, copiers, and computers if the option is available.
- Make double-sided copies whenever possible.
- Allow your workers to wear comfortable clothing during hot weather. It makes little sense to keep a room cold enough that workers must wear suits and coats.
- To save energy, keep exterior and freight doors closed as much as possible.
- Make sure that bulbs, fixtures, lenses, lamps and reflective surfaces are cleaned regularly. By removing grease, dust and other dirt, you can increase the output of your lights.
- Remove under desk space heaters.

SUGGESTED VOLUNTARY MEASURES (Petroleum)

An overview of various petroleum mitigation and conservation measures is provided below. Details regarding measures and set-aside programs are included in Appendix B – Fuel Allocation Office Operations Manual.

- **Increased use of rideshare programs.** Work with Nevada Department of Transportation and local Regional Transportation Commissions to implement or intensify their rideshare programs.

- **Increase use of public transit vehicles.** Maintain contact with local public and private transit services, exchanging information on ridership and fuel supplies. Work with county officials to encourage greater use of mass transit facilities.

- **Increased use of bicycles.** Encourage commuters who live within bicycling distance of their places of employment to use their bicycles. Work with local governments and employers to provide more lanes, racks or secured parking areas for bicycles.

- **Flexible work schedules.** This program allows employees to stagger their commute hours, while still working during core hours, usually 10 a.m. to 2 p.m.

- **Telecommuting.** This program offers a means of reducing transportation fuel use by allowing employees to work independent of their employer's location, using their homes or neighborhood offices close to their homes.

- **Teleconferencing.** This program can be used as a substitute for business trips to meetings and conferences, especially by state agencies.

- **Miscellaneous.** The following list of energy saving tips is suitable for public appeals for voluntary conservation:
  - ✓ Observe speed limits
  - ✓ Combine trips whenever possible
  - ✓ Do not idle engines unnecessarily and do not race engines
  - ✓ Properly inflate tires
  - ✓ Avoid excessive braking
  - ✓ Reduce use of car air conditioner
  - ✓ Check air filters and PCV valves

SUGGESTED INTERIM MEASURES

These options are worthy of consideration as the implementation of the State Petroleum Set-Aside Program can take up to a month to get functioning and, in an emergency, these alternatives will allow a faster method of addressing fuel issues. These interim measures would be implemented if the voluntary measures do not achieve the desired results but prior to mandatory measures being put into effect.

1. Adopt a state priority end-user program.
2. Develop contractual provisions and language in fuel purchasing contracts for fuel supplies in an emergency.
3. Expand fuel storage capacity on existing storage locations or incorporating larger storage in new facilities that may be constructed in the future.
4. Maximize the use of alternative fuels through increased use of vehicles with flexible or alternative fueling capabilities. This includes the use of hybrid electric and electric vehicles.

STATE PRIORITY END USER PROGRAM

A priority End User Program requires petroleum suppliers to provide sufficient fuel to critical end users as listed below:

- Agriculture
- Aviation
- Emergency Services
- Energy Production
- Government
- Health Care Services
- Passenger Services
- Trucking
- Utility Services

This program brings together energy assurance officials and fuel marketers to examine options and legislation necessary for expediting the sale of critical fuels in times of drastic shortages. An accepted measure for supply would be based on an average of previous supply volume during normal conditions. The supply may need to be supplemented by the nature and scope of the shortage such as a power shortage coupled with the fuel shortage. If the shortage will be for an extended period of time, this would be the starting point for enacting the fuel set-aside program.

CONTRACTUAL OPTIONS

Many groups and agencies purchase fuel at spot-market pricing and do not have fuel contracts. Fuel contracts may have higher prices than spot-market pricing, but generally fuel contracts provide a higher priority for delivery of fuel. Sources of spot-market fuel generally disappear during a fuel shortage. Risk management activity can determine advantages of fuel contracts vs. spot-market purchasing for fuel.

STORAGE OPTIONS

NDOT fuel sites are limited in the amount of storage that is available. The storage amounts are based upon normal fuel consumption for the area. With anticipated use of NDOT fuel sites for emergency operations, supplementing the amount of storage with additional tankage as a hedge against a fuel shortage must be evaluated. The evaluation would be based on the following:

- Location
- Site additional fuel source (distance from supply)
- Space available for additional tankage
- Cost of increased storage
- Risk

FLEET MANAGEMENT OPTIONS

The State Motor Pool has been purchasing alternative fueled vehicles to be in compliance with NAC 486A. Hybrid vehicles and flex fueled (E-85) vehicles have been purchased, but these vehicles are for moving persons and are not working vehicles in the heavier class. NV Energy has been purchasing hybrid and electric vehicles in small numbers to supplement their operations during fuel shortages. Funding shortages have kept these programs from progressing as far as desired, but it is a movement in the right direction to address fuel shortages.

EMERGENCY FUEL ALLOCATION PROGRAM

The Emergency Fuel Allocation Program has two components: first, the disaster support function for use during a specific, isolated event; and second, the Petroleum Fuels Set-Aside program for use during a more widespread or prolonged shortage.

The program details, implementation and application process are contained in the Fuels Allocation Office Operations Manual, attached as Appendix B. This manual is designed to assist the Fuels Allocation Officer in establishing the Fuels Allocation Office. It contains:

- Fuels Allocation Officer (FAO) Checklist
- Staffing the Fuels Allocation Office
- Space and Equipment
- Monitoring and Reporting
- Appeal Process

DISASTER SUPPORT

During a disaster, the NDEM is the lead agency. The Office of Energy provides support by coordinating the fuel supply as directed by the NDEM. The disaster support function consists of both an informal and a formal process. The informal process is based on the voluntary cooperation of oil

companies. It is generally used during a disaster when fuel needs to be redirected immediately to one or two areas for a particular use, normally related to an ESF. This informal process can be very effective because action can be taken quickly to help mitigate the appearance of a widespread problem and, thereby, prevent a panic. The formal part of the program will be implemented at the direction of the Governor only after proclamation of an energy emergency pursuant to NRS 416.050. Such proclamation will enable the Office of Energy to regulate fuels in a manner to provide for the best allocation to support the response to the disaster. In coordination with the NDEM, the Office of Energy will coordinate and direct oil companies to provide the amount of fuel needed by emergency service providers who are responding to the disaster.

PETROLEUM FUELS SET-ASIDE PROGRAM

During a more prolonged and widespread shortage, such as an embargo, the Office of Energy is the lead state agency. If market forces and voluntary conservation measures are unable to provide for adequate fuel distribution, the Governor may proclaim an energy emergency pursuant to NRS 416.050 procedures and implement the Petroleum Fuels Set-Aside Program (Set-Aside Program).

The Governor has designated the Office of Energy as the agency responsible for administration of the Set-Aside Program. The program is managed by the Energy Program Manager, appointed by the Director. When the Set-Aside Program is implemented, the Energy Program Manager will notify all oil companies that supply Nevada. The state Set-Aside Program is designed to interfere minimally with the market, using set-aside volumes sufficient only to satisfy hardship and emergency cases. All fuel delivered through the program will be purchased at the market price and, whenever possible, through the usual supplier.

When certain critical services and industries cannot obtain adequate supplies of fuel at any price, these priority users can apply to the Fuels Allocation Officer at the Office of Energy for additional fuel through a priority distribution system. Each application will be reviewed and evaluated by the Fuels Allocation Officer using the basic priority criteria of: (1) protection of life; (2) protection of property; (3) provision of essential services; (4) restoration of infrastructure; and (5) continuity of economic viability.

Specific customer requests within these criteria may vary from event to event, but should include the following priority customers (listed alphabetically):

- Agricultural production, including agricultural trucking and agricultural aviation
- Aviation ground support vehicles and equipment
- Cargo, freight, and mail hauling by truck, including diesel truck stations
- Emergency services
- Energy production
- Health care facilities
- Public passenger transportation services
- Sanitation services
- Snow removal and other non-normative road service
- Telecommunication services
- Utility services (including water supplies)
- Visitor services (tourism)

The set-aside volume is designed to achieve maximum flexibility in the distribution of set-aside fuels and to minimize government interference with the market mechanisms. The Fuels Allocation Officer, in consultation with the Director, will designate the set-aside volume up to a maximum of 5 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. In no event shall one supplier be required to set aside more than the volume percent designated by the Fuels Allocation Officer for any single fuel assigned for allocation.

ECONOMIC ASSISTANCE PROGRAMS

The three main energy programs are listed below: In addition, some utilities maintain programs to assist with or defer payment of utility bills for eligible parties.

COMMUNITY SERVICES BLOCK GRANT (CSBG) PROGRAM

Enables low-income families and individuals to attain the skills, knowledge, motivation, and opportunities necessary to achieve self-sufficiency. CSBG funds activities in the categories of employment, education, income management, housing emergency services, linkages with other programs, nutrition, family self-sufficiency, and health. There is considerable flexibility within this program.

In addition to government funding sources, there are in-kind contributions, such as volunteer services and donations of space, equipment and food. An eligible client may receive tangible services. Tangible services may be nutritious lunches for senior citizens, emergency clothing, blankets, and shelter for flood victims. Some intangible services are educational counseling sessions, job referrals, and consumer counseling.

ENERGY CRISIS INTERVENTION PROGRAM (ECIP)

Provides payments for weather-related or energy-related emergencies. It provides payment where there is a utility shut-off notice, insufficient funds
to establish or maintain an energy account, or energy supply interruptions due to extreme weather conditions.

HOME ENERGY ASSISTANCE PROGRAM (HEAP)

Established in 1981, HEAP is a federally funded program which helps low-income households to pay their energy bill. Assistance is in the form of a dual or single part warrant or a direct payment to a utility company on behalf of an eligible applicant. Eligibility is based on the household's total monthly income, which cannot exceed the HEAP income guidelines.

WEATHERIZATION PROGRAM

Provides assistance to improve the energy efficiency of homes, determined by the DWSS, to provide an average energy savings of 20 percent. This program includes ceiling insulation, attic venting, glass replacement, weather-stripping, minor housing envelope repairs, low-flow showerheads, evaporative cooler vent covers, water heater blankets, pipe wrap, switch and outlet gaskets, caulking, and related energy conservation measures.

Most payments are delivered to low-income residents by the DWSS. The DWSS depends primarily on federal funding for the programs it administers. These funds may need to be augmented to respond to an energy emergency due to reductions which have been experienced in some programs.

In addition to regular LIHEAP appropriations received by the DWSS, federal law provides for permanent authorization for an emergency contingency fund at an annual level of $600 million, to be used to meet additional home energy assistance needs arising from a natural disaster or other emergency. Any funds appropriated under this authority are declared by Congress to be emergency requirements under the Balanced Budget and Emergency Deficit Control Act of 1985, except that all or part of the funds will be made available only after the submission to Congress of a formal budget request for that amount by the President that designated the need for such funds as an emergency under that Act.

The federal law further provides that when emergency contingency funds are made available under the LIHEAP statute, the federal government may allot the funds to one or more states. The federal government must take into account the extent to which a state was affected by the emergency or disaster, the availability to affected states of other resources, and any other relevant factors. The federal government must inform Congress of the allotment prior to releasing the funds to the states.

Section IV
Cyber Security for Smart Grid

Cyber security for the electric sector is a national concern. The concern is growing as the power system becomes increasingly complex and reliant on information technology and communications infrastructures. This reliance has seen a corresponding increase in the power system's vulnerability to cyber attacks. The management and protection of these infrastructure systems and components should be addressed as part of energy assurance plans because of the potential for power outages caused by cyber attack. The role of cyber security in ensuring the effective operation of the smart grid is documented in legislation. Utilities, Homeland Security, and the Department of Emergency Management are responsible for this area. As stated in the EISA 2007, the characteristics of smart grid address security:

1. Increased use of digital information and controls technology to improve reliability, security, and efficiency of the electric grid.
2. Dynamic optimization of grid operations and resources, with full cyber security. [2]
3. Cyber security includes preventing damage to, unauthorized use of, or exploitation of electronic information and communications systems and the information contained therein to ensure confidentiality, integrity, and availability. Cyber security also includes restoring electronic information and communications systems in the event of a terrorist attack or natural disaster. [3]

Cyber security must address deliberate attacks, such as those launched by disgruntled employees, industrial espionage, terrorists and sovereign nation states. It also needs to prevent inadvertent compromises of the information infrastructure due to user errors, equipment failures, and natural disasters. Security is best applied in layers and at different levels. The term "layers" implies multiple security barriers between the attacker and the target, while the term "levels" refers to the different levels in the communications infrastructure underlying any cyber system. This concept is referred to as "defense in depth." Defense in depth is a critical concept that can be illustrated by the following:

- If one security barrier is broken, such as the lock on a door, the next layer may prevent the attack.
- The system may detect the attack and it may trigger responses to the attack, such as a lock-down of all access to the attacked facilities.
- The system may mitigate the damage to equipment (e.g., by breakers tripping off), or it may allow the system to continue to operate during an attack via automated switching to restore most power immediately.
- The system may help restore power via black start capability. It may also help investigators to understand the source of the attack, and even prosecute the attacker, by using audit logs to determine exactly which actions were taken, when, and by whom.

2 EISA 2007: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_bills&docid=f:h6enr.txt.pdf

3 US Department of Homeland Security http://www.dhs.gov/files/programs/editorial_0827.shtm#0 National Infrastructure Protection Plan http://www.dhs.gov/xlibrary/assets/NIPP_Plan.pdf.

A cyber security strategy will take into account information on impacts, vulnerabilities, and threats to produce a risk assessment. In a typical risk management process, assets, systems and networks are identified; risks (including vulnerabilities), impacts and threats are assessed; cyber security requirements are specified; and cyber security controls are selected, implemented, assessed for effectiveness, authorized, and then monitored over the lifecycle of the system.

Cyber security is not a one-time activity, like building a fence for protection. Because the smart grid will be built over time, cyber security must also grow over time to address threats and vulnerabilities in the short term as well as the longer term. While the focus of this Plan is smart grid, many of the security practices it outlines apply to the entire energy sector and to the day-to-day operations of all organizations. The development of this capability can be used to address the need in these other areas as well. For additional background information on cyber security see the NASEO *Energy Assurance Guidelines.* [4]

The National Association of Regulatory Utility Commissioners (NARUC) adopted a Resolution Regarding Cyber Security [5] in February 2010. This resolution encourages commissions to open a dialogue with their regulated utilities to ensure that these organizations are in compliance with standards and, where applicable, ensure that cost-effective protection and preparedness measures are employed to deter, detect, and respond to cyber attacks and to mitigate and recover from their effects. It also encourages commissions to regularly revisit their own cyber security policies and procedures to ensure that they are in compliance with applicable standards and best practices, such as those of the National Institute of Standards and Technology (NIST) and Certification for Information System Security Professionals (CISSP). The resolution also states in part:

> "That NARUC supports member commissions in becoming and remaining knowledgeable about these threats, and ensuring that their own staffs have the capability, training, and access to resources to adequately review and understand cyber security issues that enhances expertise in review of cyber security aspects of filings by their jurisdictional utilities..."

In addition to committing staff resources, states should provide training for cyber security to assure a sufficient depth of knowledge as needed. While some state public utility commissions may elect to employ individuals with cyber security expertise, they should at a minimum maintain staffs that are sufficiently knowledgeable to be able to ask the right questions and fully understand the cyber security measures taken by utilities. State public utility commissions should understand to what degree the utilities they regulate meet or exceed guidelines and standards that exist or may be adopted in the future. Once staffing has been committed, the following is an approach that could be taken as one path to build this capability. This approach suggests an understanding of cyber security in the workplace as a primary step toward developing an understanding of cyber security practices. If the staff knowledge level is beyond this point, then move directly to Step Two.

4 NASEO Energy Assurance Guidelines
5 NARUC Resolution Regarding Cyber Security, February 2010

As a precursor to this effort, it is important for states to understand the nature of the risk and the threat of cyber attacks. Examples of recent attacks include the following:

- In 2001, hackers penetrated the California Independent System Operator (CAISO), which oversees most of the state's electricity transmission grid. Attacks were routed through California, Oklahoma, and China.
- Ohio's Davis-Besse nuclear power plant safety monitoring system was offline for five (5) hours due to the Slammer worm in January 2003.
- In March 2005, security consultants within the electric industry reported that hackers were targeting the U.S. electric power grid and had gained access to U.S. utilities electronic control systems.
- In April 2009, the Wall Street Journal reported that spies hacked into the U.S. electric grid and left behind computer programs that could allow them to disrupt service.
- Associated Press on August 4, 2010 reported "Hackers Try to Take over Power Plants." In September 2010, cyber experts discovered for the first time a malicious computer code, called a worm, specifically created to take over systems that control the inner workings of industrial plants.
- The Stuxnet Worm was reported in an Industrial Control Systems Cyber Emergency Response Team Advisory on September 29, 2010. Stuxnet is a Malware Targeting Siemens Control Software. It can be used to infiltrate industrial control systems used in the power grid, power plants and other infrastructure. It is reported to have the ability to damage or possibly destroy control systems.
- The North American Electric Reliability Corporation (NERC) and DOE-OE released a report titled *High-Impact, Low-Frequency Event Risk to the North American Bulk Power System* (June 2, 2010) [6] that identifies a certain class of high-impact, low-frequency risk shown to have the potential to significantly affect the reliability of the North American bulk power system. The report examines three high-impacts, low-frequency risks in detail: coordinated cyber, physical, or blended attacks; pandemic illness; and geomagnetic disturbances and electromagnetic pulse (EMP) events.
- NERC issued a recommendation [7] to industry on the AURORA vulnerability [8] in October 2010. The recommendation provides new sensitive and clarifying information regarding the nature of AURORA. The recommendation requires entities to report on efforts and progress by Dec. 13, 2010 with updates every six months until mitigation is complete.

6 High-Impact, Low-Frequency Event Risk to the North American Bulk Power System NERC< June 2010 reference

7 http://www.nerc.com/fileUploads/File/PressReleases/PR_AURORA_14_Oct_10.pdf

8 In 2006, Idaho National Laboratory demonstrated spinning machine connected to the power grid -- such as a generator, pump or turbine

Development of cyber security at the local level may utilize the following steps:

STEP ONE: Understand the state's internal cyber security profile

1. Understand cyber security risks at work and at home. Many states and organizations have guidance available. For an example see: http://www.michigan.gov/cybersecurity.
2. Identify the individuals in the state who have the primary roles for addressing cyber security, and identify their roles and responsibilities.
3. Determine which state agency, if any, has lead and/or supporting roles and responsibilities in cyber security as it directly relates to smart grid implementation.
4. Become familiar with the DOE-OE's Continuity of Operations Plans (COOP) [9] and disaster recovery strategies that pertain to the essential cyber security systems. [10]
5. Determine if it may be helpful to become a member of the FBI's InfraGard program.
6. Become familiar with the U. S. Computer Emergency Readiness Team (US-CERT), which provides response support and defense against cyber attacks for the Federal Civil Executive Branch, as well as information sharing and collaboration.

STEP TWO: Understand the current cyber security requirements for the energy sector

1. Electricity and smart grid:
   a) NERC - Standards CIP-002 through CIP-009 (the Critical Cyber Asset Identification portion of the Critical Infrastructure Protection Standards.
   b) Section 1305 of EISA 2007 defines the roles of both Federal Energy Regulatory Commission (FERC) and NIST as they relate to the development and adoption of smart grid standards. Subsection 1305(d) defines the Commission's role. This subsection reads as follows: "At any time after the Institute's work has led to sufficient consensus in the Commission's judgment, the Commission shall institute a rulemaking proceeding to adopt such standards and protocols as may be necessary to insure smart-grid functionality and interoperability in interstate transmission of electric power, and regional and wholesale electricity markets." [11]
2. Understand the cyber security requirement for other parts of the energy sector including natural gas (pipeline safety standards) and the petroleum sector because of the interdependency effects that need to be considered.
3. Under EISA 2007, NIST has "...primary responsibility to coordinate development of a framework that includes protocols and model standards for information management to achieve interoperability of smart grid devices and systems..."
   a. The NIST Smart Grid Interoperability Standards Project [12] is working to meet this goal.
   b. One of the primary documents was issued in January 2010 and titled *Framework and Roadmap for Smart Grid Interoperability Standards*, Release 1.0 (Framework)." [13]

[9] http://www.fema.gov/government/coop/index.shtm

[10] The SANS (SysAdmin, Audit, Network, Security) Institute see: http://www.sans.org/reading_room/whitepapers/recovery/

[11] Ray Palmer Smart Grid Update to FERC A-3: (Docket No. AD10-15-000) July 15, 2010

[12] Smart Grid Interoperability Standards Project

[13] National Institute of Standards and Technology (NIST) *NIST Framework and Roadmap for Smart Grid Interoperability Standards, Release 1.0* Office of the National Coordinator for Smart Grid Interoperability, NIST Special Publication 1108, January 2010.

c. The Framework identified 75 interoperability standards that are applicable, or are likely applicable, to the ongoing development of smart grid technologies and applications. [14]
d. NIST developed *Guidelines for Smart Grid Cyber Security.* [15]

STEP THREE: Understand *future* standards and guidelines currently under discussion and development, and how they may affect utilities' plans for smart grid deployment.

1. The Advanced Security Acceleration Project for the Smart Grid (ASAP-SG) is a utility driven, public-private collaborative among DOE-OE, EPRI, and a large group of leading North American utilities. ASAP-SG is developing system-level security requirements for smart grid applications, such as advanced metering, third party access for customer usage data, distribution automation, home area networks, and Synchrophasors. ASAP-SG is capturing these requirements in a series of Security Profiles, which are submitted to the SG Security Working Group with the UCA International Users Group (UCAIug) for ratification. ASAP-SG also submits the Security Profiles to the Cyber Security Working Group (CSWG) as input in development of the Guidelines for Smart Grid Cyber Security. As a result of the collaboration between the CSWG and ASAP-SG, the *Guidelines for Smart Grid Cyber Security* provide context and establish logical interface categories for the ASAP-SG Security Profiles, while the Security Profiles in turn provide detailed, actionable, and tailored controls for those building and implementing specific smart grid systems.

   To date, ASAP-SG has produced three Security Profiles.
   a. The Security Profile for Advanced Metering Infrastructure (*AMI Security Profile*) has been ratified by the AMI-SEC Task Force within the UCAIug and provides prescriptive, actionable guidance for how to build in and implement security from the meter data management system up to and including the home area network interface of the smart meter. The AMI Security Profile served as the basis for early discussions of security for advanced metering functions, eventually informing selection of requirements for the various Logical Interface Categories.
   b. The Security Profile for Third Party Data Access (*3PDA Security Profile*) has been ratified by a Usability Analysis team within the UCAIug SG Security Working Group. It delineates the security requirements for individuals, utilities, and vendors participating in three-way relationships that involve the ownership and handling of sensitive data (e.g., electric utility customers who want to allow value-added service providers to access electric usage data that the utility serving the customer possesses). The 3PDA Security Profile served as a reference point for many discussions on the subject of privacy, and informed several aspects of Chapter Three – Privacy and the Smart Grid of the *Guidelines for Smart Grid Cyber Security.*

[14] Ray Palmer Smart Grid Update to FERC A-3: (Docket No. AD10-15-000) July 15, 2010

[15] National Institute of Standards and Technology (NIST), NISTIR 7628 *Guidelines for Smart Grid Cyber Security*, Introduction and Volumes 1-3, The Cyber Security Coordination Task Group, Advanced Security Acceleration Project Smart Grid, August 2010. *http://csrc.nist.gov/publications/PubsNISTIRs.html*

c. The recently completed Security Profile for Distribution Management (*DM Security Profile*) has been handed over to the SG Security Working Group for review and ratification, and addresses automated distribution management functions including steady state operations and optimization. For this profile, "distribution automation" is treated as a specific portion of distribution management related to automated system reconfiguration and Supervisory Control and Data Acquisition (SCADA), and is within scope. Publicly available versions of ASAP-SG documentation may be found on SmartGridiPedia at: http://www.smartgridipedia.org.

2. Over the next three years, the National Electric Sector Cyber Security Organization (NESCO) will be working with the National Electric Sector Cyber Security Organization Resources (NESCOR) to lead a broad-based, public-private partnership to improve electric sector energy systems cyber security. NESCO will work with federal agencies to improve electric sector cyber security, identify and disseminate cyber security best practices to the sector, and develop a dissemination system for threat and vulnerability information.

   NESCOR will collaborate with NESCO to assist the electric sector in addressing mitigation strategies for vulnerabilities identified in the electric sector, collect best practices, and develop metrics. NESCOR will assess cyber security requirements and standards from NIST, DHS, NERC, UCA and other entities to determine how well the current power systems and protocol standards are meeting those requirements. Lastly, for emerging technologies that could provide cyber security protection, they will develop cyber security testing methodologies, test plans and facilitate testing at the EPRI substation lab and industry sites.

   NESCOR is comprised of a team of partners and experts led by EPRI to assist NESCO in creating a framework to identify and address immediate and future challenges for securing the electricity sector. Partners include Oak Ridge National Laboratory, Idaho National Laboratory, National Renewable Energy Laboratory, Sandia National Laboratories, Palo Alto Research Center, Telcordia, SRI, University of California Berkeley, University of California Los Angeles, University of Minnesota, University of Houston, and several subject matter experts and cyber security consultants in the power industry.

STEP FOUR: Determine whether there are cyber security plans in place, and whether they are driven by state regulatory or federal grants compliance

In addition to the requirements for the electricity grid that are standards-driven, it's also important to understand those requirements that are non-standards driven. Such standards may be subject to regulation or to compliance with DOE-OE Smart Grid Investment Grant (SGIG) criteria. For the former, plan-writers may want to determine whether there are regulatory efforts underway at a State utility commission to create audit, reporting and compliance obligations on cyber security for the utilities. Examples of such obligations include the self-certification of cyber security measures employed by the Pennsylvania Public Utility Commission staff in Pennsylvania, however, does not inspect security plans or derive any system understanding other than the potential relative vulnerability level of specific distribution and transmission systems. States need to identify the best options for working with the private sector to address cyber security concerns in general. This is an

evolving issue that will change over time and will require attention to new and emerging concerns. While regulatory and compliance issues are part of what needs to be addressed, so are policy and program issues, as well as the way States address the public private partnerships as provided for the National Infrastructure Protection framework [16] and the Energy Sector Specific Plan. [17] The SGIG Grant [18] language requires a description of how cyber security concerns will be addressed with respect to the use of best available equipment and the application of procedures and practices involving system design, testing, deployment, operations and decommissioning, including at a minimum:

1. A description of the cyber security risks at each stage of the system deployment lifecycle.
2. Cyber security criteria used for vendor and device selection.
3. Cyber security control strategies.
4. Descriptions of residual cyber security risks.
5. Relevant cyber security standards and best practices.
6. Descriptions of how the projects will support/adopt/implement emerging smart grid security standards.

Another area to consider is whether the cost to meet cyber security requirements will be recovered. Public utility commissions need to address how regulated utilities will pay for the necessary infrastructure upgrades to meet the cyber security requirements. This is a necessary step because of the ubiquitous presence of legacy information systems that will require upgrades to meet the cyber security requirements. The commissions need to work with the regulated utilities in their jurisdictions to determine the optimal migration plan. This plan should protect the consumer in terms of electricity, reliability, and costs, while keeping the utility operational limits and financial solvency in perspective. Commissions may wish to collaborate with EPRI in the NESCO program to determine the roadmap for compliance with current and future cyber security requirements.

STEP FIVE: Consider and address the human element of cyber security

While this step is last, in many ways it is also one of the most important. It represents a serious ongoing vulnerability, and therefore it is critical to assure that it is properly addressed.

1. Understand what the insider threat is and what policies and procedures are in place to prevent intrusion and manipulation. These items could include the following:
   a. Develop a procedure for office records disposal, including authority levels, verification, etc.
2. Understand what social engineering is and how it can be used to access systems.
   a. Storing email on Smartphones (iPhone, Android, or Blackberry) could allow hackers to read emails stored on the phone.
   b. Personal phones should not be used for state purposes or to download state information.
   c. Require security software if using home computers or devices on the state network.
   d. Develop a social media policy for the department, and educate personnel on their responsibility.
   e. Only one person can be designated to speak for the department. This prevents conflicting reports.

[16] US Department of Homeland Security http://www.dhs.gov/files/programs/editorial_0827.shtm#0 National Infrastructure Protection Plan http://www.dhs.gov/xlibrary/assets/NIPP_Plan.pdf

[17] US Department of Homeland Security Energy Sector Specific Plan: http://www.dhs.gov/xlibrary/assets/nipp-ssp-energy-redacted.pdf Note the 2010 update became available in November 2010.

[18] DOE Office of Energy/Office of Energy Smart Grid Investment Grants: The Smart Grid Investment Grants (SGIG) program under the American Recovery and Reinvestment Act required utilities proposing projects to develop cyber security plans. It is recommended that any State with investment grant projects should become aware of what areas are covered by those plans.

f. Home users should be covered by the department/agency licensing agreement.

3. Understand that technical solutions to security should account for human behavior, which can be driven by both cultural and psychological factors.
   a. Take care when attending activities that allow BYOD (bring your own device).
   b. Consider source of USB devices and other electronics. If the source is unknown, it should go through IT personnel for clearance.
4. Understand the nature of the threat from employees, contractors, consultants, or anyone with short or long-term access to IT systems and know about system vulnerabilities.
   a. Develop a process for background checks for contractors that occupy the department's facilities after hours.
5. Understand that the effect of new systems on consumer behavior could be both a plus and a minus. It could strengthen security or incite actions to attack the system.

Glossary of Acronyms

Advanced Metering Infrastructure	(AMI)
Advanced Security Acceleration Project for the Smart Grid	(ASAP-SG)
Air Quality Management District-Washoe County	(AQMD)
Bonneville Power Administration	(BPA)
California Energy Commission	(CEC)
California Independent System Operator	(CAISO)
Central Processing Unit	(CPU)
Certification for Information System Security Professionals	(CISSP)
Community Services Block Grant	(CSBG)
Continuity of Operations Plan	(COOP)
Cyber Security Working Group	(CSWG)
Department of Homeland Security	(DHS)
Division of Air Management and Quality-Clark County	(DAMQ)
Division of Welfare and Supportive Services	(DWSS)
Electric Membership Cooperatives	(EMC)
Electric Power Research Institute	(EPRI)
Emergency Support Function	(ESF)
Energy Assurance	(EA)
Energy Crisis Intervention Program	(ECIP)
Energy Emergency Assurance Coordinators	(EEAC)
Energy Independence and Security Act 2007	(EISA 2007)
Federal Emergency Management Administration	(FEMA)
Federal Energy Regulatory Commission	(FERC)
Home Energy Assistance Program	(HEAP)
Homeland Security Presidential Directive	(HSPD)
Information Technology	(IT)
Investor Owned Utilities	(IOU)
Legislative Counsel Bureau	(LCB)
Liquid Petroleum Gas	(LPG)
Local Distribution Companies	(LDC)
Low-Income Home Energy Assistance Program	(LIHEAP)
National Association of Regulatory Utility Commissioners	(NARUC)
National Association of State Energy Officials	(NASEO)
National Electric Sector Cyber Security Organization	(NESCO)
National Electric Sector Cyber Security Organization Resources	(NESCOR)
National Incident Management System	(NIMS)
National Institute of Standards and Technology	(NIST)

Nevada Administrative Code	(NAC)
Nevada Department of Homeland Security	(NDHS)
Nevada Division of Emergency Management (within the Department of Public Safety)	(NDEM)
Nevada Division of Environmental Protection	(NDEP)
Nevada Division of Welfare and Supportive Services	(DWSS)
Nevada Energy Shortage Contingency Plan	(the Plan)
Nevada Revised Statutes	(NRS)
North American Electric Reliability Corporation	(NERC)
Petroleum Administration Defense Districts	(PADD)
Presidential Policy Directive	(PPD)
Public Information Officer	(PIO)
Public Utilities Commission of Nevada	(PUCN)
Smart Grid Investment Grant	(SGIG)
State Energy Program	(SEP)
Supervisory Control and Data Acquisition	(SCADA)
U.S. Computer Readiness Team	(USCERT)
UCA International Users Group	(UCAIug)
United States Code	(USC)
United States Department of Energy	(U.S. DOE)
U.S. DOE Office of Energy Office of Electricity Delivery and Energy Reliability	(DOE-OE)
U.S. DOE Office of Energy Weatherization Assistance Program	(DOE-WX)
Western Area Power Administration	(WAPA)
Western Electricity Coordinating Council	(WECC)

Appendices

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APPENDIX A
Industry and Government Contact List

Confidential - Limited Access

APPENDIX A
Industry and Government Contact List

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APPENDIX B
Fuel Allocations Office Operations Manual

Prepared by the Governor's Office of Energy
755 N. Roop Street, Suite 202
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June 2013

Approved by:

Brian Sandoval, Governor

Stacey Crowley, Director

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TABLE OF CONTENTS

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INTRODUCTION

This manual is the guidebook for the Fuel Allocations Office during a fuel emergency. It is authorized by NRS 701.210 and responsibility is within the Governor's Office of Energy. Various petroleum mitigation and conservation measures are discussed. This manual provides options to be considered during a fuel crisis. Some would be considered in every situation, but others would only be used as a last ditch option. Fuel shortages may be caused by normal events such as refinery shut downs, electricity shortages that affect pumping capabilities, pipeline problems, or events such as natural disasters, oil embargos or terrorist activity.

The Fuel Allocations Office must be familiar with the fuel delivery systems within the state and also the storage capacities at Las Vegas and Sparks as well as other smaller facilities in rural areas. Notification of a fuel emergency may come from the fuel suppliers, the pipeline company, the federal government, other states, news sources or others. This activity will only be activated during a proclaimed emergency.

It is of utmost importance that the fuel contact list be kept up to date so the appropriate persons/groups are notified. These persons include the Energy Director who will notify the Governor and the Nevada Department of Emergency Management (DEM), other states, local entities, the federal DOE and others listed in the Energy Assurance and Emergency Operations Plan.

This manual is divided into two functions, the disaster support function and the petroleum fuel set-aside function. These functions may be operated individually or together.

DISASTER SUPPORT FUNCTION

Fuels Allocation Officer Checklist: At the instruction of the Energy Director, the Fuels Allocation function is activated.

- Access staff, equipment and communication needs.
- Survey situation and quantify resources.
- Prepare regular updates and attend briefings with the Energy Director.
- Monitor impact of shortage in local jurisdictions.
- Work closely with the Energy Director.
- Draft emergency response recommendations and implement mandatory demand reductions.
- Make fuel security/protection recommendations to the Energy Director.
- Process Emergency Fuel Applications.
- Provide Fuels Allocation Review Officer support data as required.
- Prepare After-Action Memo after shortage is resolved.
- Close function and return borrowed resources when event is resolved.

Voluntary Energy Conservation: For normal shortage support, the Fuel Allocations Office will be acting under the Governor's Office of Energy in maintaining contact and monitoring fuel delivery and status of bulk storage of fuel. Appeals for voluntary energy conservation may include the following:

- Increase use of rideshare programs.
- Increase use of public transportation.
- Increase use of bicycles.
- Observation of speed limits.
- Combine trips whenever possible.
- Reduce idling time.
- Do not race engines.
- Properly inflate tires.
- Avoid excessive braking.
- Reduce use of automotive air conditioning.
- Avoid jack rabbit starts.
- Keep vehicles tuned up (air filters & PCV valves).
- Close drive-thru options at businesses.
- Fill up gas tank after sunset.
- Try not to spill gasoline when filling up, and don't top off your gas tank.
- Drive an electric hybrid vehicle, or low-emission scooter or motorcycle.
- Consider low-maintenance landscaping that uses less water and doesn't require the use of gas-powered lawn tools to maintain.
- Turn off lights and electronics when not in use. Less fuel burned at power plants means cleaner air.

If the above actions do not mitigate the fuel shortage, the following items could be considered. At this point, it is likely that the Governor might issue a declaration of emergency as the fuel situation has existed for an extended period of time and is not being resolved in a satisfactory manner.

- Adopt a state priority end-user program.
- Develop contractual provisions and language in fuel purchasing contracts for fuel supplies in an emergency.
- Expand fuel storage capacity on existing storage locations or incorporate larger storage in new facilities that may be constructed in the future.
- Maximize the use of alternative fuels through increased use of vehicles with flexible or alternative fueling capabilities. This includes the use of hybrid electric and electric vehicles.

These options are worthy of consideration as the implementation of the State Petroleum Set-Aside Program can take up to a month to get functioning and, in an emergency, these alternatives will allow a faster method of addressing fuel issues.

State Priority End-User Program: A Priority End-User Program requires petroleum suppliers to provide sufficient fuel to critical end users as listed below:

- Agriculture
- Aviation
- Emergency Services
- Energy Production
- Government
- Health Care Services
- Passenger Services
- Trucking
- Utility Services

This program brings together energy assurance officials and fuel marketers to examine options and legislation necessary for expediting the sale of critical fuels in times of drastic shortages. An accepted measure for supply would be based on an average of previous supply volume during normal conditions. The supply may need to be supplemented by the nature and scope of the shortage such as a power shortage coupled with a fuel shortage. If the shortage will be for an extended period of time, this would be the starting point for enacting the fuel set-aside program.

Contractual Options: Many groups and agencies purchase fuel at spot-market pricing and do not have fuel contracts. Fuel contracts may have higher prices than spot-market pricing, but generally fuel contracts provide a higher priority for delivery of fuel. Sources of spot-market fuel generally disappear during a fuel shortage. Risk management activity can determine advantages of fuel contracts versus spot-market purchasing for fuel.

Storage Options: NDOT fuel sites are limited in the amount of storage that is available. The storage amounts are based upon normal fuel consumption for the area. With anticipated use of NDOT fuel sites for emergency operations, supplementing the amount of storage with additional tankage as a hedge against a fuel shortage must be evaluated. The evaluation would be based on the following.

- Site location,
- Additional fuel source (distance from supply),
- Space available for additional tankage,
- Cost of increased storage, and
- Risk.

Fleet Management Options: The State Motor Pool has been purchasing alternative fueled vehicles to be in compliance with NAC 486A. Hybrid vehicles and flex fueled (E-85) vehicles have been purchased, but these vehicles are for moving persons and are not working vehicles in the heavier class. NV Energy has been purchasing hybrid and electric vehicles in small numbers to supplement their operations during fuel shortages. Funding shortages have kept these programs from progressing as far as desired, but it is a movement in the right direction to address fuel shortages.

Mandatory Conservation

- **Car Pooling/Rideshare:** State agencies and business should establish car pools and ride share programs. These programs would be easier to apply to the large metropolitan areas rather than in the rural areas. The regional transportation agencies have the capability to implement these activities. However, some of the rural businesses such as mining operations, power plants, and manufacturing facilities that are labor intensive may consider these types of mitigating efforts to get their employees to work. Personnel departments have employee addresses and should establish pickup points and drivers. Decisions would be necessary to determine whether personal or company vehicles would be used for this activity. Insurance, cost of fuel and work schedules would have to be investigated prior to an emergency. Incentives and support programs may be necessary to stimulate increased use of ride sharing. Carpools may be organized by the commuters, by employers, or private companies. This type of activity would also include vanpools, but this type of system would probably require involvement of the employer.

- **Use of Public Transportation:** Expanding the use of public transportation may require incentives by government or the employer to be effective with a short notification time. Public transportation routes and schedules should be made available to employees.

- **Reduction of commuter trips and business trips:** Fuel can also be conserved by reducing commuter and business trips by using Web-cast methods for meeting or alternative work sites. If alternative work sites are not available, telecommuting would be an option if equipment was available to the employees to do this. Staggered work hours and four day work weeks would also save fuel.

If the above mentioned methods still do not mitigate the fuel situation, the following may be considered:

- **Reinstate a 55 mph speed limit:** This measure to conserve fuel usage would require cooperation of local and state law enforcement agencies and revised signs along the roadways.

- **Restricted vehicle use;** In addition to the revised speed limits, non-essential use of vehicles would be restricted as would fuel availability. This would burden enforcement agencies, but would reduce traffic and highway congestion and would reduce fuel consumption.

- **Restrict vehicle use on designated days to only commercial, mass transit and essential vehicles:** On odd or even days of the week, privately owned cars, trucks and vans with even (or odd) numbered license numbers would be allowed on the roads.

- **Measured structuring of fuel sales:** Require a minimum amount of fuel to be purchased at a fueling stop to prevent "topping off" and to minimize panic buying of fuel.

- **Limit fuel sales on designated days:** For all days of the week, privately owned cars, trucks and vans with even (or odd) numbered license numbers would be restricted from refueling. This activity would foster more efficient and conservative transportation practices. The first number on the license plate would be the number used to determine odd or even. If only letters are on the plate, the first letter would be used converting the letter to where it fits in the alphabet numbering one to twenty-six
- **Surcharge on fuel:** If fuel prices were not high enough to curtail fuel consumption, a surcharge (tax) on fuel could be used to conserve fuel usage.

PETROLEUM FUEL SET-ASIDE FUNCTION

If the above measures have still not gotten the fuel situation in hand, the final activity would be to use the Nevada Petroleum Fuel Set-Aside program, NRS 701.210. This would require an emergency declaration by the Governor. The application process for the Fuel Set-Aside program follows.

Request for Federal Assistance: Severe petroleum product emergencies usually result from national or international events that are beyond the ability of state agencies to influence. At this point, the state can request assistance from the federal government.

Two actions, which can be taken by the federal government or initiated by the state request include: Fuel Waivers and Driver Hours of Service Waivers.

Fuel Waivers: A fuel waiver can be granted in the event of a gasoline or diesel fuel supply emergency by the Environmental Protection Agency with the agreement of the Department of Energy. Fuel or fuel additive requirements may be temporarily waived if doing so will alleviate the fuel supply emergency. In addition, actions might be taken to suspend state rules and regulations that mirror federal requirements. In such cases, the Governor may also need to take action under state authority. Alternatively, if the state's rules on fuel requirements include waiver provisions, these may be used.

When fuel waivers are under consideration at a state level, it is important to ensure coordination between the various state agencies. A fuel waiver can be issued only when the criteria specified in the Clean Air Act Section 211 (c) (4) (C) have been met. In general, these criteria allow a fuels waiver only to address a temporary emergency fuel supply shortage that exists throughout a state or region that was caused by an unusual situation such as an Act of God, and that could not have been avoided by prudent planning. "Spot" or localized shortages generally are not fuel supply disruptions for which a waiver may be issued. A fuel supply disruption that meets the criteria for a waiver must by one that results in a generalized supply emergency.

EPA has promulgated various requirements for motor vehicle fuel under the Clean Air Act, which applies to both gasoline and diesel fuel. If the fuel waiver criteria have been met, EPA may waive time and type fuel restrictions for a designated area and period of time. This provides petroleum suppliers with added supply flexibility during a shortage.

A fuel waiver may allow use of higher volatility gasoline from rural areas to address a fuel supply shortage in an urban area. Similarly, a waiver of the summer volatility requirements could allow winter grade gasoline to be used during the summer high ozone season. Fuel waivers that allow use of gasoline with high volatility may result in increased VOC emissions. For this reason, the Clean Air Act provides strict criteria for when fuel waivers may be granted, and requires that waivers be limited as much as possible in terms of their geographic scope and duration.

Process for Requesting a Fuel Waiver: EPA works closely with state officials especially during emergencies. Except in unusual or emergency circumstances, a formal request for a fuel waiver is made by, or on behalf of, the Governor after consultation with EPA. During normal business hours (Monday through Friday, 8 am to 5 pm Eastern Time) the first point of contact for obtaining information about a fuel waiver request is the EPA Air Enforcement Division, at 202-564-2260, or the Transportation and Regional Programs Division, at 734-214-4956. Outside of normal business hours, the point of contact is the EPA Emergency Operations Center, at 202-564-3850, which is able to communicate with ehe EPA officials who provide assistance regarding fuel waiver requests.

Waivers for Driver Hours of Service Restrictions: Limits on the number of hours a truck driver can operate a vehicle fall under requirements of the Federal Motor Carrier Safety Administration (FMCSA). These limits can be waived under two conditions. First, if an emergency has been declared by the President of the United States, the governor of the state, or by their authorized representatives having authority to declare emergencies; and second, if the FMCSA Field Administrator has declared that a regional emergency exists which justifies and exemption. This exemption cannot exceed the duration of the motor carrier's or driver's direct assistance in providing emergency relief to the affected area, or 30 days from the date of the initial declaration of the emergency or the exemption from the regulations by the FMCSA Field Administrator, whichever is less.
This means that if the governor has declared an emergency in all or any part of the state, driver hours of service are automatically waived for drivers making deliveries to provide emergency relief to the affected area. Drivers passing through multiple states do not require that waivers be in effect in those states if they are providing supplies to an area where an emergency has been declared.

390.23 Relief from regulations which includes Parts 390 to 399 can be found at:
http://www.fmcsa.dot.gov/rules-regulations/administration/fmcsr/fmcsrruletext.asp?chunkKey=090163348002389c
Limits on Hours of Service of Drive can be found at:
http://www.fmcsa.dot.gov/rules-regulations/administration/fmcsr/FmcsrGuideDetails.asp?menukey=395

APPLICATION PROCESS FOR EMERGENCY FUELS ALLOCATION

The Governor's Office of Energy is the agency responsible for administering the Petroleum Fuels Set-Aside Program (Fuels Set-Aside Program). During a proclaimed state of emergency, intrastate petroleum and petroleum product stocks that are for the essential activities pertaining to the citizens of Nevada may be allocated through the Fuels Set-Aside Program. The total amount of all fuel types available for the Fuels Set-Aside Program is based on in-state availability and storage at the time of the state of emergency. An agency or organization may be eligible for the program if it is an emergency service provider or it uses petroleum fuel for operating equipment, producing crops, moving goods and people, or maintaining other types of essential services and can prove justifiable hardship.

This is the second function of the Fuels Allocation Office after the disaster support function. This is the final activity to make sure that essential activities pertaining to the citizens of Nevada may be performed. These are:

- Protection of life
- Protection of property
- Provision of essential services
- Restoration of infrastructure
- Continuity of economic viability

The following information on the Petroleum Fuel Set-Aside is from the Petroleum Fuel Set-Aside Applicant Handbook published by the California Energy Commission, October 2007. This has been modified to fit Nevada requirements and is prepared in compliance with NRS 701.210.

Purpose of the Program: The Nevada Fuels Set-Aside Program is intended to help ease regional shortages and hardships for end-users who are unable to acquire essential volumes of fuel at any price. The Fuels Set-Aside Program is implemented only after the Governor proclaims a state of emergency and when market forces, voluntary conservation, or other mandatory programs are unable to maintain an adequate and equitable distribution of fuel.

The program is designed to cause only minimal interference with the market, using a percentage of in-state availability of fuel that are sufficient only to satisfy hardship and emergency cases. The program makes no attempt to reduce or inhibit the market price of fuels. All fuel delivered through the program will be purchased at the market price and, whenever possible, through the usual supplier. The petroleum set-asides are as follows:

- Motor gasoline: 5%
- Diesel and heating oil: 4%
- Boiler fuel, #4 heavy industrial fuel oil: 3%
- Propane: 3%
- Aviation Gasoline: 5%
- Kerosene: 2%

Purpose of this Document: This document provides a description of the application process for requesting fuel supplies in the event of a fuels shortage. It explains the purpose of the Fuels Set-Aside Program, the eligibility requirements for each program category, and how the application process works. A copy of the application form and detailed instructions on how to complete the form are included. In addition, audit procedures used to discourage or detect fraud are included as well as procedures for appeal if an application is denied.

Structure of the Program:
The specific management of the Fuels Set-Aside Program is located in the Governor's Office of Energy and is the responsibility of the Fuels Allocation Officer. The Fuels Set-Aside Program is divided into three categories:

- Emergency Services
- Community Hardship
- Basic Set-Aside

To achieve maximum flexibility in the Fuels Set-Aside Program, the individual categories within the program are implemented only as directed by the Energy Director. Thus, all categories will not automatically become effective when the Fuels Set-Aside Program is implemented. The Fuels Set-Aside Program ends when the Governor rescinds the emergency proclamation or chooses to terminate the program.

Audit Process: Provisions exist for auditing or investigating applications to discourage and prosecute those who would abuse the Fuels Set-Aside Program. The audit is intended to prevent the deliberate misrepresentation of facts, use of the fuel for a purpose other than as stated, or resale of the fuel.

Three criteria are used to select the applications to audit:

- **Suspicion of Abuse:** The tracking systems used to process applications will screen for discrepancies and possible abuse.

- **Public Complaint:** If the Bureau of Consumer Affairs of the Attorney General's Office receives
- a public complaint, particularly if accompanied by a written report, the application will be reviewed for possible investigation.

- **Random Selection:** At the discretion of the Fuels Allocation Officer, applications may be randomly selected for audit. Any person who knowingly violates the rules and regulations of the Fuels Set-Aside Program is guilty of a misdemeanor and will be punished to the full extent of the law. The Attorney General or prosecuting attorney of a county will prosecute alleged violators.

Application Procedures: Read this section carefully if you think you may be eligible for fuel supplies from the Fuels Set-Aside Program. It contains step-by-step instructions you will need to follow to complete the application form, located at the end of this section. If you need technical assistance in filing the application, you should call the Governor's Office of Energy at (775) 687-1850.

IMPORTANT

Fuel will be allocated monthly. Therefore, you must file an application at the beginning of each month that you require an emergency allocation. You must also complete a separate application for each type of fuel you require (gasoline, diesel, etc.)

There are four steps to the application process:

- **Determine Your Eligibility:** The first step in the application process is to determine your eligibility for the program. The Fuels Set-Aside Program is divided into three categories:

    a. **Emergency Services:** This category allows end users who provide emergency, health, safety, or essential services to receive fuel during a crisis. You are eligible to apply within this category if you are a provider of emergency services (police, fire, emergency medical, etc.) and are unable to obtain fuel supplies at any price.

    b. **Community Hardship:** This category allows for distribution of fuels to qualified areas. You may be eligible to apply within this category if you are an individual, association, retailer, or governmental agency providing fuel services to a community experiencing an emergency or hardship. A community is defined as one of the following:
        - City
        - County
        - Geographical area consisting of at least 50 square miles
        - Geographical area of 5 square miles but containing no more than 10 service stations
        - Military base exchange
        - Community Hardship is the only category of the program where retail service stations may be eligible for a fuels set-aside allocation. When filling out an application for an emergency fuel allocation, you must include a description of the community boundaries and how the inability to obtain fuel is affecting the community.

    c. **Basic Set-Aside:** This category allows distribution to end users who are providing essential services and can demonstrate they are having difficulty obtaining fuel supplies at any price. If you are experiencing a fuel hardship or emergency, but do not qualify for either of the other two categories, you may be eligible to file within this category.

- **Complete the Form:** Listed below are instructions for filling out the Emergency Fuel Application form located on the last page of this document. When the Fuels Set-Aside Program has been activated, this form can also be found online at www.energy.nv.us. The online form can be accessed only during an emergency.

1. **Applicant Name:** Enter the name of the individual, company, or organization requesting a fuel allocation.
2. **Tax ID or SSN:** Enter the tax identification number used for filings with the Internal Revenue Service for the requesting organization. If requesting fuel as an individual, enter your social security number.
3. **Contact Person:** If the applicant is a company or organization, enter the name of a contact person.
4. **Mailing Address:** Enter the contact person's mailing address.
5. **Phone:** Enter the contact person's area code and telephone number.
6. **Cell Phone:** Enter the contact person's area code and cell phone number.
7. **Fax:** Enter the contact person's fax number.
8. **City/State/Zip:** Enter the second line of address information for the contact person.
9. **Email:** Enter the contact person's email address.
10. **Delivery Address:** Enter the address where the requested fuel will be delivered (if different from mailing address).
11. **Delivery City/State/Zip:** Enter the second line of delivery address information.
12. **Delivery County:** Enter the county where the fuel will be delivered (delivery must be in Nevada).
13. **Amount of Fuel Requested (Gallons):** Enter the amount of fuel being requested for emergency allocation from the fuels set-aside program (in gallons).
14. **Average Historical Monthly Usage (Gallons):** Enter the average amount of fuel applicant uses monthly under normal circumstances.
15. **Date Fuel Needed:** Enter the date for which applicant is requesting emergency fuel allocation. Note that an application must be filed at the beginning of each month that applicant requires an emergency allocation.
16. **Fuel Type Requested:** Select the type of fuel being requested. A separate application must be filled for each type of fuel. If the "other" category is chosen, please specify the type of fuel.
17. **Program Category:** Select one of the listed categories. If applicant doesn't qualify under Emergency Services or Community Hardship, choose Basic Set-Aside. Select the closest application for which applicant intends to use the fuel.
18. **Fuel Use Category:** Select one category that best describes the activity for which the fuel is to be used. Table 1 contains examples of possible activities and their related categories. However, the categories are not limited to just those activities. If an applicable fuel use is not listed, choose "other" and describe it in one or two words.

Table 1
FUEL USE CATEGORIES

Agriculture	Agricultural Production (Including Agricultural Trucking & Agricultural Aviation)
Aviation	Commercial Aviation for Passengers and Cargo, Aviation ground Support Vehicles and Equipment
Emergency Services	Police, Fire, Ambulance, Dispatch Services, Emergency Shelters
Energy Production	Diesel Fuel for Electric Generating Systems and Emergency Back-up Generators
Government	Critical Maintenance Activities such as Snow Removal, Landslide Clean-up, Dam Repair
Health Care Services	Hospitals, Clinics, Nursing Homes
Marine Transportation	Non-Military Cargo, Passenger, and Fishing Vessels
Passenger Services	School Buses, Regional Transit Systems, Taxis, Commercial Bus Lines
Trucking	Cargo, Freight, and Mail Hauling by Truck (including Diesel Truck Stations)
Utility Services	Electricity, Natural Gas, Water, Telephone, Telegraph, Sanitation

19. **Distributor:** Enter the name of the local (Nevada only) distributor, jobber, or consignee's firm that normally supplies applicant with fuel. If applicant does not normally receive fuel in this manner but instead receives fuel directly from an oil company, enter the oil company's name and other related information.
20. **Distributor's Contact Person:** Enter the name of the contact person at the company that normally provides applicant with fuel.
21. **Distributor's Address:** Enter the address for applicant's normal distributor.
22. **Phone:** Enter the phone number for applicant's normal distributor.
23. **Cell Phone:** Enter the cell phone number for applicant's normal distributor.
24. **Fax:** Enter the fax number for applicant's normal distributor.
25. **City/State/Zip:** Enter the second line of address information for applicant's normal distributor.
26. **Email:** Enter the email for applicant's normal distributor.
27. **Distributor's normal fuel source (Company Name):** Enter the name of the distributor's source of fuel supply; that is, the oil company that supplies the applicant's distributor with fuel under normal circumstances.
28. **Description and Comments:** Describe in detail the circumstances and situation relating to the hardship or emergency. Fully explain how the inability to obtain the needed fuel is impacting or will impact essential or emergency services in Nevada (or the community if you are applying under community hardship). Also, describe any efforts to reduce the

hardship or emergency and all attempts (successful or unsuccessful) that have been made by the applicant to obtain fuel from other sources.

- **File the Application:** Make sure all sections of the application are completed or marked "not applicable". Use one of the following methods to submit the application.
  1. Hard (paper) copies of the application can be either faxed to the Office of Energy at: (775) 687-1869 or mailed to the following address:
     Governor's Office of Energy
     755 N. Roop St., Suite 202
     Carson City, Nevada 89701

  2. Electronic (scanned) copies of the application can be emailed to the Office of Energy at pkonesky@energy.nv.gov. Instead of filling in the form in this handbook, you can fill in the online form located on the Office of Energy web page at www.energy.nv.gov. This online form can only be accessed during an emergency.

- **Purchase the Fuel:** The Office of Energy will notify you whether your application has been approved for the full amount requested, approved for a smaller amount than requested, or denied. You must make your own arrangements with the supplier for delivery and payment. The State of Nevada makes no guarantee for payment nor acts as surety for payment.

Appeal Process: If your application was denied, or only partially approved, you may appeal the decision. The appeal must be filed within 15 days after the date of notification of the decision. In an appeal, you must fully explain your objection to the decision and why your particular situation constitutes a hardship or emergency. File the written appeal with:

Fuels Allocation Review Officer
Governor's Office of Energy
755 N. Roop St., Suite 202
Carson City, Nevada 89701

The Fuels Allocation Review Officer, who is independent of the Fuels Allocation Officer, will review your appeal. The Fuels Allocation Review Office has 15 days after the appeal has been received by the Office of Energy to stipulate one of three possible actions:

- Reverse the prior decision and grant the requested fuel
- Modify the prior decision and grant an increase in the amount of fuel originally allocated
- Affirm the prior decision and deny the appeal

The Fuels Allocation Review Officer will notify the applicant by mail of the decision within 15 days after the appeal is filed. The Office of Energy Deputy Director is available to provide procedural advice. For further information call (775) 687-1850 or visit our website at: www.energy.nv.gov.

GOVERNOR'S OFFICE OF ENERGY
PETROLEUM FUELS SET-ASIDE PROGRAM

Office Use Only
Case Number
Date Received
Entered By

EMERGENCY FUEL APPLICATION

Fax completed application to (775) 687-1869 or mail to: Governor's Office of Energy, 755 N. Roop St., Ste. 202 Carson City, Nevada 89701

Applicant Information

1. Applicant Name	2.Tax ID or SSN	3. Contact Person	
4. Mailing Address	5. Phone	6. Cell Phone	7. Fax
8. City/State/Zip		9. Email	
10. Delivery Address	11. Delivery City/State/Zip	12. Delivery County	

Fuel Use Information

13. Amount of Fuel Requested (Gallons)		14. Avg. Historical Usage (Gal)	15. Date Fuel Needed
16. Fuel Type Requested (*Check one*)		17. Program Category (*Check one*)	
☐ Gasoline	☐ Jet Fuel	☐ Emergency Services	
☐ CARB Diesel (on road)	☐ Kerosene	☐ Community Hardship	
☐ High Sulfur Diesel (on road)	☐ Propane	☐ Basic Set-Aside	
☐ Heating Oil	☐ Other (specify):		

18. Fuel Use Category (*Check one*)

☐ Agriculture	☐ Energy Production	☐ Marine Transportation	☐ Utility Services
☐ Aviation	☐ Government	☐ Passenger Services	☐ Other (specify):
☐ Emergency Services	☐ Health Care Services	☐ Trucking	

Fuel Source and Distributor Information

19. Distributor		20. Distributor's Contact Person	
21. Distributor's Address	22. Phone	23. Cell Phone	24. Fax
25. City/State/Zip		26. Email	
27. Distributor's Normal Fuel Source (Company Name)			

Description and Comments

28. Describe the hardship or emergency and your efforts to obtain the necessary fuel from other sources, (attach additional sheets if necessary)

Important Note: By submitting this application, you certify that all information is true and correct to the best of your knowledge. You also certify that you have made a good faith attempt and have been unable to obtain essential fuel at any price. If any or all of the fuel requested is granted, you agree that it will be delivered in Nevada and used to lleviate the hardship, and will not be diverted to other purposes or resold.

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APPENDIX C
Federal Energy Emergency Policy and Actions

This appendix identifies Federal Agencies and their response during an emergency as well as policies relating to energy commodities.

U.S. DEPARTMENT OF ENERGY

DOE's energy emergency support responsibilities and capabilities are distributed among several offices within the Department. DOE sets forth the missions of the key offices as follows:

Office of Policy: This Office is the principal advisor to the Secretary, Deputy Secretary, and Under Secretary on energy and technology policy issues, including the environmental consequences of energy use. This Office has primary responsibility for the formulation and development of national energy policy and for the conduct of policy analyses. It analyzes, develops, and coordinates departmental science and technology policy, environmental policy including global change policy, and economic policy. It is also responsible for advising the Department's senior management on issues related to the Department's environmental security and energy emergency policies.

Office of Electricity Delivery and Energy Reliability (OE): This Office operates DOE's Emergency Management System, Headquarters Emergency Operations Center (Forrestal Building), the Technical Support Center (Germantown, Maryland) and ensures integration and compatibility of all Departmental emergency operations facilities. Office of Energy ensures integration and compatibility of all Departmental emergency operations facilities. In order to meet its national security requirements and responsibilities contained in the Federal Response Plan, DOE has established mandatory reporting requirements for electric power system incidents or possible incidents. Such incidents are to be reported to the Department through its EOC on a timely basis.

The Office of Energy is also responsible for Critical Infrastructure Protection. It manages Departmental activities that support DOE's role as lead agency for Government interaction with the nation's energy sectors regarding critical infrastructure protection. In this role, Office of Energy develops and manages the critical infrastructure protection R&D program, and leads and coordinates Departmental efforts to work with industry, state and local governments and national and international entities in accordance with Presidential Decision Directive 63 (Policy on Critical Infrastructure Protection). This Directive calls for a series of actions that are designed to defend our critical infrastructures from various threats. The Directive also identifies lead federal agencies for each critical infrastructure in the U.S.

Energy Information Administration (EIA): EIA was created by Congress in 1977. It is a statistical agency of the U.S. Department of Energy that provides policy-independent data, forecasts, and analyses to promote sound policy making, efficient markets, and public understanding regarding energy and its interaction with the economy and the environment. EIA distributes four types of information products: energy data, analyses, forecasts, and descriptive information about its products. Many of the products, such as the Petroleum Supply Monthly, deal with specific industries. Of particular value to a broad range of customers are products that contain data on all fuel types presented in an integrated manner.

Some key releases of integrated information are the Monthly Energy Review, the Annual Energy Review, the Short-Term Energy Outlook, and the Annual Energy Outlook.

Most of the energy data are collected by EIA staff who design and send our statistical surveys to energy producers, users, transporters, and certain other businesses. Companies and households report directly to us. EIA also obtains energy data from other sources, such as trade associations and other government agencies.

EIA's analysis products are technical reports and articles that analyze issues about energy including economics, technology, energy production, prices, distribution, storage, consumption, and environmental effects. The Administration's forecasts cover all energy types, and include forecasts of supply, consumption, prices, and other important factors. There is a short- term forecast that goes out 6 to 8 quarters in the future, and a midterm forecast that goes out 20 years. Some of EIA's forecasting models are available on their Web site at http://www.eia.doe.gov.

Other EIA products are descriptions of information products that include directories of survey forms, lists of publications, electronic products and models, a guide to energy education resources, and complete lists of energy data contacts to call who have answers to energy questions.

Additional Activities: The following actions are taken in an emergency that requires activation of the Federal Response Plan and ESF-12.

- DOE Headquarters will establish the Headquarters Emergency Management Team (EMT) and assign personnel to temporary duty at the Federal Emergency Management (FEMA) Headquarters, Regional Operations Center, and Disaster Field Office as needed;
- The ESF-12 priority will be to save lives, protect property, and assist other ESFs by aiding in the restoration of damaged energy systems; and
- Within 24 hours of implementation of the Federal Response Plan or upon instruction from FEMA, DOE Headquarters will start submitting situation reports to FEMA Headquarters.

FEDERAL EMERGENCY MANAGEMENT AGENCY AND THE FEDERAL RESPONSE PLAN

FEMA Role and Responsibility: Under the Stafford Act and Executive Orders 12148, Federal Emergency Management, and 12656, Assignment of Emergency Preparedness Responsibilities, the Federal Emergency Management Agency has been delegated primary responsibility for coordinating Federal emergency preparedness, planning, management, and disaster assistance functions. FEMA also has been delegated responsibility for establishing federal disaster assistance policy.

Federal Response Plan: FEMA has the lead in developing and maintaining the Federal Response Plan which describes the structure for organizing, coordinating, and mobilizing federal resources to augment state and local efforts under the Stafford Act and its implementing regulations that appear in 44 CFR 206. The NRP also may be used in conjunction with federal agency emergency operations plans developed under other statutory authorities as well as memorandums of understanding (MOU) among various federal agencies. The NRP is implemented through regional supplements developed by FEMA, and the regional offices of other federal agencies, that describe specific actions, operating locations, and relationships to address the unique needs of the region and states. From time to time, operations supplements to the NRP may be issued to address special events that merit advanced planning, such as the Olympics or Presidential inaugurations.

Organization of the NRP: The NRP consists of six sections, two of which are the Basic Plan and Emergency Support Function Annexes. The Basic Plan presents the policies and concept of operations that guide how the federal government will assist disaster- stricken state and local governments. It also summarizes federal planning assumptions, response and recovery actions, and responsibilities. Separate Emergency Support Function Annexes describe the mission, policies, concept of operations, and responsibilities of the primary and support agencies involved in the implementation of key response functions that supplement state and local activities. Energy is ESF-12.

State Assistance: Under the Stafford Act, a Governor may request the President to declare a major disaster or an emergency if an event is beyond the combined response capabilities of a state and affected local governments. Based upon the findings of a joint Federal-State-local Preliminary Damage Assessment (PDA) indicating the damages are sufficient to warrant assistance under the Act, the President may grant a major disaster or emergency declaration. No direct Federal assistance is authorized prior to a Presidential declaration. However, FEMA can use limited pre-declaration authorities to move Initial Response Resources (critical goods typically needed in the immediate aftermath of a disaster, e.g., food, water, emergency generators) and emergency teams closer to potentially affected areas. FEMA also can activate essential command and control structures to lessen or avert the effects of a disaster and to improve the timeliness of disaster operations.

Additional Assistance: Additionally, when an incident poses a threat to life and property that cannot be effectively dealt with by state or local governments, FEMA may request the Department of Defense (DOD) to utilize its resources prior to a declaration to perform any emergency work "essential for the preservation of life and property" under the Stafford Act. Following a declaration, the President may direct any federal agency to use its authorities and resources in support of state and local assistance efforts to the extent that provision of the support does not conflict with other agency emergency missions. A state must commit to pay a share of the cost to receive certain types of federal assistance under the Stafford Act. In extraordinary cases, the President may choose to adjust the cost share or waive it for a specified time period. The Presidential declaration notes any cost-share waiver, and a FEMA-State Agreement is signed further stipulating the division of costs among federal, state, and local governments and other conditions for receiving assistance.

Energy Consequences: A natural disaster, such as an earthquake, may produce energy consequences such as pipeline ruptures disrupting petroleum transmission and natural gas or transmission tower collapses interrupting gas flow and electric transmission. Conversely, failure of a primary transmission line may result in an energy emergency in its own right.

ELECTRICITY

Federal Power Act(16U.S.C.§791aetseq.): Section 202(c) permits DOE to order temporary interconnections of facilities and the generation and transmission of electric energy in an emergency situation. (16 U.S.C. §824a(c)). Sections 210 and 211 authorize the Federal Energy Regulatory Commission to order interconnections and wheeling transmission services, if such actions are in the public interest and would promote efficient use of the facilities in are in the public interest and would promote efficient use of the facilities in question, conserve energy, or improve system reliability. (16 U.S.C. §§824i and 824j)

The Federal Government has the following resources available in the event of an electrical emergency:

Emergency Electric Power Interconnections: The Secretary of Energy has authority in an emergency to order temporary interconnections of facilities and the generation and delivery of electric power through the Federal Power Act, Section 202(c). This authority may be utilized upon a petition from a party requesting the emergency action or may be initiated by the Government on its own initiative. Adverse economic conditions are not considered to be an emergency justifying the use of the statute.

Historical Use: The Federal Power Commission used Section 202(c) of the Federal Power Act extensively during the Korean War to direct the delivery of electric power to various aluminum smelters in the Pacific Northwest to ensure that adequate aluminum was available for the war effort. In the early 1970s the FPC also used this authority to order the connection of the municipal electric system in Cleveland to the investor-owned Cleveland Electric Illuminating Company system. DOE has received several petitions from parties seeking issuance of Section 202(c) orders, but has denied them following determinations that an emergency did not exist.

Economic Charges: Implementing regulations (10 CFR 205.370 et seq.) specify that the involved parties must attempt to resolve the economic charges associated with the interconnection and/or delivery of electric power. If no resolution can be reached, the matter would be referred by DOE to the Federal Energy Regulatory Commission for hearings and resolution. This authority probably has limited usefulness in light of ongoing restructuring of the electric power supply industry. An increasing number of independent generating supply entities, and energy supply brokers, are available to meet increased demand for electric power that cannot be met by utilities. Similarly, when a utility petitions DOE to order a transmission entity to deliver electric power over the bulk electric transmission system, the lead-time for permits and construction of new transmission lines limits the applicability of this authority to existing connections, which would already be operating at close to design capacity in an emergency. It is likely that physical limits to transmission, rather than refusal to cooperate, will limit power movements in emergency situations. This authority needs to be re-examined when the electric power industry restructuring is completed.

Electric Power Reliability: The Secretary of Energy has limited authority with regard to the reliability of the interstate electric power transmission system. Under the Federal Power Act, Section 202(a) and the Public Utilities Regulatory Policies Act, Section 209(b), DOE can define reliability regions and encourage interconnection and coordination within and between regions to gather information regarding reliability issues and to make recommendations regarding industry standards for reliability. These authorities are utilized whenever the Secretary requests a special study on electric power reliability issues.

Power System Emergency Reporting Procedures: The Department of Energy has authority to obtain current information regarding emergency situations on the electric supply systems in the United States. The Department of Energy Organization Act, Federal Power Act, 10 CFR Sections 205.350 - 205.353 give DOE the authority to established mandatory reporting requirements for electric power system incidents or possible incidents. This reporting is required to meet national security requirements and other responsibilities contained in the NRP for emergencies. The DOE-417R Form was

developed to standardize reporting procedures. Such incidents are to be reported via telephone, fax, or e-mail to the DOE Emergency Operations Center (staffed 24 hours a day, 365 days a year) on a timely basis.

There are four types of incidents that should be reported to DOE:

- **Loss of Firm Load**: Based on their size, utilities must report activities that include load shedding actions resulting in the reduction of 100 megawatts or more of firm load or equipment failures/system operational actions that result in a continuous interruption for 3 hours or longer to over 50,000 customers.
- **System Voltage Reductions or Public Appeals: Utilities must report anticipated or** actual system voltage reductions of 3 percent or greater for purposes of maintaining the continuity of the bulk electric power supply or any general public appeal to reduce the use of electricity for purposes of maintaining the continuity of the bulk electric power system.
- **Bulk Power System Operational Actions:** Utilities report any incidents that degrade the reliability of the bulk power service such as actual or suspected intentional acts of physical sabotage (not vandalism) or terrorism to provider systems. They must also report an abnormal bulk electric power system operating condition that forces curtailment of scheduled electric power flows or limits emergency response capabilities.
- **Fuel Supply Emergencies:** Utilities report existing or anticipated fuel supply (or water supply for hydro units) emergency situations at electric power generating stations that could threaten continuity of the bulk electric power supply system.

Allocating Coal Shipments: Coal is used primarily to generate electric power. The President has authority to allocate coal (and require the transportation of coal) for the use of any power plant or major fuel-burning installation during an energy emergency under the Power plant and Industrial Fuel Use Act, Section 404(a). This allocation would take place upon declaration of a "severe energy supply interruption" as defined in the Energy Policy and Conservation Act, or a published finding that a national or regional fuel supply shortage exists. Section 404(e) precludes the President from delegating the authority to issue these coal allocation information orders, but DOE may be requested to provide about the energy emergency or to take other necessary action in the implementation of such a Presidential Order. To date, these authorities have never been used.

NATURAL GAS

Natural Gas Act (15U.S.C.§717etseq.): Section 3 grants DOE the authority, upon application, to authorize imports and exports of natural gas. (15 U.S.C. §717b) Section 3 requires DOE to approve, without modification or delay, applications to import liquefied natural gas and applications to import natural gas from countries with which there is in effect a free trade agreement requiring national treatment for trade in natural gas. Section 7(c)(1)(B) authorizes the Federal Energy Regulatory Commission, in times of emergency, and without notice or hearing, to issue a temporary certificate of public convenience and necessity for the transportation or sale of natural gas to assure maintenance of adequate service or to serve particular customers. (15 U.S.C. §717f(c)(1)(B)).

Natural Gas Policy Act of1978 (15U.S.C.§3301etseq.): DOE has delegated authority (E.O. 12235) under sections 302 and 303, respectively, to ''authorize purchases of natural gas'' and to ''allocate supplies of natural gas'' in interstate commerce upon a finding by the President under section 301 of an existing or imminent ''severe natural gas shortage, endangering the supply of natural gas for high-priority uses.'' (15U.S.C. §§3361-3363)

The potential federal responses to natural gas emergencies are as follows:

Natural Gas Imports and Exports: Under the Natural Gas Act, Section 3, DOE can authorize imports and exports of natural gas to and from NAFTA partners Canada and Mexico.

Natural Gas Emergency Allocation Authority: DOE can order any interstate pipeline or local distribution company served by an Interstate pipeline to allocate natural gas in order to assist in meeting the needs of high priority consumers during a natural gas emergency under the Natural Gas Policy Act, Title III, Sections 301 to 303 (E.O. 12235).

- **Emergency Purchase and Allocation:** DOE has been delegated the emergency purchase and allocation authority of the President (E.O. 12235) under Title III, Sections 301 to 303 of the Natural Gas Policy Act. To use this authority, the President must first declare a natural gas supply emergency for high-priority users under Section 301. Under the provisions of Section 302, the Secretary may authorize emergency purchases of natural gas by any interstate pipeline or local distribution company served by an interstate pipeline. The Secretary may also order pipelines to transport gas or construct emergency facilities. Section 303 allows the Secretary to allocate supplies of natural gas.
- **Implications of Industry Restructuring:** The restructuring of the natural gas industry following Federal Energy Regulatory Commission Order 636 in 1992 has fundamentally changed the transmission and distribution networks. Interstate natural gas pipelines are common carriers and must provide customers equal access to pipeline space. Consequently, some of these emergency provisions may no longer be necessary. The emergency authorities may need to be rewritten to reflect current realities in a natural gas industry that has been significantly restructured since the Natural Gas Policy Act was written in 1978.

Prohibit Burning of Oil and Natural Gas: The President has authority to prohibit any power plant or major fuel-burning installation from using natural gas or petroleum as a primary fuel during an emergency. The Public Utilities Regulatory Policies Act of 1978, Section 607 and Power plant and Industrial Fuel Use Act, Section 404(b) provides this authority. To date, these authorities have never been used.

Pipeline Operations: Under the authority of the Natural Gas Pipeline Safety Act and Hazardous Liquids Pipeline Safety Act, the Office of Pipeline Safety governs the operation of liquefied natural gas plants and gas and hazardous liquids pipelines in interstate and intrastate operations to establish general parameters for the safety. OPS may issue waivers of its regulations for good cause (to permit pipelines to increase operating pressure or to address a particular safety issue, for instance). OPS looks to DOE staff to provide relevant energy supply, distribution and infrastructure interdependency impact assessments for use by OPS in determining whether to issue such waivers.

History: In the period following a break in the Colonial Pipeline Company's pipeline system, DOE (Office of Emergency Management and EIA Office of Oil and Gas) staff worked closely with the OPS to provide petroleum product supply and distribution assessments to determine the appropriate operational requirements for restoration of safe service.

PETROLEUM

Energy Policy and Conservation Act (EPCA)(42U.S.C.§6201etseq.)

- Section 103 provides broad authority, which has been delegated to the Department of Commerce (E.O. 11912), to limit exports of crude oil and refined petroleum products (as well as coal, natural gas, petrochemical feed stocks and energy-related materials and equipment). The Commerce Department has implemented this authority with respect to certain domestic crude oils and petroleum products refined from Naval Petroleum Reserve crude oil in its Export Administration Regulations at 15 CFR Part 75. (42 U.S.C. §6212)
- Sections 151-181 authorize DOE to establish and operate the Strategic Petroleum Reserve (SPR). Section 161(d)(1) authorizes the President to order draw down of the SPR upon a finding that draw down is required either by a ''severe energy supply interruption'' or obligations of the U.S. under the Agreement on an International Energy Program (IEP). Section 3(8) of the EPCA defines ''severe energy supply interruption'' as a national energy supply shortage which the President determines - is, or is likely to be, of significant scope and duration, and of an emergency nature; (B) may cause major adverse impact on national safety or the national economy; and results, or is likely to result, from (i) an interruption in the supply of imported petroleum products, (ii) an interruption in the supply of domestic petroleum products, or (iii) sabotage or an act of God. The Act also provides that in addition to the circumstances set forth in section 3(8), a ''severe energy supply interruption shall be deemed to exist if the President determines that an emergency situation exists and there is a significant reduction in supply which is of significant scope and duration; a severe increase in the price of petroleum products has resulted from such emergency situation; and such price increase is likely to cause a major adverse impact on the national economy.''
- (42 U.S.C. 6241 (d)(1)) Section 161(h) empowers the President to draw down the SPR despite the absence of a ''severe energy supply disruption'' or a need to meet U.S. obligations under the IEP, if the President finds that other circumstances exist that constitute, or are likely to become, ''a domestic or international energy supply shortage of significant scope or duration'' and the President determines that draw down would assist directly or significantly in preventing or reducing the adverse impact of such a shortage. However, there are several limitations on the use of this authority: the Reserve may not be drawn down for more than 30 million barrels or for longer than sixty days with respect to a single event, or if the Reserve would be reduced below the level of 500 million barrels. The Act gives the President authority to authorize the export of crude oil withdrawn from the SPR during a drawdown for refining or exchange outside the U.S., in connection with an arrangement for the delivery of refined petroleum products to the U.S. (42 U.S.C. §6241(i)) The Commerce Department has implemented this authority in its Export Administration Regulations at 15 CFR 754.
- Section 251 empowers the President to require U.S. oil companies to divert oil supplies to other International Energy Agency (IEA) member countries in

satisfaction of United States' allocation obligations when the IEA's emergency oil sharing system has been triggered. (42 U.S.C. §6271)

Petroleum supply disruptions can result in the following federal actions:

U.S. Lead for International Oil Emergency Response Activities: DOE is responsible for coordinating U.S. involvement in an International Energy Agency (IEA) response to an international oil supply emergency. The IEA, consisting of 23 member countries, was created following the 1973 oil crisis with the goal of developing and maintaining cooperative oil emergency response policies and programs. This authority comes from:

- Executive Order 11912
- Department of Energy Organization Act,
- Energy Policy and Conservation Act (Sections 251 to 254), and
- Agreement on an International Energy Program

International Energy Program: As a signatory to the 1974 Agreement on an International Energy Program (IEP), the U.S. is obligated to cooperate with its allies in the International Energy Agency (IEA) to respond to international oil supply emergencies. The IEA has two primary oil emergency response mechanisms that it can employ. The IEP contains an emergency oil allocation program known as the Emergency Sharing System, under which each member country is responsible for helping share the burden of an oil supply shortfall. A second measure developed by the IEA in 1984 is known as the Coordinated Emergency Response Measure (CERM), which utilizes a more market-oriented approach involving stock draw and complementary measures, such as demand restraint. DOE leads U.S. participation in an IEA oil emergency response action. The Department develops plans for U.S. emergency response actions, develops the U.S. position on an appropriate international response, and makes recommendations for action to the President. Close coordination is maintained with the Department of State and other interested Federal agencies.

Strategic Petroleum Reserve: The DOE is authorized to create and maintain a Strategic Petroleum Reserve and the President is authorized to order a drawdown of the Reserve in emergency circumstances as defined in the Energy Policy and Conservation Act, Sections 151 to 181.

- **Drawdown:** DOE is authorized to create and maintain the SPR and implementing the draw down and distribution of the reserve upon a Presidential finding of a ''severe energy supply interruption'' or the need to fulfill International Energy Agency obligations. The President can also order a drawdown if he finds that other circumstances exist that constitute a "domestic or international energy supply shortage of significant scope or duration." Under this authority, the SPR can be drawn down by up to 30 million barrels a day for up to 60 days, but not fall below 500 million barrels. Purchasers would be delivered oils within approximately 16 days from the day of the decision. However, it could take several weeks for purchasers to transport oil from the SPR, have it refined and then distributed to consumers. In November 2001, the President ordered that the SPR be filled to its 700 million barrel capacity.

- **History:** The emergency drawdown authority was used in January 1991

during the Gulf War when 17 million barrels of SPR oil were sold pursuant to the IEA's Gulf War Contingency Plan of January 11, 1991. In addition, DOE has had three Congressionally-mandated sales of SPR oil for deficit reduction purposes and operational expenses and has conducted two test sales with industry to ensure SPR readiness. In September of 2000, the President directed that 30 million barrels of SPR be swapped to bolster oil supplies and enhance low inventories of winter heating oil. Companies that obtained the oil were required to return the oil plus an additional bonus amount to the SPR by the fall of 2001.

- **Jones Act and the SPR:** In the event of a drawdown of the SPR, the volume of crude oil to be moved would be significantly greater than the capacity of the available U.S. flag crude oil tanker fleet that the Jones Act requires for transport. While procedures exist to expedite the waiver process on a case-by-case basis, a general waiver of the Jones Act, such as directed by the President in his finding for the 1991 SPR drawdown, is essential to assure the rapid and orderly sale and distribution of SPR oil.

LIMITING EXPORTS OF ENERGY PRODUCTS

The Department of Commerce has broad authority to limit exports of energy supplies, including coal, crude oil, petroleum products, natural gas, or petrochemical feed stocks under the Energy Policy and Conservation Act, Section 103. However, such actions could have implications for U.S. international trade obligations under the General Agreement on Tariffs and Trade (GATT) and North American Free Trade Agreement (NAFTA) and are seldom used. DOC may seek advice on energy supply situations from DOE when considering this option.

- **Export Administration Regulations:** DOC has implemented this authority in its Export Administration Regulations in the past. Exports of refined products do not require a license (with the exception of product refined from Naval Petroleum Reserves crude oil). Exports of certain domestic crude oils (Naval Petroleum Reserves crude oil, crude oil subject to a Mineral Leasing Act right of way, and Outer Continental Shelf Lands Act oil) remain subject to restrictions in different statutes, including Energy Policy and Conservation Act, Section 103, and require an export license. Section 103 has never been used to re-impose export controls on crude oil or refined petroleum products.
- **Priority for Domestic Energy Supplies:** The DOE has delegated authority from the Department of Commerce (DOC) under the Defense Production Act of 1950, Section 101(c) to assign priority ratings to contracts for materials, equipment, or services for projects deemed necessary to "maximize domestic energy supplies" or enter the marketplace to allocate the same. Most often these contracts are essential to exploration, production, refining, transportation, or conservation of energy supplies, or construction and maintenance of energy facilities. Impositions of priority ratings on contracts legally require the contractor to perform the contract on a priority basis. Such contractors receive DPA "breach of contract protection" from their existing customers.
- **Production Act (DPA) Contract Eligibility:** DOE must determine whether a contract(s) is eligible and supplies of materials or equipment are critical and essential to the project. DOC must determine whether the supplies for which priority assistance has been requested are scarce and whether the project reasonably can be accomplished without them. Section 101(c) is also one of the permanent provisions of the DPA that never expires should the Congress allow the DPA to lapse.

a. **History:** This authority was used in the 1970s, and again in the 1980's. In the early 1990s, it was also used to facilitate the development of the Alaskan North Slope oil fields and was considered for use during the Persian Gulf War to enhance foreign oil production. In limited circumstances, Section 101(c) could be used to obtain equipment needed to repair damaged production facilities or to expedite supply of fuel oil to electric utilities.
b. **Supply from Foreign Projects:** Increasing energy supplies from foreign projects can increase domestic energy supplies. During emergencies, DOE may want to increase foreign oil production. It can do so through a draft interim final rule. This draft rule would become effective immediately upon issuance through a waiver in the DOE Organization Act.

Directed Energy Supplies Under the Defense Production Act: The Secretary of Energy, under the Defense Production Act of 1950, Section 101(a), can require suppliers to accept contracts or orders at their normal market prices, on a priority basis, for energy supplies that are deemed "necessary or appropriate to promote the national defense." The Secretary can also impose priority ratings on existing contracts, requiring suppliers to meet priority defense requirements relative to other customers or simply issue allocation orders to suppliers.

- **Application to DOD Contractors:** The Secretary's broad energy emergency authority applies to the Defense Department, Defense Department contractors (such as commercial airlines), and other federal agencies with national security or defense-related responsibilities. The Defense Production Act provides complying suppliers with breach of contract protection. This authority could be used to require acceptance of and priority performance under contracts relating to the production, delivery, or refining of petroleum products to meet national defense energy needs.
- **Transportation of Supply:** DPA authority could also be used to facilitate transportation of energy supplies during an emergency by requiring pipelines, marine terminals, and other facilities to perform transportation contracts to promote national defense. However, the authority to control the general distribution of petroleum supplies in the "civilian market" cannot be used until the findings are made that supplies are "scarce and critical" and defense needs cannot be met without causing dislocations that will create appreciable hardship (Section 101(b)).

OTHER FEDERAL AUTHORITIES

Government Emergency Telecommunications: DOE sponsors energy industry requests for priority access through the interstate and intrastate telecommunication switching networks. Refer to the Federal Communications Act of 1934, Presidential Executive Order 12472, and 47 CFR Part 201.

- **National Communications System:** The National Communications System (NCS) has established a National Security and Emergency Preparedness (NSEP) program called the Government Emergency Telecommunications Service (GETS) to facilitate emergency communications. GETS provides priority access through the computer systems controlling the Local Exchange Carrier (LEC) and the public switching networks that route intrastate and interstate calls. GETS provides the legal ability for telecommunications providers to give preference in the routing of telecommunications to NSEP users.
- **Delegated Authority**: NCS has delegated to DOE the authority to issue GETS personal identification numbers (PINs) to the energy industry so that their NSEP telecommunications can obtain priority access to telecommunications routing.

State Energy Emergency Assurance Coordination: DOE and NASEO have agreed that DOE will develop, maintain, and distribute a contact list of state and federal individuals responsible for energy market assessment and energy emergency responses. The states will participate in the effort by providing timely assessments of energy markets to DOE and other states in the event of an energy supply disruption. Refer to the Department of Energy Organization Act, Section 205 and Federal Energy Administration Act of 1974, Sections 51 to 59.

- **Electronic Communications Network:** This critical electronic communications network of DOE officials, state emergency officials, state energy offices, and local emergency management officials provides a mechanism for the rapid dissemination and sharing of information on energy supplies, distributor and market assessments. DOE provides states an aggregated regional assessment of the effects of a market disruption when two or more states are affected. The assessment will draw upon information gathered by states, as well as other information, data, or analysis available to DOE. In support of this effort, each state identified one or more Energy Emergency Assurance Coordinators from different agencies throughout the state.

Low Income Home Energy Assistance Program (LIHEAP): The Department of Health and Human Services (HHS) can make the Low Income Home Energy Assistance Program (LIHEAP) emergency contingency funds available to assist eligible low income households meet their home heating and/or cooling needs arising from a natural disaster or other emergency such as extremely high energy prices. DOE may advise HHS on the fuel supply situation for such emergency funding. This authority is granted by the Community Opportunities, Accountability and Training and Educational Services Act of 1998, Title III, Sec 301-309 and the Low Income Home Energy Assistance Act of 1981.

- **Distribution of Funds:** High heating oil and propane prices have justified distributing emergency discretionary funds in the past to states based on their use of these fuels or other variables that reflect state needs.
- **Block Grants:** In addition to the availability of discretionary emergency funds, HHS also annually awards energy assistance block grants to the 50 states, District of Columbia, eligible Indian tribes/tribal organizations and insular territory areas, who then make payments directly to eligible households, or on behalf of such households, to help meet the cost of home energy. Although funded by the Federal Government, the HHS LIHEAP program is operated by each grantee.

Federal Energy Management Program (FEMP): In a severe emergency, the President may order increased conservation in federal facilities and operations, including the federal vehicle fleet. FEMP helps federal agencies reach their energy savings goals by aggressively raising awareness of energy efficiency activities and making it easier for agencies and utilities to save energy and money. The General Services Administration (GSA) coordinates the notification and distribution of the President's request. Refer to the Energy Policy Act of 1992 (EPA Act) and the Energy Emergency Conservation Act of 1979, Section 211(c).

- **Conservation by Federal Agencies**: Federal agencies spend approximately $4.3 billion annually on utilities and are required by Executive Order 13123 to reduce their energy consumption by 20 percent from 1985 levels by 2010. FEMP energy savings performance contracts, utility incentives programs, and other creative financing mechanisms help federal agencies and utilities reach their energy and budget goals. FEMP has a Federal

Utility Partnership Working Group to develop communications between federal agencies and utilities. Utilities are moving from rebates to customized financing programs and value-added services such as energy audits, design assistance, load management, maintenance, and power quality to federal agencies.

- **Caveat Concerning Federal Closures**: At times it may be counterproductive to order the closure of federal office buildings to save energy. Federal staff could actually increase total energy demand in peak periods by increased residential consumption. Timing and magnitude of all emergency building closures needs to be weighed carefully.

Fuel Switching Public Utilities Regulatory Policies Act of 1978 (codified in16U.S.C.§2601et seq.and15 U.S.C.§717z)

- DOE has delegated authority (E.O. 12235) under Section 607, following the President's finding of a ''severe natural gas shortage endangering the supply of natural gas for high-priority uses,'' to prohibit the burning of natural gas by any electric power plant or major fuel-burning installation. Required emergency finding identical to that in the Natural Gas Policy Act. (15 U.S.C.717z) Powerplant and Industrial Fuel Use Act (42U.S.C.§8301et seq.)
- Section 404(a) grants the President authority to allocate coal (and to require the transportation thereof) for the use of any powerplant or major fuel- burning) installation. (42 U.S.C. §8374(a)) Exercise of this authority requires a Presidential finding of a severe energy supply interruption, as defined in Section 3(8) of Energy Policy and Conservation Act (EPCA), set out above. Section 404(e) stipulates that the President may not delegate his authority to issue allocation orders under this authority.
- Section 404(b) grants the President authority to prohibit any powerplant or major fuel-burning installation from using natural gas or petroleum, or both as a primary energy source. (42 U.S.C. §8374 (b)) Exercise of this authority requires a Presidential finding of a severe energy supply interruption, as defined in Section 3(8) of EPCA, set out above. Section 404(e) stipulates that the President may not delegate his authority under this provision.

Facilitating the Transportation of Energy Products ICC Termination Act of 1995 (Pub.L.No.104-88,109Stat.803)

- Authorizes the Surface Transportation Board, Department of Transportation, to issue priority orders during an emergency situation for rail movement of commodities including petroleum. (49 U.S.C. §11123)
- Implementing regulations (10 CFR 205.370 et seq.) specify that the involved parties must attempt to resolve the economic charges associated with the interconnection and/or delivery of electric power. If no resolution can be reached, the matter would be referred by DOE to the Federal Energy Regulatory Commission for hearings and resolution. Regulations of the Department of Transportation, Federal Highway Administration, provide in 49 C.F.R. 390.23 for waiver of Federal motor carrier safety regulations in Parts 390 to 399 for motor carriers or drivers operating commercial motor vehicles to provide emergency relief during a regional or local emergency declared by the President, Governor of a State, or the Regional Director of Motor Carriers. An emergency is defined to include natural disasters, explosions, blackouts or other occurrences, natural or man-made, which interrupt the delivery of essential services such as, electricity, medical care, sewer, water, telecommunications and telecommunications transmission or essential supplies such as food and fuel, or otherwise immediately threaten human life or

public welfare. For example, the waivers may exempt motor carriers and drivers from limits on on-duty hours when providing direct assistance in such emergencies and provides exemptions from inspections, record keeping, hazardous materials, and other requirements. Magnuson Act (50U.S.C.§191etseq.

- Authorizes the Secretary of Transportation to issue regulations governing the movement of any vessel within the U.S. territorial waters, upon a Presidential declaration of a national emergency by reasons of actual or threatened war, insurrection or invasion, or disturbance or threatened disturbance of the international relations of the United States. (50 U.S.C. §191) Ports and Waterways Safety Act (33 U.S.C.§1221etseq.) Authorizes the Secretary of Transportation to establish vessel traffic systems for ports, harbors and other navigable waters and to control vessel traffic in areas determined to be hazardous (e.g. due to conditions of reduced visibility, adverse weather, vessel congestion, etc.). (33 U.S.C. §1223).
- PublicLawNo.81-891,64Stat.1120(''JonesAct''waiver) Directs the Secretary of the Treasury to waive the provisions of section 27 of the Merchant Marine Act of 1920 (''Jones Act''), which require the use of vessels documented under 46 U.S.C. §12106 (i.e. U.S.-flag, U.S.-built, and U.S.-crewed vessels) in coastwise trade, ''upon the request of the Secretary of Defense to the extent deemed necessary in the interest of the national defense by the Secretary of Defense.'' In addition, Public Law No. 81-891 authorizes the Secretary of the Treasury to waive compliance with the Jones Act either upon his own initiative or upon the written recommendation of the head of another agency whenever the Secretary ''deems that such action is necessary in the interest of the national defense.''

ENVIRONMENTAL WAIVERS

Clean Air Act (42U.S.C.§7401etseq: Section 110(f) of the Clean Air permits a State Governor to issue an emergency temporary suspension of any part of a State Implementation Plan (''SIP'') (as well as a temporary waiver of penalties for ''excess'' SOx or NOx emissions) in accordance with the following: (1) the owner/operator of a fuel burning source petitions the State for relief; (2) the Governor gives notice and opportunity for public hearing on the petition; (3) the Governor finds that an emergency exists in the vicinity of the source involving high levels of unemployment or loss of necessary energy supplies for residential dwellings and that the unemployment or loss can be totally or partially alleviated by an emergency suspension of SIP requirements applicable to the petitioning source; (4) the President, in response to the Governor's request, declares a national or regional emergency exists of such severity that a temporary SIP suspension may be necessary and other means of responding to the energy emergency may be inadequate; and (5) the Governor issues an emergency suspension to the source.

Environmental Protection Agency regulations (40 C.F.R. 80.73) permit EPA to grant an exemption from the Clean Air Act Section 2ll (k)(1) requirement mandating the sale of reformulated motor gasoline in nine large U.S. cities (in order to reduce emissions of ozone-forming substances and toxic substances) in ''appropriate extreme and unusual circumstances (e.g. natural disaster or Act of God)'' if a refiner, importer, or blender satisfies the following five criteria:

a. Nonconforming gasoline is necessary to meet projected supply shortfalls;
b. Refiner/importer/blender could not have avoided noncompliance and is minimizing extent of noncompliance;
c. Refiner/importer/blender can demonstrate how compliance will be expeditiously achieved;

d. Refiner/importer/blender agrees to make up air quality detriment where practicable; and
e. Refiner/importer/blender pays to U.S. Treasury an amount equal to the economic benefit of nonconformity less the amount expended in making up the air quality detriment.

NATIONAL DEFENSE AND NATIONAL SECURITY

Defense Production Act of 1950 (50U.S.C.App.§2061etseq.): The Secretary has delegated authority (E.O. 11790 and E.O. 12919) under section 101(a) to require performance on a priority basis of contracts for energy supplies that the Secretary deems ''necessary or appropriate to promote the national defense,'' and to allocate energy supplies ''in such manner, upon such conditions and to such extent as [the Secretary] shall deem necessary or appropriate to promote the national defense.'' This authority could be used, for example, to require acceptance of and priority performance under contracts relating to the production, delivery, or refining of petroleum products, to meet national defense energy needs of the Department of Defense and its contractors. It also could be used to facilitate petroleum transportation during an emergency, for example, by requiring pipelines, marine terminals, and other facilities to perform oil transport contracts necessary or appropriate to promote the national defense. (50 U.S.C. App. §2071(a)) Section 101(a) authority is not available to control the general distribution of material in the civilian market unless further findings required by Section 101(b) of the DPA are made, i.e. that the material is a ''scarce and critical material essential to the national defense'' and that defense needs cannot be met without causing dislocations in that market that will create ''appreciable hardship.'' (50 U.S.C. App. §2071(b))

Section 101(c) authorizes contract ''priority ratings'' and the allocation of equipment, material and services in order to maximize domestic energy supplies, if the Secretaries of Energy and Commerce, under E.O. 12919, make certain findings with respect to the need for the material, equipment or services for the exploration, production, refining, transportation, or conservation of energy supplies, or for the construction and maintenance of energy facilities. This authority could be used, for example, to assist oil companies or electric utility companies in obtaining equipment needed to repair damaged facilities, or to provide fuel oil to electric utilities. (50 U.S.C. app. §2071(c))

Section 708 provides a limited antitrust defense for industry participating in voluntary agreements ''to help provide for the defense of the United States through the development of preparedness programs and the expansion of productive capacity and supply beyond levels needed to meet essential civilian demand in the United States.'' In the event of widespread damage to energy production or delivery systems, this authority could be used to establish a voluntary agreement of service companies to coordinate the planning of the restoration of the facilities. (50 U.S.C. app. §2158)

The Secretary has delegated authority (E.O. 11790 and E.O. 12919) under Section 710 to train and employ persons from the private sector in order to facilitate planning for and responding to emergencies. (50 U.S.C. app.§2160)

NUCLEAR ENERGY

Atomic Energy Act of 1954 (42U.S.C.§2011etseq.): Authorizes the Nuclear Regulatory Commission, upon the declaration by Congress of a state of war or national emergency, to suspend any licenses granted under the Act if such action is necessary for the common defense and security. (42 U.S.C. §2138).

INTERNATIONAL AUTHORITY

International Emergency Economic Powers Act (50U.S.C.§1701etseq.): Authorizes the President to declare a national emergency to deal with a threat, which has its source in whole or substantial part outside the United States, to the national security, foreign policy, or economy of the United States. Upon declaration of a national emergency, the Act provides the President with plenary control over property that is subject to U.S. jurisdiction and in which any foreign country or national thereof has an interest. If a petroleum shortage is sufficiently severe to invoke a presidentially declared national emergency, the IEEPA could be used to control supplies of petroleum products in which foreign countries or foreign nationals have an "interest" (e.g. regulate exports of petroleum products owned or controlled by a U.S. company and in which a foreign national has contract right to acquire). (50 U.S.C. §§1701-1702.

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APPENDIX D
Continuity of Operations Plan

STATE OF NEVADA GOVERNOR'S OFFICE OF ENERGY
CONTINUITY OF OPERATIONS PLAN

APPROVALS

This Continuity of Operations Plan (COOP) was prepared by Governor's Office of Energy to develop, implement and maintain a viable COOP capability. This COOP complies with applicable internal agency policies, state and local regulations and supports recommendations provided by the Federal Emergency Management Agency. This COOP has been distributed internally within the Governor's Office of Energy and with external agencies that may be affected by its implementation.

Approved: _____ Date 7-8-16

Angie Dykema, Director
Governor's Office of Energy

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Table of Contents

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1. EXECUTIVE SUMMARY

The Governor's Office of Energy has essential functions that must be performed, or rapidly and efficiently resumed, in an emergency. While the impact of an emergency cannot be predicted, planning for operations under such conditions can mitigate the impact of the emergency on our people, our facilities and our mission – in addition to maintaining services for State citizens.

2. INTRODUCTION

The Governor's Office of Energy has prepared this Continuity of Operations (COOP) plan as part of its Energy Assurance grant and responsibilities. This COOP establishes policy and guidance to ensure the execution of the essential functions for the Governor's Office of Energy in the event that an emergency at the agency or in the State threatens or incapacitates operations, and/or requires the relocation of staff and functions.

A. Purpose

The capability to prepare for, respond to and recover from emergencies affecting the office's operations is dependent upon the proficiency and well being of its employees and leadership. The Office of Energy has adopted this plan, which allows the Office of Energy to:

- Have the capability to implement the COOP both with and without warning;
- Perform essential functions no later than 12 hours after activation of the COOP;
- Maintain essential functions for up to 30 days (90 days in a pandemic scenario);
- Develop standard operating procedures which enable the performance of essential functions.

B. Applicability and Scope

This plan describes the actions that shall be taken to activate a viable COOP capability within 12 hours of an emergency event and to sustain that capability for up to 30 days. The COOP can be activated during business and non-business hours, both with and without warning.

C. Policy

It is the policy of the State of Nevada to respond quickly at all levels in the event of an emergency or threat in order to continue essential functions and operations. COOP capabilities must be maintained at a high level of readiness, capable of being activated both with and without warning, ready to achieve operational status no later than 12 hours after activation, and able to maintain sustained operations for up to 30 days (90 days in a pan flu scenario) or until termination.

D. Objectives

The objectives of this plan are to:

- Ensure the continuation of essential functions;
- Protect facilities, equipment, records, and other assets;
- Facilitate decision-making during an emergency;

- Achieve an orderly recovery from emergency operations; and
- Fulfill the office's responsibilities in local, regional and state emergency operations plans and agreements.

E. Assumptions

The following assumptions are made in considering continuity of operations planning by the Office of Energy:

- Upon declaration of COOP activation, employees will be instructed about their responsibilities under the activation of the COOP.
- Emergencies or threatened emergencies can adversely impact the agency's ability to continue to support essential functions and to provide support to the operations of clients and external agencies.
- Agency and non-agency personnel and resources located outside the area affected by the emergency or threat shall be available as necessary to continue essential functions.
- A disaster may require staff to function with limited automated support and some degradation of service until full recovery is made.
- In compliance with the National Incident Management System (NIMS), and Homeland Security Presidential Directive (HSPD) - 5, all COOP program activities shall incorporate the principles of NIMS and the Incident Command System (ICS).

3. AUTHORITIES AND REFERENCES

A. Authorities

The COOP has been developed with the full endorsement of the Governor's Office of Energy's Director and senior management. The authority to develop the COOP is derived from Nevada Revised Statutes 701.180, 701.190 and 701.210.

B. References

The reference used to develop this plan includes *The State of Idaho Continuity of Operations (COOP) Template*, August 2008. Other references that have supported the development of this COOP include the Homeland Security Presidential Directive (HSPD) 20, National Security Presidential Directive (NSPD) 51: *National Continuity Policy.* Though not required, the COOP addresses elements identified in the Federal Emergency Management Agency, *Federal Continuity Directive 1.* The updated FCDs and other related FEMA documents can be found at: http://www.fema.gov/government/coop/index.shtm.

4. CRITICAL BUSINESS FUNCTIONS

When confronting events which disrupt normal operations, the Governor's Office of Energy is committed to ensuring that essential business functions will be continued even under the most challenging emergency circumstances. During activation of this COOP, all other activities may be suspended to enable the agency to concentrate on providing the essential functions and building the internal capabilities necessary to increase and eventually restore operations.

Essential Functions of the Office of Energy include:

1. Serve in the capacity of the ESF-12 position when an emergency is declared in the State.
2. Provide appropriate communication to the Governor and other essential stakeholders.

The Office of Energy currently operates out of one facility in the State. All documents, equipment and staff are located in Carson City, Nevada.

5. CONCEPT OF OPERATIONS (CONOPS)

To implement the COOP, the agency has developed a Concept of Operations (CONOPS), which focuses on establishing emergency decision-making authority and defining a decision process for determining appropriate actions in implementing COOPs and procedures.

A. Planning Scenarios

Activation of the COOP may involve:

- The pre-planned movement of selected key personnel and technical personnel to an alternate operating facility;
- The implementation of temporary work procedures;
- The delegation of emergency authorities to successors of senior management and technical personnel due to their being unavailable during the emergency; and/or
- The assignment of COOP teams to perform specific activities necessary to ensure essential functions.

When activating the COOP, certain items of cyber security need to be considered. Cyber security and policy are to protect an individual's information. The following should be considered:

- Consider the source of USB devices.
- If necessary, have USB devices cleared by IT personnel.
- Consider the vulnerability of PDF readers on Smartphones. Storing email on Smartphones (iPhone, Android or Blackberry) could allow hackers to read emails stored on phones.
- Personal Smartphones are not to be used for state purposes or to download state information.
- Verify that appropriate and approved software is installed on home computers or Smartphones that are allowed access to State systems.
- Employees can often unknowingly be the biggest threat to system security. Alert supervisors to any unusual emails or computer activity.

Three threat scenarios have been identified as the most likely to trigger COOP activation:

- **Class 1 Scenario: Single Building/Agency**: In this scenario, a portion or all of the agency's operations are disrupted at one location, with limited displacement of operations to alternate facilities. The most likely causes of such a disruption are fire; system/mechanical failure; loss of utilities such as electricity,

telephone, water, or steam; or explosion (regardless of cause) that produces no significant damage to any other facilities or systems used by the agency.

- **Class 2 Scenario: Catastrophic Event**: This scenario assumes that an incident affects a geographic region with a cluster of state operations (e.g., the Capitol). This scenario also assumes the disruption of operations to a number of agencies, leading to widespread displacement of the workforce and a disruption to multiple interdependencies between and among agencies. Disruption of normal business operations is assumed to be for an extended period of time.

- **Class 3 Scenario: Pandemic**: This scenario assumes that there is a pandemic-related disruption of the workforce and that infrastructure is affected only to the extent that systems require maintenance and/or operation by a severely depleted workforce. Operations from an alternate (continuity) location will probably not be required. A pandemic event will most likely last for 12-18 months with as many as three waves of new infections lasting 4-6 weeks each. Continuous essential function evaluation may be required. Flu.gov has Nevada's Pandemic Plan online, which contains more information: http://www.flu.gov/planningpreparedness/states/nevada.html#.

B. COOP Execution

The Director, or his or her designee, may implement the COOP. The COOP is implemented based on known or anticipated threats and emergencies occurring with or without warning.

- **Known Threats And Emergencies (With Warning)**: There are some threats to operations that may afford advance warning that shall permit the orderly alert, notification, evacuation, and, if necessary, the relocation of employees. Such situations may include seasonal flooding, a transportation accident resulting in a threat of a release of hazardous material (HAZMAT) or a threat of a terrorist incident.
- **Unanticipated Threats and Emergencies (No Warning) During Non-Business Hours**: Incidents may not be preceded by warning (e.g., earthquakes, arson, HAZMAT, or terrorist incidents) and may occur while on-site staff is not at work. In these circumstances, while operations from the primary facilities may be impossible, employees may still be able to respond to instructions, including the requirement to relocate following notification.
- **Unanticipated Threats and Emergencies (No Warning) During Business Hours**: Incidents may also occur with no warning during normal office hours. Execution of the COOP would begin with implementation of building evacuation and safe assembly procedures, continuing through to notification of the COOP team.

C. COOP Team

The Governor's Office of Energy has identified key positions to provide management necessary to establish essential functions within 12 hours after the emergency event. These are identified in *Personnel Contact List (Rapid Recall List)* located in the Appendix.

D. Time-phased COOP Implementation

When confronting events that disrupt the normal operations of the agency, the office shall implement its COOP using a time-phased approach detailed below.

- **Phase 1: Activation and Relocation, 0-12 hours**
  a. **Alert and Notification**: The agency has established specific procedures to alert and notify the director and staff that COOP activation is imminent. The *Personnel Contact List (Rapid Recall List)* is located in the Appendix. Any staff member may recommend to the Director or his/her designee, COOP activation. Upon declaration, by the director, of the continuity of operations plan, staff will proceed with Initial Actions.
  b. **Initial Actions**: The Office has identified specific actions to be taken to terminate primary operations and activate the COOP team, communication links, and alternate work locations. Initial actions emphasize staff safety. Staff should be notified by the Director (or designee) of COOP activation in an orderly manner, via the *Rapid Recall List* in the Appendix. If office evacuation is necessary, staff should secure vital records and equipment if it is reasonable to do so and relocate to alternate work sites, to include home offices, the Division of Emergency Management facility (2478 Fairview Drive, Carson City) and/or Washoe County's Emergency Operations Center (5159 Spectrum Boulevard, Reno). Home office sites are available to staff who are able to connect to state computers via a Virtual Private Network (VPN). Upon COOP activation, staff should:
     1. Secure vital records and equipment (if it is safe to do so
     2. Relocate to alternate work locations, to include
        a. Home office if VPN exists
        b. DEM
        c. Washoe County EOC

- **Phase 2: Alternate Operations, 12 hours to end of emergency**
  a. **Operational Hours:** During COOP activation, the office's operating hours will be 8 a.m. and 5 p.m., Monday through Friday, or as otherwise necessary to provide essential functions.
  b. **Execution of Essential Functions**: The agency will perform any functions determined to be essential to operations from the alternate facilities using temporary procedures. The agency will re-establish normal lines of communication within the agency, to other agencies, and to the public via email, online communications and via the news media if necessary.
  c. **Development of Plans and Schedules for Reconstitution and Termination:** As soon as it is feasible, and safe to do so, preparation for transferring operations of communication, vital records, databases and other activities back to the primary office will begin. Circumstances may dictate that a new primary facility is designated and subsequently occupied.

- **Phase 3: Reconstitution, end of emergency**
  a. **Reconstitution Process**: Upon the conclusion of the emergency event, staff should begin reconstitution procedures.
  b. **Reconstitution Procedures**: Vital records and equipment should be relocated back to the office, and staff should return to the office as under normal work conditions.
  c. **After-Action Review and Remedial Action Plans**: An after-action review should be conducted with staff input to determine what, during the COOP, worked well, what did not and what specific solutions can be made to correct any areas of concern. The after-action review should occur within five business days of the COOP, and, depending upon the event's severity, may be a staff debriefing or a written report.

E. Notification and Alert

The Office of Energy recognizes that the COOP may be activated under different conditions:

- **With Warning**: It is expected that, in many cases, the Governor's Office of Energy will receive a warning of at least a few hours prior to an event via office emergency declaration from the state Division of Emergency Management, the Governor's Office, or local emergency officials. Staff notification of the COOP will occur through email, text message and/or telephonic methods listed in the *Rapid Recall List* in the Appendix.
- **Without Warning:** The ability to execute the COOP following an event that occurs without warning depends on the severity of the emergency and the number of personnel who survive.
  a. **Non-Business Hours**. Staff will be alerted and activated to support operations for the duration of the emergency. Notification will occur through email, text message and telephonic means as listed in the *Rapid Recall List* in the Appendix.
  b. **Business Hours**. If possible, the COOP will be activated and available staff will be deployed as directed to support operations for the duration of the emergency. Depending on the status of communications, notification will be made by telephone, in-person at the office, and using designated call down procedures as listed in the *Rapid Recall List* in the Appendix.

F. Delegations of Authority and Orders of Succession

In the event that executive leadership, senior management or senior technical personnel are unavailable during an emergency, the Office of Energy has developed a set of procedures to govern delegations of authority.

- Authorities have been identified for delegation in support of policy determinations and executive decisions. Delegations specify what the authority covers, what limits may be placed upon it, who (by title) will have the authority, and under what circumstances. See *COOP Response Team / Delegation of Authority* in this Appendix: F-13.

6. RESPONSIBLITIES

A. Responsibilities

The following lists identify major responsibilities of key personnel required to implement Office of Energy's COOP. The Director is responsible for:

- Activating the COOP
- Working with emergency management agencies and the Governor's Office to ensure the office's resource needs are met
- Deactivating the COOP

The COOP coordinator is responsible for:

- Initiating communications via the *Rapid Recall List* in the Appendix.
- Overseeing staff are safely evacuated when applicable
- Overseeing that records and equipment are maintained safely
- Overseeing the reconstitution of the office's operations

7. ADMINISTRATION AND LOGISTICS

A. Alternate Facility

The Office of Energy recognizes that normal operations may be disrupted and that there may be a need to perform essential business functions at alternate facilities. The Office, through cooperative agreements and mutual aid agreements, also has access to additional facilities that could support essential business functions. The current options for alternate work sites are:

1. Home offices with VPN connections
2. The Division of Emergency Management (Carson City)
3. Washoe County EOC (Reno)

B. Vital Records, Equipment and Systems

The Office of Energy has records, equipment and systems that will be prioritized for restoration and recovery in an emergency event. Energy Program Managers, in coordination with the Deputy Director and Administrative Assistant, should identify key records and equipment for preservation during emergencies and ensure these items are maintained during a COOP activation.

C. Interoperable Communications

Communications is a critical component of a successful COOP activation. Communications must support connectivity to internal organizations, other agencies, critical customers, and the public. Primary and alternate modes of communication are listed in the *Rapid Recall List* in the Appendix.

D. Employee Support

If circumstances require, the Office recognizes that the well-being of an employees' dependants and domestic companion animals are of mutual concern to ensure that employees remains available to support alternate facility operations. Employees must determine a prudent course of action, and management must take this into consideration.

8. COOP MAINTENANCE

The Office has provided staff with a training program to ensure that the agency's COOP capability remains viable. The training is intended to familiarize agency staff members with their roles and responsibilities during an emergency, ensure that systems and equipment are maintained in a constant state of readiness, and validate aspects of the COOP.