



New York State 2015 Energy Emergency Plan:

**An Integrated Resource Plan Specifying Actions to be taken in
the Event of an Energy or Fuel Supply Emergency**

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Preface

New York's energy markets are increasingly influenced by national and international economic and market events – often beyond the State's control. These include increasingly sophisticated financial and operating practices, changing policy and regulatory environments, expanding opportunities and access to products and services, and intense competition. National and State energy policy, along with underlying market forces, have resulted in a diverse energy marketplace and an economy more vulnerable to energy supply disruption.

Climate change is also impacting New York's energy markets. Throughout the Northeast, heavy rain events have become more frequent, and cold events have become more rare. These and other climate changes are projected to lead to increasing impacts across New York State's economy and natural systems.¹ Not all of these changes will necessarily be gradual; when certain tipping points are crossed, impacts can increase dramatically. While New York State's energy supply and distribution systems are highly reliable, weather-related stressors can damage equipment, disrupt fuel supply chains, reduce power plant output levels, or increase demand beyond the energy system's operational capacity.

Given the changes that have occurred and continue to evolve in electric, natural gas and petroleum markets, the State must periodically examine strategies for responding to supply disruptions or fuel emergencies to ensure that such actions are appropriate and responsive to meeting critical public needs. The success of New York's Energy Emergency Plan depends on cooperation among energy market participants and government agencies to facilitate industry response efforts during difficult market events. The State must ensure that priority health and safety needs are met during a severe or prolonged fuel disruption.

The State cannot prevent shortages of fuel or rapid increases in prices that result from natural or man-made disasters or other market-disrupting events, nor does it have regulatory control over the factors that affect supply. Regulatory and policy actions affecting long-term supply occur primarily at the federal level. Natural gas and petroleum drilling regulations and taxing decisions; the size, fill rate, and release of the nation's strategic oil reserves; and the regulation of interstate

¹ Climate Change In New York State: Updating the 2011 CLIMAID Climate Risk Information Supplement to NYSERDA Report 11-18 (Responding to Climate Change in New York State), NYSERDA, September 2014.

gas and oil pipelines and truck, rail, and water-borne shipping of product are all federal responsibilities, although shared in many instances with the states. In addition, foreign relations and national defense priorities are prime factors affecting imported energy markets. The Federal Government, through the U.S. Department of Energy (U.S. DOE) and its Energy Information Administration (EIA), also plays a direct role in helping markets and industry respond to fuel emergencies and monitoring market conditions.

In the event of a significant disruption in energy supplies, the State and the Federal Government could adopt limited supply-enhancement and demand-management strategies. Supply-enhancement measures could include relaxation of regulations governing drilling, mining, shipping, transmission, or environmental restrictions on energy use or extraction. Petroleum supplies could be physically augmented with crude oil supplies released from the federal Strategic Petroleum Reserves, Northeast Heating Oil Reserve, Northeast Gasoline Supply Reserve, and New York State Strategic Fuel Reserves. Demand-restricting strategies in the past were promulgated at the federal level with implementation delegated to the states. The New York State Energy Emergency Plan assumes the same powers could be granted to states in the event of serious, widespread, or extended energy disruptions and presents a strategy that would lead to a formal emergency declaration.

During an emergency, both the State and Federal governments would have responsibility for greater energy market intelligence, including data collection, analysis, and information dissemination. The U.S. DOE and EIA state-of-the-art computer capabilities make it possible to quickly access critical energy data. During an emergency, U.S. DOE, EIA, and individual states or regional organizations perform more active market monitoring to more closely assess event market conditions. Information, such as regional and statewide pricing, inventory availability, and shipping and import characteristics, is crucial to providing an accurate portrayal of energy markets upon which policy makers can base decisions and public support for any potential voluntary or mandatory policies and programs.

While the market is recognized to be the most efficient allocator of scarce resources during both normal market conditions and disruptions, in an actual energy emergency State government needs to ensure adequate energy resources and in particular, that the most pressing energy priority needs are met for all of its citizens. Beyond responding to certifiable health and safety issues involved

in meeting the energy needs of priority users during an emergency, New York State government can expect pressure from the general public to mitigate price impacts.

In general, since the Organization of Petroleum Exporting Countries' (OPEC) oil crises of the 1970s and early 1980s, the energy industry has become more efficient and flexible, as well as more dependent on real-time supply to meet customer needs. Many previous industry practices (such as long-term supply-lifting contracts, exclusive development and supply agreements, and fixed-price contracts) have been replaced with near real-time pricing and greater diversity in supply sources. Financial instruments have made it possible for energy firms to better manage risks. However, the impact of these instruments on price and supply security on a broader basis is as yet untested in a serious, extended energy supply disruption.

New York State should continue to support industry efforts to respond aggressively to new marketplace opportunities, while encouraging contingency planning and effective communication among energy suppliers, transporters, and appropriate government agencies. State government itself must be prepared to take effective and responsive measures to protect the health and welfare of its citizens during catastrophic or extended disruptions of energy supplies. The New York State Energy Emergency Plan (hereafter, the "Energy Emergency Plan") has been prepared as a strategy tool to help New York State prepare for and respond to a broad range of energy emergencies.

1 Introduction

1.1 Purpose and Scope

The role of energy emergency management has evolved over the years from strictly managing physical shortages of petroleum products, such as those that occurred during the OPEC embargoes of the 1970s and early 1980s, to a broader concern for the adequacy and reliability of all energy supplies and response to increasing weather-related energy supply disruptions such as those associated with Superstorm Sandy in 2012. Many different events can occur that could lead to actual or potential interruptions in the steady delivery of different energy products to the State's consumers, businesses, and industries. Such events could pose significant threats to residents, in terms of mobility, comfort, and health, as well as to the continued operation of businesses. And as all energy markets are nearly fully integrated, a supply disruption in one market will affect other markets as well.

An energy emergency is defined as an imbalance between fuel supply and demand or a price escalation significantly above the recent prevailing average sufficient to result in a general threat to the health and welfare of the State's citizens. It can be local, regional, statewide, or even national or international in scope and be triggered by market conditions, physical disruptions, or nature-related emergencies. It can be caused by insufficient supply, excessive demand, or even a perception of such that leads to extreme consumer behavior resulting in panic buying or storing of excess product to ensure future availability.

Officials at every level of government must be prepared to respond to such incidents in an appropriate, constructive, and responsive manner. Government can facilitate the operation of energy markets in periods of stress by increasing monitoring of supply and distribution conditions, observing relative price movements among sectors and regions, and initiating cooperative efforts among industry members, associations, and government officials to identify and correct system bottlenecks or market failures. Government can work to alleviate such problems by locating or identifying alternative supplies, arranging more flexible delivery arrangements, adjusting regulatory requirements, or encouraging intra-industry sharing of available supplies. Government must also be prepared to provide objective information to the public on market activities, restrain consumers if it appears that overreaction is occurring in light of market fundamentals, or take punitive action in situations where individuals or organizations are found to be taking advantage of market uncertainty to gain unfair advantage. Government

should be looked to for implementation of voluntary or mandatory demand-reduction measures or supply-allocation programs only when actual, wide-scale disruptions of energy markets are expected to last for an extended period of time.

The availability of adequate and reliable energy resources plays a vital role in the economic activities and general well-being of New Yorkers. This is true for all fuels: electricity, natural gas, all refined petroleum products, and coal. These energy resources typically originate beyond the State's borders, necessitating an uninterrupted flow of pipeline, waterway, rail car, and highway deliveries to meet the energy needs of New York's end-users.

The reliable flow of energy supplies to end-users in the State depends on numerous factors. New York consumers depend primarily on out-of-State sources for primary energy supplies (*e.g.*, petroleum products, natural gas and coal). There is always an inherent potential for disruption in the delivery of these supplies due to inclement weather or natural and man-made disasters affecting transmission or distribution facilities. Further, the evolving realignment, restructuring, and consolidation of some energy markets are expected to have notable impacts on supply dynamics. It remains to be seen whether supply stability is maintained at current levels in a mostly cost-driven environment, compared to earlier mandated criteria established by regulation.

To respond effectively and in a timely manner to future energy emergencies, New York is:

- Maintaining continuous energy resource supply, demand, and price monitoring and up-to-date electronic data processing capability.
- Performing periodic review and update of the Energy Emergency Plan with strategies that address all types of energy emergencies.
- Prepared to implement a standby State fuel set-aside program, if necessary.
- Coordinating activities with federal agencies, other states, New York State agencies, and the energy supplier industry to exchange supply, demand, and price market intelligence.

1.2 New York State Legislative Mandate

New York State Executive Law, Article 2-B, establishes the State Disaster Preparedness Commission and requires the commission to develop disaster preparedness plans. Such disaster preparedness plans are to address disaster prevention, response and recovery, and collectively comprise the elements of the State's Comprehensive Emergency Management Plan (CEMP). The CEMP is comprised of three main volumes, one of which is the Response and Short-Term

Recovery portion of the plan. The CEMP provides general strategic guidance and an organizational structure of New York State agencies during emergency response and short-term recovery operations. Further, the CEMP includes numerous functional annexes to address various response activities. Each annex brings together the collective resources of various response disciplines. This Energy Emergency Plan serves as an annex to the CEMP and utilizes all of the existing powers and authorities that are realized in the CEMP.

The need for a comprehensive plan setting forth the State's response strategies during energy emergencies was recognized by the State Legislature when it enacted the State Energy Law in 1976. At that time, the Legislature authorized the preparation of an “integrated resource plan specifying actions to be taken in the event of the declaration by the Governor of an energy or fuel supply emergency.” Responsibility for energy emergency planning and response was transferred from the State Energy Office to the New York State Energy Research and Development Authority (NYSERDA) in 1995.²

Energy Law Section 5-117 authorizes the Governor to declare an energy or fuel supply emergency, which may remain in effect for up to six months. Extension beyond six months must be approved by the Legislature. Upon declaration by the Governor of an energy emergency threatening the health and welfare of the State's citizens or economy, NYSERDA's President is granted broad authority to:

- Allocate available supplies of energy or energy resources among areas, users, persons, or categories of persons or users. In allocating available supplies, the President shall give priority to energy and energy resources use essential to public health and safety, and shall thereafter attempt to allocate the remaining supply equitably and in a manner designed to avoid undue hardship.
- Impose restrictions on any wasteful, inefficient or nonessential use of energy or energy resources, and upon the promotion of such uses.
- Waive State and local environmental protection requirements to the extent necessary for emergency use of energy resources not meeting such requirements for a period of not more than thirty (30) days; provided, however, that an additional thirty (30) days may be granted for good cause. Only one such waiver and one extension thereof may be granted any facility within any six-month period. (Energy Law §5-117 (1)(a),(b), and (c)).

² Subdivision 15 of Section 1854 of the Public Authorities Law.

A second source of emergency powers exists to address specific liquid fossil fuel supply problems affecting the State. Liquid fuels include petroleum fuels and propane. NYSERDA's President is authorized to activate a fuel set-aside system for liquid fossil fuels under Article 10 of the Energy Law and the accompanying regulations.³ This authority was also transferred to NYSERDA in 1995. This program exists in "standby" status, to be implemented by NYSERDA's President if "he (sic) finds that implementation of the ... program for one or more liquid fuels is necessary to prevent or alleviate energy hardships or shortages."⁴

Energy Law Section 10-105(2)(b) authorizes a monthly fuel set-aside by each prime supplier of liquid fossil fuels.⁵ The amount of product set-aside may not exceed 3%. Upon a declaration by NYSERDA's President that activates the set-aside program, each prime supplier doing business in the State will be directed to make available up to 3% of its total available monthly supply to the State for allocation to qualifying users under the set-aside program. Allocation of set-aside product will be granted on a month-to-month basis to priority users' wholesale supplier for delivery to end-users. Priority uses are identified during an emergency to alleviate emergency or hardship conditions in the most effective and equitable manner possible. For example, priority uses would generally include those uses supporting public health and safety, such as medical care and law enforcement. NYSERDA may also determine that a particular area of the State is experiencing a significant supply imbalance compared to other regions of the State and is authorized to issue a General Distribution Order directing some or all prime suppliers to release all or a portion of their set-aside supplies into the designated market.

In the event the set-aside program is activated, NYSERDA would work with local county energy coordinators, through the State Office of Emergency Management (OEM), to implement the program in a rapid and effective manner. The set-aside program has three major operational aspects: allocation assessment, data management, and communications. NYSERDA would review the identification of eligible applicants by county officials, review and establish monthly set-aside amounts for each county; contact prime suppliers, process exempt category applications and applications requesting in excess of 25,000 gallons of product, and perform program review

³ NYCRR Chapter IV, Subchapter D, Part 7900.

⁴ Ibid §7900.2(a).

⁵ A prime supplier is any person who makes the first sale of any liquid fossil fuel into the New York State distribution system for use within the State.

and reporting requirements. In the event of a long-term fuel supply emergency, other State agencies' resources could be used to respond adequately to the situation.

The New York State Strategic Fuel Reserve, established in 2013 as part of New York State's Fuel NY initiative, includes the Downstate Strategic Gasoline Reserve (SGR) and the Upstate Strategic Fuels Reserve (SFR) and is designed to mitigate fuel distribution disruptions during Declared Emergencies. The Downstate Reserve holds 2.5 million gallons of gasoline while the Upstate Reserve holds 1.4 million gallons of gasoline and 1.4 million gallons of diesel fuel at six locations spread across Upstate New York. Upon declaration by New York State of an energy supply emergency and upon the written direction of NYSERDA, fuel from the Reserve may be sold to suppliers and distributors to provide fuel for emergency responders, municipal and governmental customers, and retail outlets as determined for the emergency event.

The Fuel NY initiative also established a portable generator program to provide, deploy and install portable emergency generators to strategically located gas stations in the event of a declared energy or fuel supply emergency. The program is designed to ensure that gas stations have the necessary back-up power capacity to distribute gasoline to first responders, essential personnel, evacuating residents and other motorists after a major storm.

Pursuant to its general authority with regard to electric and gas corporations (see, *e.g.*, Public Service Law Sections 65 and 66), the Public Service Commission has assumed lead for electric system and natural gas emergencies.

Individual State agencies and departments may also have specific legal bases that require and/or authorize certain emergency planning and response actions that are not included in this document. Additionally, under a State Declaration of Disaster Emergency (New York State Executive Law, Article 2-B, Section 28), the Governor may issue an Executive Order that directs State agencies to take such actions as may be necessary to protect the public health and safety.

All of these powers must be exercised in a manner which does not conflict with federal law, may be exercised notwithstanding any State or local law or contractual agreement to the contrary, and are in addition to any other emergency powers vested in the Governor that he or she may choose to delegate to NYSERDA's President. In exercising the power granted pursuant to Energy Law

Section 5-117 (1) and (2), as described above, Section 5-117 (3) authorizes NYSERDA to supersede any emergency power previously vested in any other State agency.

1.3 Energy Emergency Plan Objectives and Guidelines

The principal objectives of the Energy Emergency Plan are to:

- Protect public health, safety, and welfare.
- Enhance resiliency of services while minimizing economic disruption.
- Direct scarce energy supplies in an equitable manner among competing essential purposes.

The Energy Emergency Plan has been developed in accordance with certain planning guidelines that aim to:

- Provide the flexibility required to meet a broad range of supply disruptions that may have materially different consequences depending, for example, on the time of year.
- Incorporate and, if necessary, supplement private sector emergency planning efforts, such as the emergency operating plans of local electric distribution companies in the State. In general, less invasive governmental action is preferred.
- Rely to the maximum extent practicable on voluntary rather than mandatory strategies.
- Include detailed strategies and options, as far as practicable, in order to respond to a broad range of information needs.
- Develop New York State's emergency response options in light of federal strategies and energy industry practices.

The benefits of the Energy Emergency Plan include:

- Providing advance notice of available emergency response strategies and options to energy suppliers, energy users, and all levels of government to allow necessary preparations before an actual emergency occurs.
- Protecting public health and safety in times of critical need.
- Minimizing delays in establishing response mechanisms during energy emergencies.
- Promoting consumer and supplier cooperation during periods of emergency.
- Coordinating State, federal and private sector actions for maximum effectiveness during an energy emergency.

1.4 Involved State Agencies

New York State agencies that may be involved in the State's response to an energy emergency include, in alphabetical order:

- Department of Agriculture and Markets (Ag & Markets)
Obtains status of farm and agriculture fuel and energy requirements, maintaining liaison with farm and agriculture-related associations.
- Department of Environmental Conservation (DEC)
Issues waivers of environmental restrictions and maintains liaison with the U.S. Environmental Protection Agency.
- Department of Health (DOH)
Lead agency for nuclear and radiological emergency response and maintains liaison with the New York City Department of Health and Mental Hygiene, hospitals and other health-related agencies and facilities.
- Department of Public Service (DPS)
Lead agency for electric system and natural gas emergency response.
- Department of Transportation (DOT)
Assist in monitoring and expediting distribution of energy resources. Perform critical roadway maintenance. Coordinate with federal agencies for any necessary transportation system waivers.
- New York State Homes and Community Renewal (NYSHCR)
Administers the Weatherization Assistance Program for low-income households.
- Division of Military and Naval Affairs (DMNA)
Identifies potential impacts upon military and civil defense operations, and identifies resources that can be used to mitigate a crisis.
- Division of State Police (State Police)
Assists in emergency energy resource deliveries to critical or sensitive locations through such activities as vehicle escorts and traffic control, and enforces other emergency response measures as required by statute.
- Education Department (State Ed)
Maintains liaison with school districts and identify needed energy supplies.
- Office of Emergency Management (OEM)
Part of the Division of Homeland Security and Emergency Services (DHSES). Provides coordination of the State's emergency response. Manages or co-manages major staging areas during emergencies that could require onsite fueling depots; Runs the Joint Information Center; Manages Branches and Ad Hoc Taskforces under the state Comprehensive Emergency Management Plan
- Empire State Development (ESD)
Provides information on impacts to market participants, maintaining liaison with regional tourism centers, business and trade groups, and utility companies.
- Energy Research and Development Authority (NYSERDA)
Lead agency for petroleum and coal energy emergencies.
- Office of General Services (OGS)
Provides general equipment support and maintains liaison with institutions supplied under State fuel contracts.
- Office of Counter Terrorism (OCT)
Part of the Division of Homeland Security and Emergency Services (DHSES). Oversees

and coordinates state agencies' homeland security resources. Prescribes protective measures commensurate with current terrorist threat.

- Office of Temporary and Disability Assistance (OTDA)
Administers the Low-Income Home Energy Assistance Program and emergency residential fuel programs.
- Office of the Attorney General (AG)
Support enforcement actions as necessary.

1.5 Definitions

Appendix A lists the most common terms and acronyms used in the Energy Emergency Plan.

2 New York State Energy Emergency Management Structure

2.1 Objectives

This section outlines the administrative framework to be used to respond to serious or extended State energy emergencies. The structure involves several components that can be viewed as a series of sequential steps, beginning with the identification of an impending short-term energy disruption, up through a gubernatorial declaration of an actual energy emergency, and ending with an evaluation of the implementation of policies and actions taken to mitigate its impact. The broad objectives of the management structure are to:

- Gather information and assess the current and emerging situation.
- Provide for communication and coordination among government decision makers.
- Establish appropriate emergency response measures.
- Assign responsibility for implementation of specific response mechanisms.
- Direct implementation of the emergency response measures.
- Monitor and evaluate results.

2.2 Energy Emergency Operations

Lead agency responsibility in the event of a severe or extended energy emergency will be assumed by either NYSERDA or Department of Public Service (DPS), depending upon the type of energy involved. NYSERDA will assume lead agency status for petroleum or coal supply emergencies. DPS will assume lead agency status for electric system and natural gas emergencies. The State Office of Emergency Management (OEM) will assume responsibility for the coordination of the State response, including the activation and operation of the State Emergency Operations Center (SEOC), as necessary. NYSERDA and DPS will also receive the full support of other State agencies.

Together, the lead agency and OEM will coordinate collection, assessment, and dissemination of information necessary to implement individual response measures comprising specific emergency response programs. Depending on the emergency situation, the lead agency's functions could include:

- Monitoring energy price, supply, and demand data received from primary and secondary sources, including:
 - Natural gas/electric utility services.
 - All petroleum/propane rail car, barge, and tanker energy supply movements.
 - Inventory of affected fuels in the wholesale and commercial sectors.
- Expediting appropriate waivers for truck, rail car, and waterborne shipments of liquid and solid fossil fuels (*e.g.*, oil, propane, and coal).
- Coordinating alternative fuel substitution for natural gas and electricity users.
- Estimating the impacts of emergency measures on energy supply and demand levels, industry, and the economy.
- Developing energy emergency response recommendations.
- Initiating emergency measure implementation actions.
- Preparing information and analyses for decision makers and the media.

The lead agency and OEM would be responsible for coordinating information flow and fielding inquiries from governments at all levels, as needed. A hotline may be used to respond directly to the general public's inquiries and a Joint Information Center (JIC) may be established to disseminate information to the media and the public. A nucleus of NYSERDA or DPS staff would work with managers and analysts assigned to the emergency response from various State agencies. Table 1 provides a more explicit listing of State agencies that may be involved in energy emergency response and their responsibilities. Lines of communication and organization are shown in Figure 1. The general responsibilities of NYSERDA, DPS and OEM are presented below:

2.2.1 NYSERDA

- Serve as lead agency for petroleum products and coal emergency response. Assist in implementing petroleum and coal emergency procedures.
- Monitor the overall fuel price, supply, and demand situation.
- Discuss potential corrective actions or interventions with major energy suppliers and key State Agencies.
- Issue emergency orders and directives as necessary and appropriate.
- Operate a public relations center in close coordination with the Joint Information Center discussed later in this plan, and maintain liaison with the media and local governments.

2.2.2 DPS

- Serve as lead agency for electric system and natural gas emergency response. Assist in implementing electric and natural gas emergency procedures.
- Monitor status of interruptible industrial and commercial natural gas users and users with dual fuel capability.
- Maintain liaison with the electricity and natural gas dispatch centers of the State's investor-owned Local Distribution Companies (LDCs), electric generators, energy service companies and marketers, other wholesale suppliers, and key State Agencies.
- Maintain liaison with the New York Independent System Operator (NYISO) and Northeast Gas Association.

2.2.3 OEM

- Coordinate the State response to the emergency.
- Coordinate with federal, state and local entities, as appropriate.

OEM, NYSERDA and the NYS Public Service Commission are participating member agencies of the State Disaster Preparedness Commission (DPC), a multi-agency organization charged with responding to a wide range of natural and man-made disasters that could occur in the State.

2.3 The Role of Local Governments

Local governments are the first place most residents and businesses would turn for information and assistance when energy emergencies or supply disruptions occur. OEM and the lead agency would consult with local governments to determine the existence of unusual conditions or events that should be addressed. Conditions that might require special attention could include:

- Local laws, regulations, and ordinances that might impede the success of emergency response programs.
- Local policies regarding traffic flow, routes, and transit service that might have the potential for improving the effectiveness of the energy emergency response measures initiated at the State level. NYSDOT, the New York State Thruway Authority and local law enforcement should be included in these consultations since most major highway facilities are owned by the State.
- Unusual energy use patterns not adequately represented by aggregate data.
- Fuel requirements for essential municipal services and alternative operational patterns.

2.3.4 County Emergency Managers

The Emergency Manager for each county coordinates County emergency response activities for the County Executive, and advises the County Executive regarding the need for declaring a local state of emergency based on the severity of the situation and the necessity to use additional executive power to respond effectively to the emergency. The Emergency Manager:

- Activates the County’s response organization and initiates County response activities;
- Notifies and briefs County departments, agencies and other organizations involved in an emergency response;
- Maintains and manages an Emergency Operations Center; and
- Facilitates coordination between the County and:
 - the lead agency;
 - towns, cities and villages in the County;
 - local governments outside the County;
 - the State of New York; and
 - private emergency support organizations.

2.3.5 City and County Energy Coordinators

A network of city and county Energy Coordinators was established by the Emergency Fuel Office (the predecessor agency to the State Energy Office) in 1974 in response to the need for energy information at the local level during the OPEC oil embargo. On a voluntary basis, local municipal government officials appointed staff to assist in processing emergency fuel inquiries, conducting fuel-related surveys, submitting various reports and generally identifying potential fuel problems in localities throughout the State. The network is a vital link between consumers and State government. OEM maintains an up-to-date list of these local Energy Coordinators, and will coordinate periodic training on the Energy Coordinators’ roles and responsibilities. Depending on the individual County’s emergency planning and response structure, the role of local Energy Coordinator may be part of the responsibilities of the County Emergency Manager.

2.3.6 New York City Office of Emergency Management

The New York City Office of Emergency Management (NYC-OEM) was created in 1996 to ensure interagency coordination before, during and after disasters or emergencies. Its mission includes planning, preparing for and mitigating emergencies; educating the public on preparedness; coordinating and supporting responses to and recovery from emergencies; and collecting and disseminating critical information. NYC-OEM maintains a corps of emergency management personnel including responders, planners, watch commanders and administrative

and support staff to identify and respond to various hazards and assist federal, State and City officials with emergency response. NYC-OEM's public information staff provides accurate, timely information to the public and media organizations. New York City's Citywide Incident Management System (CIMS) was established in 2004. CIMS establishes a formal command matrix and provides a protocol for governing how City agencies should respond to emergencies.

2.4 Federal and State Liaisons

An ongoing liaison with federal officials and other states' emergency planners, particularly in the neighboring New England and Mid-Atlantic regions, is maintained by NYSERDA to establish a coordinated response to energy shortages. As the energy supply and demand situation dictates, it might become necessary to interact with federal energy officials and other states' energy officials to obtain information or discuss specific management strategies. A number of formal and informal mechanisms are available throughout the federal government to coordinate information regarding energy emergencies. However, the emergency response management process within U.S. DOE is now primarily limited to communication exchange. U.S. DOE maintains an emergency contact list to expedite communications with the states. The U.S. DOE Office of Energy Emergencies conducts certain outreach and coordination programs to facilitate timely information exchange and provide a central point of contact for energy emergency preparedness.

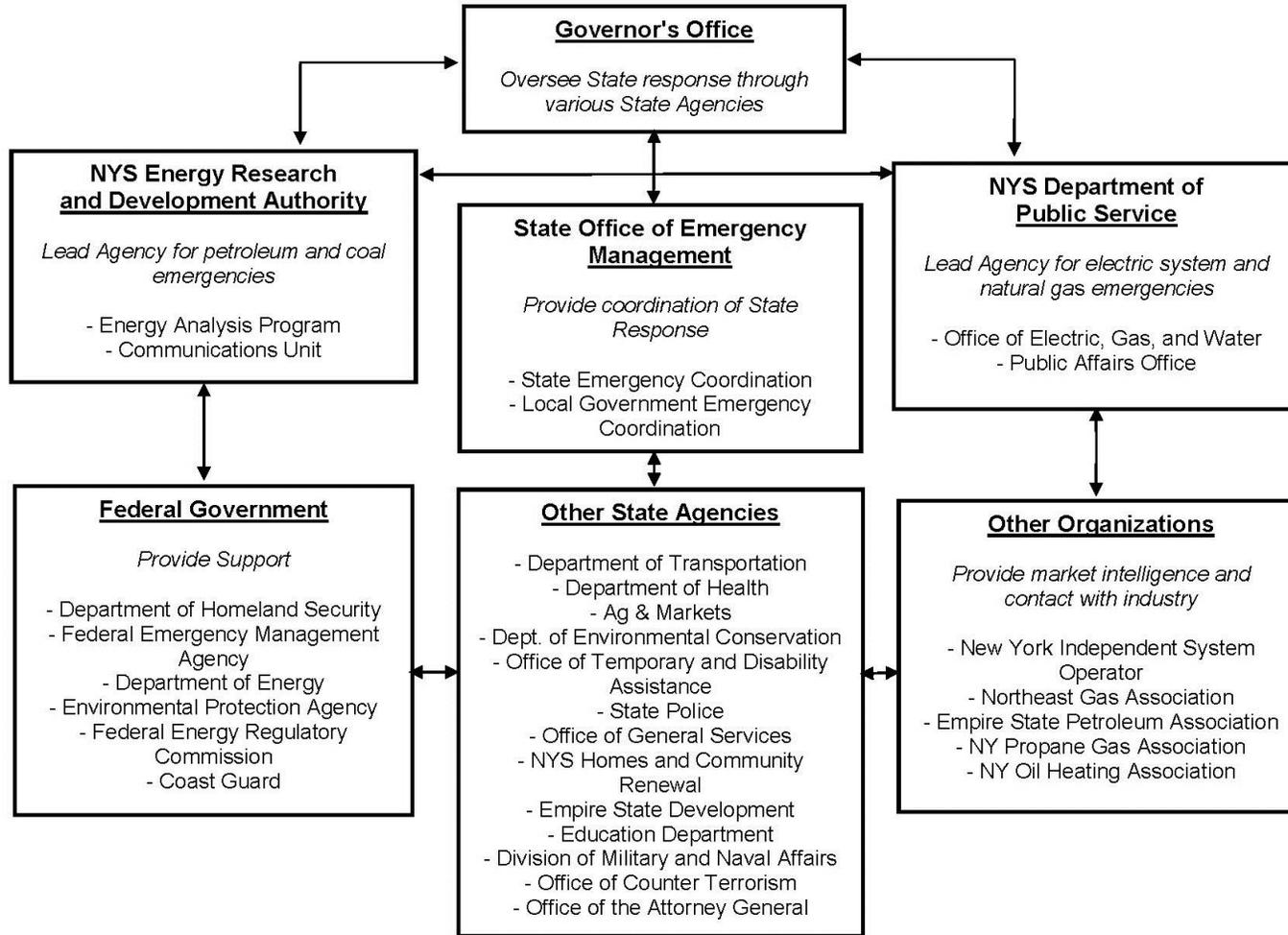
Table 1. Energy Emergency Response Agency Responsibilities

Agency	Responsibility
NYS Energy Research & Development Authority	<ul style="list-style-type: none"> • Serve as lead agency for petroleum and coal emergency response. Assist in implementing petroleum and coal emergency procedures. • Monitor the overall fuel price, supply, and demand situation. Discuss potential corrective actions with major energy suppliers. • Issue emergency orders and directives as necessary and appropriate. • Operate a public relations center and maintain liaison with the media and local governments.
NYS Department of Public Service	<ul style="list-style-type: none"> • Serve as lead agency for electric system and natural gas emergency response. Assist in implementing electric and natural gas emergency procedures. • Monitor status of interruptible industrial and commercial natural gas users and users with dual fuel capability. • Maintain liaison with the electric and natural gas dispatch centers of the State's investor-owned Local Distribution Companies (LDCs), electric generators, and wholesale suppliers. • Maintain liaison with the Independent System Operator (ISO) and Northeast Gas Association.
NYS Office of Emergency Management	<ul style="list-style-type: none"> • Provide coordination of State response. • Manages or co-manages major staging areas during emergencies that could require onsite fueling depots; • Runs the Joint Information Center; Manages Branches and Ad Hoc Taskforces under the state Comprehensive Emergency Management Plan
NYS Agriculture & Markets	<ul style="list-style-type: none"> • Maintain liaison with farm and agriculture-related associations. • Obtain status of fuel requirements for seasonal agricultural production.
NYS Empire State Development	<ul style="list-style-type: none"> • Maintain information on status of industry and commercial closings due to energy shortages. • Provide information on energy supply circumstances affecting specific industries. • Maintain liaison with regional tourism centers, business/trade groups, and utility companies.
NYS Education Department	<ul style="list-style-type: none"> • Maintain liaison with all school districts. • Coordinate with school administrators to identify needed energy supplies.
NYS Division of Military and Naval Affairs	<ul style="list-style-type: none"> • Identify fuel shortages that would affect military and civil defense operations. • Prepare inventory of available heavy equipment and supplies (e.g., generators for emergency hospital use). • Assists with Fueling Missions
NYS Department of Transportation	<ul style="list-style-type: none"> • Assist in preparations to expedite energy resource deliveries, if necessary. • Coordinate with federal agencies for any necessary waivers (i.e., weight restrictions, driver's hours of operation, geographical area limitations) to expedite distribution of fuel. • Conduct maintenance operations such as snowplowing, sanding, traffic signals, etc. • Coordinate with the Port of Albany and the U.S. Coast Guard for ice breaking operations on the Hudson River to facilitate winter fuel deliveries. • Maintain liaison with appropriate federal agencies, such as U.S. Department of Transportation and local transit authorities.

Table 1 continued

Agency	Responsibility
NYS Office of General Services	<ul style="list-style-type: none"> • Maintain liaison with all institutions supplied under State fuel contracts. • Provide general equipment support, including telecommunications facilities, computer equipment and other office systems. • Total operational management of approximately 41 State-owned facilities statewide. Solely responsible for supporting and managing the energy needs for numerous State agencies that occupy these facilities.
NYS Office of Temporary and Disability Assistance	<ul style="list-style-type: none"> • Maintain liaison with all local social service districts and human services institutions. • Administer Low-Income Home Energy Assistance Program and emergency fuel programs to assist qualified residents with heating costs.
NYS Homes and Community Renewal	<ul style="list-style-type: none"> • Determine status of state-assisted housing fuel and energy requirements and maintain liaison with housing owners and statewide associations. • Coordinate Weatherization Assistance Program network response to decrease energy use in low-income housing units. • Issue energy conservation recommendations to all HCR-regulated property owners.
NYS Division of State Police	<ul style="list-style-type: none"> • Assists in emergency energy resource deliveries to critical or sensitive locations through such activities as vehicle escorts and traffic control, and enforces other emergency response measures as required by statute.
NYS Office of Counter Terrorism	<ul style="list-style-type: none"> • Oversee and coordinate state agencies' homeland security resources. • Recommend and communicate changes to National Terrorism Advisory System threat alert level. • Review and assess measures taken to protect energy-related critical infrastructure by state agencies and others. • Prescribe protective measures commensurate with current terrorist threat. • Chairs the Critical Facilities and Infrastructure Branch as well as the Fuel Taskforce and Pump and Generator Taskforce
NYS Department of Environmental Conservation	<ul style="list-style-type: none"> • Issue waivers of environmental restrictions (e.g., sulfur in fuel content standards). • Maintain liaison with the U.S. Environmental Protection Agency.
NYS Department of Health	<ul style="list-style-type: none"> • Maintain liaison with the New York City Department of Health and Mental Hygiene, hospitals and other health-related agencies and facilities. • Act as the State Lead agency for nuclear and radiological emergencies.
NYS Office of the Attorney General	<ul style="list-style-type: none"> • Support enforcement actions as necessary.

Figure 1. Listing of Organizations Involved in State Energy Emergency Planning Activities



3 Federal Emergency Response

3.1 Federal Energy Emergency Authorities

Federal energy policy relies to a large extent on market forces to allocate energy supplies during a severe shortage or state of emergency. Often, the first noticeable effect of a supply shortage is a sharp rise in prices above the recent prevailing average. In general, consumption of fuel supplies declines in response to the higher prices and available supplies are attracted to higher priced areas.

The National Response Framework (NRF) and National Incident Management System (NIMS) were developed by the federal government as a way to integrate the various federal domestic prevention, preparedness, response and recovery plans into a single all-discipline, all-hazards approach. The NRF is supported by the NIMS, a national system that creates standardized incident management processes, protocols and procedures. The following federal emergency response plans are linked by the NRF:

- Federal Response Plan
- U.S. Government Interagency Domestic Terrorism Concept of Operations Plan
- Federal Radiological Emergency Response Plan
- Mass Migration Response Plans
- National Oil and Hazardous Substances Pollution Contingency Plan

The NRF includes an Emergency Support Function Energy Annex (ESF-12) that was formerly part of the Federal Response Plan (FRP), and is implemented in anticipation of a significant event likely to result in a need for federal assistance and/or in response to an actual event requiring Federal assistance under a Presidential declaration of a major disaster or emergency. ESF-12 describes the roles and responsibilities of federal departments for energy emergency response. The U.S. DOE is the lead federal agency when the Federal ESF-12 is activated. Within the ESF-12, the U.S. DOE is responsible for:

- Forecasting energy price, supply, and demand, and estimating system damage.
- Advising local authorities on energy restoration, assistance and supply priorities.
- Providing recovery coordination to affected parties.
- Providing regular incident situation reports.
- Providing a single point of access for Departmental assets and expertise.
- Serving as an information clearinghouse on recovery assistance, funding and emergency response resources and organizations for the energy sector.

- Assisting in the provision of temporary fuel supply.
- Recommending conservation actions.
- Reviewing requests to the National Communications System for Telecommunications Service Priority.

To meet these responsibilities, U.S. DOE (www.doe.gov);

- Collects and reports to Congress, information filed by electric energy generators, transmitters and distributors on loss of firm load, system voltage reductions or public appeals, bulk system operational actions and fuel supply emergencies;
- Assists affected energy stakeholders in obtaining repair crews and materials from outside affected areas; and
- Assists affected energy stakeholders in dealing with Federal Emergency Management Agency (FEMA) by coordinating with publicly-owned electric, gas and lifeline utilities in applying for FEMA cost sharing for repairs.

Other major federal agencies and offices that respond to energy emergencies include:

- Environmental Protection Agency (EPA) - www.epa.gov - State governors can apply to the EPA for a temporary suspension of the state's Clean Air Act (CAA) implementation plan to adjust normal refinery operations or allow the importation or use of non-conforming, higher-sulfur petroleum products or coal, which may be more readily available during an emergency than conforming fuels.
- Federal Energy Regulatory Commission (FERC) - www.ferc.gov - FERC is responsible for regulating the interstate transportation and wholesale sales of natural gas and electricity. FERC can implement programs to curtail natural gas sales or shed load to low-priority customers. If a natural gas emergency is declared by the U.S. President, FERC may prohibit certain industrial uses of natural gas or order allocation of available supplies. Emergency measures for electricity are limited to authorizing the temporary connection or use of surplus transmission or generating facilities.
- Federal Emergency Management Agency (FEMA) - www.fema.gov - Has the lead responsibility for coordinating Federal responses to civilian emergencies and disasters.
- US Department of Transportation (DOT) - www.dot.gov - U.S. DOT has several sub-agencies that may relate to an energy emergency. These include:
 - Office of Pipeline Safety (OPS) – Located within DOT’s Pipeline and Hazardous Materials Safety Administration (PHMSA), OPS rules apply to inter and intra-state pipelines. Additionally, State regulations for natural gas generally reinforce the federal requirements.
 - Federal Maritime Administration (FMA) - In the event that the State requires long distance waterborne fuel delivery (usually heating oil or motor gasoline) aboard an international shipping carrier not registered in the United States, a waiver from the federal act requiring the use of US-flagged vessels (Jones Act) would be sought through the FMA. U.S. DOE would assist with this.

- Federal Motor Carrier Safety Administration (FMCSA) - If the State receives a request to waive highway fuel transport driver hours in order to facilitate delivery during a shortage, it may be necessary to contact FMCSA.
- Department of Homeland Security (DHS) - www.dhs.gov - In the event of a terrorist attack, natural disaster, or other large-scale emergency, DHS will assume primary responsibility for ensuring that emergency response professionals are prepared to act.
- Department of Defense (DOD) - www.dod.gov - If a potential energy emergency is severe enough to threaten mission readiness or ongoing operations, special authorities exist to ensure military energy priorities are met.
- U.S. Coast Guard - The US Coast Guard is an arm of the Department of Homeland Security and has responsibilities related to Maritime Homeland Security. The Coast Guard base in the NY Harbor area, Sector New York, is located on Staten Island. The following web site is specific to the New York Harbor area. www.harborops.com New York is also served by Coast Guard Sector Buffalo <http://homeport.uscg.mil/buffalo>, Sector Long Island Sound <http://www.uscg.mil/d1/sectLIS/>, and Station Burlington (Lake Champlain) which reports to Sector Northern New England <http://www.uscg.mil/d1/sectNNE/>.

The listing above is not all inclusive. Other federal agencies may be contacted as needed. A useful compendium of federal authorities, responsibilities and capabilities is available in the National Association of State Energy Officials' (NASEO) State Energy Assurance Guidelines document, dated June 2009. This document is available at the NASEO website: <http://www.naseo.org/eaguidelines/index.html>.

3.2 Federal Policy Options

Programs and energy policy options available at the federal level to deal with energy emergencies include:

- **Increased monitoring of market supply, demand, and price fundamentals.**
The current federal market monitoring system for obtaining weekly fuel inventory reports at the federal, regional, and state levels for petroleum fuels, and nationally and East and West of the Mississippi River for natural gas, performed by the DOE's Energy Information Administration (EIA), helps to alert decision makers to an impending emergency and is used to determine the severity of supply shortages or restrictions by location. EIA works with energy companies to gather and disseminate information and perform data analysis.

The monitoring system is designed to obtain accurate and timely information and is used to calm markets, helping to avoid panic behavior by consumers or businesses. Collecting this information is critical to ensuring that the supply and distribution system responds effectively to an emergency. Mitigating a deteriorating energy emergency situation depends on objective analysis of appropriate energy price, supply, and demand data.

- **Release of crude oil stockpiles contained in the Strategic Petroleum Reserve (SPR)** <http://energy.gov/fe/services/petroleum-reserves/strategic-petroleum-reserve>
The federal SPR program was authorized by the Energy Policy and Conservation Act of 1975 (EPCA). The SPR was established to diminish the vulnerability of the United States to a severe petroleum supply interruption and serves to meet the nation's obligations under International Energy Agency (IEA) oil-sharing agreements. Historically, the primary objective of drawing down the SPR has been to move crude oil into the distribution system at a specified rate to replace lost imports.
- **Northeast Home Heating Oil Reserve** - <http://energy.gov/fe/services/petroleum-reserves/heating-oil-reserve> - On July 10, 2000, a 2-million-barrel home heating oil component of the SPR in the Northeast was established. The intent was to create a buffer large enough to allow commercial companies to compensate for interruptions in supply or severe winter weather. The reserve, which now equals one million barrels of ultra-low sulfur diesel (ULSD), is held in two terminals located in Connecticut and Massachusetts.
- **Northeast Gasoline Supply Reserve** - <http://energy.gov/fe/services/petroleum-reserves/northeast-regional-refined-petroleum-product-reserve> - In 2014, a 1-million-barrel gasoline component of the SPR in the Northeast was established. The intent was to create a buffer large enough to allow commercial companies to compensate for the initial impacts of interruptions in supply, but not so large as to dissuade the companies from maintaining stock levels sufficient to respond to routine disruptions or to recognize that increasing prices are an indicator that more supply is needed. A one-million-barrel emergency reserve would give Northeast consumers supplemental supplies for a few days in the event of a hurricane or other disruption, until existing distribution infrastructure could return to full operation. The regional reserve has 700,000 barrels of gasoline located in the New York Harbor area, 200,000 barrels positioned in the Boston area, and 100,000 in South Portland, Maine
- **Increase domestic oil production through royalty reductions on federal leases and direct regulatory action to encourage private production to increase domestic product output.**
In the case of a severe energy supply emergency, the federal government can order increased production from oil fields on federal, state, and private lands, pursuant to Section 106 of the EPCA. Also, production from the Naval Petroleum and Oil Shale Reserves may be increased pursuant to a joint resolution of Congress.
- **Encourage fuel-switching and provide environmental waivers.**
U.S. EPA can expedite voluntary power generation at coal plants to facilitate inter-regional power transfers that displace oil or natural gas, pursuant to Section 202 of the Federal Power Act. Additionally, U.S. EPA can encourage states to temporarily waive

environmental restrictions on burning high-sulfur oil, pursuant to Section 110(f) of the Clean Air Act.

- **Restrict use of natural gas or petroleum as a primary fuel.**

Under the Powerplant and Industrial Fuel Use Act of 1978,⁶ the President has the authority to prohibit any powerplant or major fuel-burning installation from using natural gas or petroleum as a primary fuel during an emergency.

⁶ Powerplant and Industrial Fuel Use Act of 1978, Pub. L. No. 95-620, 92 Stat. 3289 (1978), codified as amended at 42 U.S.C., Section 8301-8484 (2002).

4 Energy Markets Intelligence

NYSERDA continuously updates the essential price, supply, and demand databases that alert staff to impending energy supply problems. Staff compile, analyze, and disseminate weekly, monthly, and annual energy statistics relevant to both national and New York State energy markets and trends. Relevant data is also received from federal agencies and the trade press regarding pricing, supply and demand fundamentals, and the status of the distribution networks serving the State. NYSERDA staff communicate with private sector firms, their associations, and corresponding state, regional, and federal officials to ascertain market conditions prior to and during any energy events. NYSERDA staff compile this data into the following reports:

- Heating Fuels Report (weekly during September – April heating season, twice a month during summer)
- Heating Fuels Inventory Review (monthly in July and August if need determined)
- Transportation Fuels Market Assessment (Spring and Summer if need determined)
- Patterns & Trends, NYS Energy Profiles (annual – released in Spring/Summer)
- Winter Fuels Outlook (annual – released in the Fall)
- Monthly Wholesale Electric Price Report
- Weekly Summer Electricity Outlook Report (summer months if need determined)
- Transportation Fuels Report (weekly, year round)

In addition to these formal reports, NYSERDA staff performs the following activities:

- Continuously update weekly and monthly petroleum and natural gas price, supply, and demand data series, both nationally and regionally.
- Maintain up-to-date petroleum fuels price and supply information on NYSERDA's web site.

Advance indications of an impending petroleum supply and demand imbalance may be determined by staff as part of its regular analysis of energy price and supply data. NYSERDA monitors developments (*e.g.*, industry-labor negotiations, rail disruptions, barge movements) that could lead to a coal strike or shortage but does not regularly collect price and supply data. If circumstances indicate a coal strike or disruption is likely, NYSERDA would request relevant information from all suppliers, distributors, and direct purchasers. Coal producers would be contacted for information on production and delivery schedules as they affect New York State. For both petroleum and coal, supply and demand data would be studied to prepare for allocation or redistribution of supplies. Electric generators would be surveyed to determine their stockpile levels, estimates of resupply needs, and alternative supply options, if any.

The Department of Public Service (DPS) is the lead agency for all electric and natural gas emergencies. Details of New York State’s emergency planning for electric and natural gas emergencies can be found in the New York State Department of Public Service Emergency Plan.

4.1 Petroleum

New York State and the Northeast are heavily dependent on foreign countries and other regions of the U.S. for crude oil and refined petroleum products, more so than most regions of the country. The State’s consumers and businesses are significantly more vulnerable than other regions of the country during periods of supply disruptions in oil-producing nations, or during any instances of distribution bottlenecks or infrastructure breakdowns.

Refined petroleum fuels are supplied through a complex, multilevel distribution network consisting of domestic and foreign refiners, brokers, futures and spot market investors, importers, and regional and local distribution companies.⁷ Disruptions of these fuel supplies, or even the possibility of an interruption, may lead to sudden price increases above the recent prevailing average that reduce consumers’ discretionary income, increase business costs, and shift financial resources out of the State to purchase additional energy supplies.

Petroleum market dynamics in New York have been affected greatly by energy company mergers, buyouts, and market withdrawals. Over the years, a growing reliance on a smaller number of retail outlets, a reduction in overall statewide terminal storage capacity, and the trend to “just-in-time” inventory management practices, combined with increased use of financial instruments by large distributors rather than holding physical inventories to ensure future supplies, has increased the potential impact of interruptions in the supply and distribution of petroleum fuels.

⁷ A detailed description and explanation of the New York State supply and distribution network is included in the most recent New York State Energy Plan.

4.1.1 Motor Gasoline and Transportation Diesel Fuels

New York consumers and businesses rely on petroleum fuels to meet 92% of their transportation needs. Gasoline is the primary automotive fuel, accounting for 51% of all petroleum consumed in the State in 2013. Diesel is also an important fuel used in the transportation sector. Demand for these fuels typically peaks during the summer driving season. However, transportation diesel (ultra-low sulfur distillate) may come under supply and price pressure during the winter months because this fuel is also used as a heating fuel.

4.1.2 Distillate Fuels

The continuous flow of distillate fuels (diesel, home heating oil, and kerosene), which are consumed in the residential sector for space and water heating, the commercial and industrial sectors for power and space heating, the transportation sector to move goods and people, and for electricity generation, has become increasingly exposed to supply uncertainty. The expanded role of imported products to meet New York's distillate requirements increases the risk to New York consumers of a petroleum fuels emergency. Evolving oil industry supply and distribution practices and de-emphasizing inventory buildup, increases the risk that short-term cold or severe weather will disrupt deliveries or sharply increase demand. Either event may lead to a supply imbalance and result in price spikes.

Distillate fuels are vital to the health and welfare of New York State's citizens. In 2014, twenty-four percent (24%) of the State's homes were heated with home heating oil or kerosene.⁸ These homes generally have a 275 gallon⁹ storage tank, providing only limited protection in case of a supply or delivery interruption. Diesel fuel is the primary liquid fuel for truck, bus, and train transport. All three fuels, kerosene, home heating oil, and diesel, are also used in the electricity generation sector as either a primary fuel or as a secondary backup fuel for natural gas. The surge in demand for distillate fuels by traditional natural gas users at the same time that the residential

⁸ Patterns and Trends New York State Energy Profiles: 1999-2013, NYSERDA, October 2015. <http://www.nysed.gov/Energy-Data-and-Prices-Planning-and-Policy/Energy-Prices-Data-and-Reports/EA-Reports-and-Studies/Patterns-and-Trends.aspx>

⁹ A full 275-gallon storage tank contains enough oil to meet the typical heating needs of households for approximately 25 days. Factors influencing this estimate include: internal and external temperatures, housing size, insulation levels, equipment efficiency, and water heating requirements.

sector is also increasing demand has the potential to seriously disrupt the supply availability of distillate fuels to all economic sectors.

4.1.3 Propane

Propane, or LPG (liquefied petroleum gas), represents a small proportion (2.5% in 2013) of total petroleum use in the State. However, it is an important "specialty" fuel, vulnerable to supply shortfalls. Most residential propane users live in suburban and rural areas of the State and depend on propane for cooking, space heating, and hot water needs. The residential sector accounted for 66% of the State's propane demand in 2013. These residential consumers, particularly those living in mobile homes, generally lack any alternative source of energy.

New York receives a significant amount of propane from producing areas of the U.S. Gulf Coast via a pipeline owned by the Texas Eastern Products Pipeline Company (TEPPCO). The company also maintains truck-loading terminals and storage facilities at Selkirk, Oneonta, and Watkins Glen, NY. In addition to the loading terminal, the Watkins Glen facility has an underground cavern capable of storing over one million barrels of propane. The balance of supplies is transported into the State by train rail car and truck. The transportation of this fuel originates from refineries in the mid-Atlantic and the Midwest regions, ship-borne deliveries received at ocean terminals in Portsmouth, NH, and Providence, RI, and from Canada. Increasing supplies are also coming from additional production in the Marcellus region.

Pipeline deliveries pose a concern for emergency planners because of the inability to increase deliveries significantly during periods of unusually cold weather, due to the physical constraint of the pipeline's volume and pumping capacity. Distributors must rely on additional supplies entering the region via rail car or truck. However, these transportation modes are particularly vulnerable to weather related disruptions such as icy roads, storms, or the availability of surplus rail cars. As overall New York State demand has increased, supply flexibility improvements have been made by TEPPCO resulting in the increased throughput of volumes on the pipeline, expanded storage capacity at the SEA-3 terminal in New Hampshire, and construction of additional local storage capacity around the State.

4.2 Coal

In 2013, 3.0 million tons of coal were used in New York State, representing 0.4% of the nation's demand. Electricity generation was 68.6 percent of this total, while the industrial sector, including cement plants, accounted for 31.4 percent, and the institutional and commercial sectors used less than 0.1 percent. The use of coal in New York for electric generation remained the same at 2.2 million short tons in both 2012 and 2013. New York ranked thirty-sixth among U.S. states in coal use.

In 2013, coal generating plants produced 4,697 gigawatt hours, or 2.9 percent of New York State electric generation. As of October 1, 2015, New York had five (5) operating coal-fired electricity generating plants located in five counties of the State. These facilities represent 1,469 megawatts of net summer capability for the New York electricity system. These plants are all located outside of the metropolitan New York City area; the greatest concentration is in Western New York. Electric generation coal stockpiles average about 12 weeks at normal consumption rates.

In 2013, domestic coal delivered to New York originated in seven states. Pennsylvania was the largest supply source with 27.6 percent, and Wyoming and Indiana combined accounted for 49.8 percent. Railroads carried 91.9 percent of the total coal delivered to the State in 2013. As rail companies servicing the State have consolidated and removed uneconomic lines and trackage, thus reducing system flexibility, complex planning may be needed to redirect emergency coal shipments during a shortage. Additionally, a possible shortage of available rail coal cars and resulting postponements in forming unit trains could delay delivery of bulk supplies to large coal consumers. Quickly increasing coal availability in the State would require cooperation between the State and federal government, as well as the coal and rail industries.

Barge and trucks also move a minimal amount of coal to end-users in New York. Although coal seems universal in form, it varies significantly by a number of important parameters, including its energy, sulfur, and moisture content(s); hardness; volatility; and ash fusion temperature. Often coal supplies for one user are not suitable for another because boilers and coal-handling equipment are designed to use a specific type of coal.

The most likely events that would trigger an extended interruption in coal supply are a rail or miner's strike. Current labor contracts should be monitored closely. A strike-related production cutoff of large enough magnitude would make it increasingly difficult to meet demand after on-site stockpiles are exhausted.

4.3 Electricity

Primary legislative authority for most types of electric system emergencies rests with the Department of Public Service (DPS). As a result, DPS staff would have the lead role in any electric system emergency affecting or occurring within the State. NYSERDA is responsible for emergencies involving fuel supply or deliverability problems. The highly integrated nature of the electric system requires that the New York Independent System Operator (NYISO) and one or more individual utilities coordinate actions involving transmission, distribution, or generation supply problems. The degree of government involvement would depend on the nature and expected duration of the problem. System blackouts and recovery might be handled entirely by the ISO or an individual electric utility, while any major distribution system damage might involve greater coordination with DPS staff.

The NYISO coordinates the operation and dispatch of the generating facilities in the State, electricity imports into the State, and the flow of electricity across the bulk power transmission system. The NYISO also coordinates operations with the neighboring Independent System Operator of New England; the Pennsylvania, New Jersey, and Maryland Interconnect (PJM); Independent Electricity System Operator (IESO) of Ontario; and Hydro Quebec.

In addition, the NYISO facilitates fair and open competition in the wholesale power market and creates an electricity commodity market in which power is purchased and sold on the basis of competitive bidding. It utilizes a bid process for electricity and transmission usage, which enables the State's utilities and other market participants to offer electricity at competitive prices, rather than regulated rates.

The New York utilities participate in the Northeast Power Coordinating Council (NPCC), which includes all of the New England states and the provinces of Quebec, Ontario and New Brunswick in Canada. The NPCC is one of eight regional councils that comprise the North American Electric Reliability Council (NERC). Both NPCC and NERC have promulgated mandatory standards that apply to the operation of the bulk electric grid and are enforced by the Federal Energy Regulatory

Commission (FERC). Additionally, NPCC and the New York Reliability Council (NYRC) have mandatory rules that the ISO and utilities must follow in bulk electric grid operations that are enforced by the NYSPSC.

New York State agencies will work with the NYISO in emergency electric energy situations to implement pre-authorized crisis operating policies; assist any affected utility or utilities in enforcing mandatory conservation measures, if necessary; assure an efficient and smooth flow of information concerning the emergency to the appropriate levels of government and to the media; and redirect available supplies of excess fuel to affected utility generating stations. Specifically, a protocol is in effect between the ISO, DPS, Department of Environmental Conservation (DEC), NYSERDA, and the Department of Transportation (DOT) that is implemented under circumstances where electric generation unit fuel supply may be at risk, thereby posing risks to electric system reliability.

4.4 Natural Gas

Primary legislative authority for most types of natural gas system emergencies rests with the Department of Public Service (DPS). As a result, DPS staff would have the lead role in any natural gas system emergency affecting or occurring within the State. The degree of government involvement would depend on the nature and expected duration of the problem. System blackouts and recovery might be handled entirely by the individual gas utility, while any major distribution system damage might involve greater coordination with DPS staff.

New York State used approximately 1,345 billion cubic feet of natural gas in 2014¹⁰, making it the fourth largest gas consuming state in the nation behind Texas, California, and Louisiana. The State has approximately 4.82 million natural gas customers¹¹ served by various local gas distribution companies (LDCs).¹² These LDCs depend on major interstate and intrastate pipeline

¹⁰ <http://www.eia.gov/naturalgas/data.cfm>. The breakdown of the volumes by sector: residential 34%; commercial/ industrial 30%; power generation 34%; transportation 0.3%; and the remaining is pipeline distribution use and lease fuel.

¹¹ <http://www.eia.gov/naturalgas/data.cfm>. The breakdown by sector is: 4.41 million residential customers and 0.40 million commercial/industrial/power generation/transportation customers.

¹² Central Hudson Gas & Electric Corporation (CHG&E), Consolidated Edison Company of New York, Inc. and Orange & Rockland Utilities (Con Edison/O&R), Corning Natural Gas Company (Corning), National Grid, New York State Electric and Gas Corporation (NYSE&G), Rochester Gas & Electric (RG&E), National Fuel Gas Distribution Company (NFGD), and St. Lawrence Gas Company (St. Lawrence).

systems for access to domestic and imported, particularly Canadian, natural gas supplies.¹³ Gas production within New York has decreased to about 1.8% of the State's natural gas requirements.¹⁴

¹³ These pipelines are: Algonquin Gas Transmission Co. (AGT), Columbia Gas Transmission Corp.(Columbia), Dominion Transmission, Inc. (DTI), Empire State Pipeline Co. (Empire), Iroquois Gas Transmission System (IGTS), Millennium Pipeline, National Fuel Gas Supply Corp. (NFGS), North Country Pipeline, Tennessee Gas Pipeline Co. (Tennessee), Texas Eastern Pipeline Co. (TETCO), Transcontinental Gas Pipe Line Corp. (TRANSCO), and TransCanada Pipelines, Ltd. (TransCanada).

¹⁴ Patterns and Trends New York State Energy Profiles: 1998-2012, NYSERDA, November 2014. <http://www.nysERDA.ny.gov/Energy-Data-and-Prices-Planning-and-Policy/Energy-Prices-Data-and-Reports/EA-Reports-and-Studies/Patterns-and-Trends.aspx>

5 Response Actions

Effective emergency response strategies are designed to be flexible and staged to become increasingly more intensive as an emergency grows more serious. Emergency planning is intended to facilitate appropriate and flexible emergency response while not unnecessarily imposing the constraints of a one-size-fits-all hierarchy. This Plan documents various stages, classes, and types of emergencies and response actions for petroleum, coal, electric system and natural gas emergencies. At the onset of any emergency situation, the Energy Emergency Plan will be reviewed by the lead agency to assess the applicability of individual response elements to the existing situation. Plan elements may be revised, excluded, or augmented to take into account specific exigencies meriting response whether or not they are specifically referenced in this Plan.

It should also be recognized that no specific type of energy emergency exists in isolation. A natural gas emergency may result in an electricity system emergency due to lack of fuel for electricity generation. The same natural gas emergency may result in a petroleum or coal emergency due to fuel switching. Similarly, a petroleum supply emergency may result in an electric system, natural gas or coal emergency. The State's response to any energy emergency situation must be cognizant of the potential impacts to all of the State's energy markets. The lead agency should consult with other affected agencies, as appropriate, in implementation of response actions.

The State's emergency response actions are based on a four-stage response hierarchy that generally reflects the severity of the energy or fuel supply situation.

- Stage I - **Increased Monitoring** - Conditions warrant increased monitoring of one or more portions of the energy supply and/or distribution system.
- Stage II - **Market Coordination** - There is active coordination between energy supply distribution systems and State agencies to moderate the effects of a potential emergency.
- Stage III - **Public Action** - The public is asked to take action to moderate the effects of a potential emergency.
- Stage IV - **Emergency Declaration** - The Governor declares an energy or fuel supply emergency. Broad emergency powers are granted to the Governor or the Governor's designee.

5.1 Petroleum Emergencies

5.1.1 Lead Agency

NYSERDA is charged with the responsibility for responding to liquid petroleum product (gasoline, heating oil, kerosene, diesel, propane, residual fuel, etc.) emergencies. In the event of an in-State petroleum emergency, or an out-of-State event immediately affecting New York supplies, NYSERDA will act as the lead agency and the NYSERDA Energy Emergency Implementation Plan will be activated. Support agencies will implement their internal emergency response plans, as needed, and their activities will be coordinated by OEM.

5.1.2 Potential Response Measures

The response activities described below for petroleum product shortages may be initiated by New York in the absence of federal initiatives. The State's strategy for responding to petroleum product shortages places a premium on flexibility and informed choice rather than rigid formulas and procedures. The precise circumstances of a particular emergency would dictate the appropriate response. A staged response involving pre-emergency and emergency elements would be used in periods of market disruption.

In the case of petroleum products, the designation of pre-emergency stages I through III are determined by the President of NYSERDA. If public health, safety, or general welfare is jeopardized by an energy supply situation, the Governor may declare an energy emergency for the State as a whole or for individual areas of the State as necessary. After the Governor has declared an energy emergency, the stand-by State fuel set-aside program for liquid fossil fuels may be activated if the President of NYSERDA finds that implementation of the program for one or more liquid fuels is necessary to prevent or alleviate energy hardships or shortages. A Governor's energy emergency declaration beyond six months must be approved by the Legislature.

The nature of a given fuel supply emergency would determine which response options are most appropriate. Criteria for evaluating and selecting relevant emergency response options may include:

- Energy savings potential - amount of fuel saved or use reduced.
- Adverse impact - relative burden or hardship on end-users and suppliers.
- Equity - sharing of hardship or available supplies among end-users.

- Administrative burden - efficiency and flexibility of program operation.
- Compliance - likelihood of cooperation, acceptance, and understanding of emergency measures.
- Environmental impacts – review actions to reduce demand/consumption of the given energy source(s) under constraint (subject of the energy emergency concern) in order to reduce the use of nonconforming fuels through waivers of permits or other regulatory requirements.
- Effectiveness in mitigating the problem.

5.2 Potential Response Stage Actions

5.2.1 Stage I - Increased Monitoring

- NYSERDA increases monitoring activities of weekly energy supply, demand, and price data by expanding fuels types, and level of detail. This includes data on production, imports, exports, and volumes supplied. As a result, staff may determine advanced indications of an impending petroleum and demand imbalance.
- NYSERDA increases the frequency and the level of detail in selected published reports.
- Update web page energy data more frequently.

5.2.2 Stage II - Market Coordination

- NYSERDA formally contacts New York State petroleum industry trade organizations to alert them to the situation. Request they encourage their membership to make all effort to coordinate supply activities.
- If necessary, request NYS DOT to grant waivers of Drivers Hours of Operation Regulations to facilitate shipments and movements of gasoline as required.
- Encourage New York State human service agencies to coordinate appropriate State, County and Federal assistance programs to assist low-income, handicapped, and elderly persons with their transportation needs as a result of the shortage.
- If appropriate, request a waiver for the Jones Act from the U.S. Department of Transportation. A waiver would allow non-U.S. flag tankers to operate between U.S. ports.
- Notify the State Office of Emergency Management which may consider activation of a virtual Multi Agency Coordination (MAC) Group to address policy issues in the event the emergency progresses to Stage III or IV.

5.2.3 Stage III - Public Action

- Activities under this phase would increase as NYSERDA determines, through ongoing monitoring, that an energy supply problem is imminent.
- The Governor’s Office and other concerned State agencies would be advised.

- NYSERDA would work with the New York State Department of Environmental Conservation (DEC) and other State agencies to call attention to the supply problem and guide steps or actions to reduce fuel demand and consumption.
- NYSERDA would identify administrative resources that may be needed under an emergency scenario and would keep affected participants, the State Office of Emergency Management (OEM), and the Governor's Office apprised of events.
- OEM may consider establishment of a more formal MAC Group.
- OEM may consider activation of any or all of the functional annexes of the State CEMP.
- OEM may consider activation of the State Emergency Operations Center and JIC.
- If fuel demand and consumption reduction efforts alone are not sufficient to mitigate the supply constraints, NYSERDA would contact DEC regarding DEC issuance of waivers for use of non-conforming fuels to prevent escalation of the emergency situation.

5.2.3.1 Transportation Fuels (Gasoline and diesel)

- Request a reduction by the consuming public and State and local government employees in all non-essential travel.
- Encourage carpooling efforts by the public.
- Encourage the use of mass transportation systems within the State.
- Request the strict enforcement of posted speed limits within the State.
- Request all non-emergency governmental, commercial, and industrial facilities to operate on a limited hour basis or limited number of days per week.

5.2.3.2 Distillate Fuels for Heating (Heating Oil, Kerosene, Diesel)

- Request all non-essential commercial, office, governmental and industrial operations to reduce their consumption.
- Request all heating oil, kerosene, and diesel consumers to voluntarily curtail use.
- Request residential sector to voluntarily lower temperatures.
- Request all non-emergency governmental, commercial, and industrial facilities to operate on a limited hour basis or limited number of days per week.
- Request all distillate fuel-using private office buildings, schools, and universities to reduce their thermostats settings for space and domestic hot water heating.
- Request curtailment of deliveries to non-essential users.
- Request Limit fill-ups to 50% of capacity on all residential and other essential deliveries where the intended use is for heating or hot water.
- Request restriction of temperatures in all non-essential buildings of commercial and governmental users to 65 degrees F during working hours and to facility maintenance levels during non-working hours.

5.2.3.3 Propane Fuel

- Request all propane consumers to voluntarily curtail propane use.
- Request all non-essential commercial, office, governmental and industrial operations to reduce their consumption.
- Request curtailment of deliveries to non-essential users.
- Limit fill-ups to 50% of capacity on all residential and other essential deliveries where the intended use is for heating or hot water.
- Request all non-emergency governmental, commercial, and industrial facilities to operate on a limited hour basis or limited number of days per week.
- Request all propane-using private office buildings, schools, and universities to reduce their thermostat settings for space and domestic hot water heating.
- Request all second homeowners using propane in New York State to reduce their thermostatic settings at these homes to minimum property protection settings.
- Discontinue recreational uses of propane, such as heating of swimming pools, saunas, spas and ornamental fireplaces not used for heat.
- Discontinue filling portable 20-gallon or smaller propane cylinders unless the fuel will serve as the primary cooking fuel or has primary space heating application for a residence.
- Request industries with dual-fuel capability to convert from propane to the alternative fuel.
- Request curtailment of deliveries to non-essential users.
- Request limit on fill-ups to 50% of capacity on all residential and other essential deliveries where the intended use is for heating or hot water.
- Request restriction of temperatures in all non-essential buildings of commercial and governmental users to 65 degrees F during working hours and to facility maintenance levels during non-working hours.

5.2.3.4 Stage IV - Emergency Declaration

- If public health, safety, or the general welfare is believed to be jeopardized by an energy supply imbalance or emergency event, the Governor may declare an Energy Emergency.
- Emergency response options would be implemented pursuant to orders issued by NYSERDA's President.
- Enforcement would be based on Section 5-119 of the State Energy Law (and, as appropriate, portions of the Public Service Law), which imposes civil and criminal sanctions for violations.
- If the President of NYSERDA finds sufficient energy hardships or shortages exist, the standby fuel set-aside program for liquid fossil fuels under Article 10 of the State Energy Law and Part 7900 of 9NYCRR may be activated. Enforcement would be based on Section 10-107 of the State Energy Law.

The following actions, or parts thereof, may be recommended in the event of a petroleum fuel supply shortfall.

- Formal requests for appropriate regulatory waivers to expedite fuel resupply and delivery efforts.
- Minimum Motor Fuel Purchase Program to assist in the orderly distribution of supplies of motor fuel by discouraging “tank topping” and reducing the length of waiting lines at retail outlets.
- Odd/Even Motor Fuel Purchase Program to assist the equitable and orderly distribution of motor fuel by reducing consumer visits to retail outlets. This measure involves retail sales of motor fuel based on vehicle license plate numbers and letters.
- Petroleum Allocation Program to provide equitable distribution of scarce supplies among all classes of end-users upon delegation under federal allocation or price control programs during a severe petroleum shortage.
- Impose restrictions on wasteful, inefficient, or nonessential uses of energy or energy resources. This may include ordering restrictions that were merely requested during a Stage III response.
- Waive State and local environmental protection requirements for individual facilities for a period of 30-60 days during each six month period that the emergency is extant.
- U.S. Department of Energy **Northeast Home Heating Oil Reserve** is a one million barrel supply of ultra low sulfur distillate (diesel) for homes and businesses in the northeastern United States, a region heavily dependent upon the use of heating oil.
- U.S. Department of Energy **Northeast Regional Refined Petroleum Product Reserve** is a one million barrel supply of seasonally adjusted, regionally appropriate supply of gasoline for consumers in the northeastern United States.
- FuelNY Initiative to ensure that critical gas stations have back-up power capacity by providing, deploying, and installing portable emergency generators.
- New York State Strategic Fuel Reserves are located in the Downstate and Upstate areas. The Downstate Reserve holds approximately 2.5 million gallons of gasoline on Long Island. The Upstate Reserve holds a total of approximately 2.8 million gallons, evenly divided, of gasoline and diesel at six separate terminals located across the Upstate area.
- Fuel Set-Aside Program to alleviate spot shortages and temporary hardships by allocating in-State supplies of petroleum products that are “set aside” from each prime supplier’s available supply

Implementation of some of the actions listed above, such as the fuel set-aside and allocation programs will require identification and determination of priority energy and fuel supply uses. NYSERDA will rely upon the appropriate State agencies to assist in this task. For example, priority medical needs are best determined by the Department of Health, school needs by the State Education department, etc.

5.3 Coal Emergencies

5.3.1 Lead Agency

NYSERDA is charged with the responsibility for responding to coal supply emergencies. In the event of an in-State coal emergency, or an out-of-State event immediately affecting New York supplies, NYSERDA will act as the lead agency and the NYSERDA Energy Emergency Implementation Plan will be activated. Support agencies will implement their internal emergency response plans, as needed, and their activities will be coordinated by OEM.

5.3.2 Potential Response Measures

The State's Coal emergency response actions are based on the same four-stage response hierarchy as is used for petroleum emergencies (see Section 5.1.2). NYSERDA monitors developments (*e.g.*, industry-labor negotiations, rail disruptions, barge movements) that could lead to a coal supply disruption or shortage. If circumstances indicate a coal strike or disruption is likely, the four-stage response hierarchy would be implemented.

5.3.2.1 Stages I & II – Increased Monitoring and Market Coordination

NYSERDA would request relevant information from all suppliers, distributors, and direct purchasers. Coal producers would be contacted for information on production and delivery schedules as they affect New York. Supply and demand data would be studied to prepare for allocation or redistribution of supplies. Electric generators would be surveyed to determine their stockpile levels, estimates of resupply needs, and alternative supply options, if any.

5.3.2.2 Stage III – Public Action

If a problem in the supply or distribution of coal is identified by NYSERDA:

- The Governor's Office and other concerned State agencies would be advised.

- The media would be informed and encouraged to promote appropriate conservation measures to reduce demand, with care taken to avoid hoarding caused by premature public notice.
- NYSERDA would work with the New York State Department of Environmental Conservation (DEC) and other State agencies to call attention to the supply problem and guide steps or actions to reduce fuel demand and consumption.
- NYSERDA would contact or convene a meeting with the major suppliers and large end-users of coal, rail companies, and others to agree on procedures to be followed in the event of an emergency.
- Regular contact and consultation would occur with appropriate DOE regional officials.
- If fuel demand and consumption reduction efforts alone are not sufficient to mitigate the supply constraints, NYSERDA would contact DEC regarding DEC issuance of waivers for use of non-conforming fuels to prevent escalation of the emergency situation.
- Notify OEM which may consider virtual Multi Agency Coordination (MAC) Group activation to address policy issues in the event the emergency progresses to Stage IV.

5.3.2.3 Stage IV – Emergency Declaration

In the event that a coal shortage continues to the point where emergency measures appear necessary, NYSERDA would recommend that the Governor declare an energy emergency.

NYSERDA would require all suppliers, distributors, and direct purchasers to report:

- Stocks in inventory and estimated number of days supply.
- Stocks in transit, expected transit time, and estimated number of days supply.
- Schedule of shipments for the next 30-day period and the following 30-day period.

NYSERDA would then implement emergency measures such as fuel switching and fuel allocation. NYSERDA may direct electric generators to immediately switch coal-fired plants to alternative fuel capability, wherever possible, to reduce coal-fired generation to a minimum. Coal supplies from these plants could then be reassigned to coal users without alternative fuel capability. Due consideration would be given to the amount of coal needed to protect the utility generating plants and the need to keep certain units operating to maintain electric supply system reliability.

The aim of an allocation program is to ensure adequate volumes of coal (to be determined by NYSERDA on a case-by-case basis) for priority end-users. NYSERDA would implement the following priority schedule for coal allocation, unless circumstances indicate otherwise:

- Medical, psychiatric, educational, and correctional facilities without alternative fuel capability.
- Other essential service facilities without alternative fuel capability.
- Residential structures without alternative fuel capability.
- All others, including electric generation.

By authorization of its President, NYSERDA would allocate coal supplies in response to applications for emergency assistance.¹⁵ Such allocation would be issued on behalf of end-users in the private sector and met by prime suppliers, similar to the liquid fossil fuel set-aside program described in Section 5.2.

In addition:

- OEM may consider establishment of a more formal MAC Group.
- OEM may consider activation of any or all of the functional annexes of the State CEMP.
- OEM may consider activation of the State Emergency Operations Center.

5.4 Electric System Emergencies

5.4.1 Lead Agency

The New York State Department of Public Service (DPS) is the staff arm of the Public Service Commission (PSC). The Commission regulates the State’s electrical utilities and is charged by law with the responsibility of ensuring that such utilities provide adequate service. In the event of an in-State electrical emergency, as specified in Table 2 below, DPS will act as the lead agency and the DPS Emergency Plan will be implemented. Support agencies will implement their internal emergency response plans, as needed, and their activities will be coordinated by OEM.

5.5 Electric System Threat Assessment

The DPS Emergency Plan calls for different levels of response actions based on the severity of the situation. Table 2 shows the DPS emergency severity classifications for transmission and distribution emergencies and bulk power supply emergencies.

¹⁵ Upon approval of such requests, the applicant must bear the responsibility for any additional expenses incurred in shipping the allocated product to his location.

Table 2. Electric Emergency Severity Classifications

Class	Transmission and Distribution	Bulk Power Supply
I - Localized Emergency or Receives Media Attention	Any emergency that might receive media attention. Includes storm anticipation.	Any event or bulk system condition that puts the bulk power system at risk of losing the ability to reliably operate. Includes, but is not limited to, the use of voltage reduction or public appeals by the ISO or any member company in order to restore the bulk system conditions to normal.
II – Widespread or Major Incident	Any emergency that results in service interruptions likely to last in excess of 24 hours, or to more than 10 percent of the customers in a given operating area of any major NYS electric utility.	Any event or bulk system condition that results in the controlled use of load shedding to restore a company's or the NYISO's bulk power system to the normal operating state.
III – Catastrophic Event (may include Emergency Declaration)	Any emergency that results in service interruptions likely to last in excess of 72 hours, or to more than 25 percent of the customers in a given operating area of any major NYS electric utility	Any event or bulk system condition that results in the uncontrolled loss of load anywhere in the State or that results in partial or full bulk power system separation of a member system of the ISO from a neighboring pool. Excludes storms that precipitate distribution load loss, but includes storms that affect the bulk power system.

Four categories of emergencies have also been developed to classify different types of electric system emergencies, as described in Table 3. The different responses to each type of emergency are covered in separate subsections. Where it is appropriate, different emergency responses may be specified for utility-specific and multi-utility emergencies.

Table 3. Electric Energy Emergency Categories

Category	Description
System blackout	Uncontrolled rapid loss of a large portion of the electric supply system due to equipment failure or disruption. System can be restored using a restoration plan.
Distribution disruption	Loss of power to many customers due to extensive damage to transmission or distribution system. Due to extensive damage, restoration may take days or weeks.
Supply shortage	Inadequate generation supplies or transmission capability reduces the amount of deliverable electricity. Voltage reductions (brownouts), customer appeals, and controlled rolling blackouts may occur.
Fuel constraints	Electric utilities and independent generation owners experience difficulties in securing adequate fuel supply to keep their generating units operating. Fuel conservation or switching may be required, and additional fuel supplies may need to be secured. NYSERDA plays an active role for petroleum and coal supply emergencies. Natural gas supply emergencies remain with DPS.

Emergencies that fall into the first three categories (system blackout, distribution disruption, or supply shortage), as well as fuel constraint emergencies involving natural gas, are addressed under the NYISO Emergency Operations Manual or the DPS Emergency Plan. Fuel constraints emergencies involving petroleum and coal may involve action by NYSERDA. (See sections 5.1 and 5.2, above).

5.5.2 System Blackout

Extreme weather conditions such as lightning, snow or ice storms, or a hurricane can cause a major disruption of service very quickly. A faulty piece of equipment may cause a fire that can quickly disrupt service or even cause a blackout. However, many events occur in stages that allow coordinated action steps to be implemented, before it is necessary to take more extreme measures such as voltage reductions, partial load reductions, or rolling brown-outs, that might avoid a utility or system-wide blackout.

5.5.3 Distribution Disruption

Extreme weather conditions or equipment failure may cause isolated or widespread service outages. Many events occur in stages, such as the loss of one line or substation, multiple lines or substations, or transformers, resulting in partial or total system outages.

5.5.4 Supply Shortage

Various events may occur, such as extreme weather conditions or equipment failures that may cause the loss of a generating unit or a transmission line or lines. Steps leading up to and including voltage reduction(s), partial load reduction(s) or rolling brownouts, or blackouts may be necessary to prevent one or more individual utilities or the entire NY system from becoming blacked out.

5.5.5 Fuel Constraints

If electric utilities or generators experience difficulty in securing adequate environmentally acceptable petroleum or coal supplies to keep their generating units operating, NYSERDA would work with affected electric generators and fuel suppliers to determine the extent and potential duration of the supply difficulty. Fuel conservation or switching might be required and additional fuel supplies might need to be secured from alternate sources. Short of an emergency declaration, to prevent escalation of the emergency situation NYSERDA would make recommendations to the

State Department of Environmental Conservation (DEC) that necessary waivers be granted to specific generators, allowing the use of non-conforming fuels for a defined period of time. In the event of a declared emergency, NYSERDA would direct DEC to issue any necessary waivers. See sections 5.1 and 5.2 for more detailed discussion of NYSERDA's response actions for petroleum and coal supply emergencies. Section 5.4 provides discussion of the DPS response actions for natural gas emergencies.

5.5.6 Potential Response Actions

Emergency response actions for system blackout, distribution disruption and supply shortage emergencies would be triggered by information indicating an impending inability to supply load. Then:

- Electric generators, NYISO, transmission owners, local distribution companies, and DPS would make determinations implementing appropriate response actions, as detailed in their respective emergency response plans. Activities under this phase would likely increase if DPS determines that loss of power is imminent. Constant review and reassessment of the situation would be carried out as long as the threat of emergency persists.
- If public health, safety, or general welfare were jeopardized by an electric system disruption, supply shortage, or actual blackout, the Governor may declare an emergency. Emergency response options would be based on DPS procedures, described in the DPS Emergency Plan.

Emergency response actions for fuel constraint emergencies would entail:

- In response to information indicating an impending fuel supply or air quality problem affecting fuel use, NYSERDA or DPS would work with generators or LDCs to evaluate the severity of the problem. The LDCs, generators, and NYSERDA or DPS then would make a determination implementing energy emergency plan responses based on a mutual assessment of the situation.
- If public health, safety, or general welfare were jeopardized by a fuel supply problem, the Governor may declare an energy emergency.

In an electric system emergency, DPS would assess the type and severity of the emergency as described in Tables 2 and 3, above. Based on that assessment, a staged response would be implemented as described below. The staged response is a guideline and would not be constrained by the severity assessment. Elements of the staged response may be employed to respond to any severity class, as deemed necessary by DPS. The exception to this is an

Emergency Declaration by the Governor. An Emergency Declaration would warrant activation of the Severity Class III – Catastrophic Event response detailed in the DPS Emergency Plan.

5.5.6.1 Stage I - Increased Monitoring

- Monitor approaching storms and plan accordingly.
- Monitor utility emergency operations.
- Monitor restoration activities on site, if needed.
- Prepare regular status reports.
- Conduct follow-up investigation.

5.5.6.2 Stage II – Market Coordination

- Maintain contact with NYISO.
- Activate Peak-Load Reduction Plan for State agencies and affiliates.
- The Peak-Load reduction program implements those provisions of Executive Order No.111 dealing with load reduction during peak demand periods at all State agencies and affiliated entities. The program shall be implemented within 60 minutes of DPS staff issuing a “Load Reduction Order” for State agencies to implement their peak load reduction plan and procedures. This program applies to all agencies and branches of State government, public benefit corporations, public authorities, community colleges, and leased spaces as listed in Appendix B of the NYSERDA Guidelines implementing Executive Order No. 111, entitled “Green and Clean”.
- Notify the State Office of Emergency Management which may consider activation of a virtual Multi Agency Coordination Group (MAC) to address policy issues in the event the emergency progresses to Stage III or IV.

5.5.6.3 Stage III – Public Action

- DPS Offices of Consumer Services and Consumer Policy will provide consumer assistance with restoration of service and resolution of issues.
- Assist in developing State response and issue notices for voltage reduction, rolling blackouts, closures, etc.
- OEM may consider a partial activation of the State EOC.
- OEM may consider establishment of a more formal MAC Group to address policy issues in the event the emergency progresses to Stage IV.
- OEM may consider activating any or all of the functional annexes of the State CEMP. Stage IV – Emergency Declaration
- Class III Catastrophic Event response by DPS would be activated, as specified in the DPS Emergency Plan.
- Assess duration and estimates of service restoration time.
- OEM may consider a full activation of the State EOC.

5.5.7 Agency Coordination

The lead agency, working with the NYISO, electric generators, and LDCs, is responsible for contacting other agencies such as NYSERDA, DPS, DEC, and OEM when an electric system emergency is declared at any level.

The following table identifies the lead agency and other involved agencies for each class of electricity system emergency. The lead agency's public information officer (PIO) would be the primary point of contact for press inquiries. Additional information on public communications is presented in Section 6 of this Plan.

Electric System Emergency	Lead Agency	Other Agencies
System blackout	DPS	OEM, NYSERDA
Distribution disruption	DPS	OEM, NYSERDA
Supply shortage	DPS	NYSERDA, OEM
Fuel constraints	NYSERDA (petroleum & coal)	DPS, DEC, OEM
	DPS (natural gas)	NYSERDA, DEC, OEM

5.5.8 Coordination with NYISO and Utility Emergency Procedures

Under Title 16, Chapter II, Section 105 of the Public Service Law, each New York State electric corporation must file an electric emergency plan (updated annually) with the PSC that addresses storms and other causes of electric system emergencies with storm-like characteristics. Each corporation's plan must contain the following elements (list not inclusive):

- Criteria used to classify severity of electric emergencies.
- Procedures to practice the emergency response program.
- Pre-emergency mitigation plans and preparations.
- Identification of management staff responsible for company operations during an emergency.
- Service restoration procedures, i.e., appropriate safety precautions regarding electrical hazards, including plans to promptly secure downed wires; procedures for deploying company and mutual aid crews to work assignment areas; and provisions for identifying and securing additional supplies and equipment during emergencies.
- Procedures for maintaining communications and responding to customer contacts during emergencies.
- Identification of and procedures for maintain communications with customers that have documented their need for essential electricity for medical needs.

- Identification of and procedures for maintaining communications with customers that provide critical telecommunications, transportation and fuel distribution services. (Limited to the provision of power which does not include the provision of fuel.)
- Identification of company staff to communicate with local officials and appropriate regulatory agencies.
- Policy and criteria regarding mutual aid with other utilities.
- Operating and emergency personnel contact lists.

These plans, along with the NYISO's emergency operations manual, form the foundation for responding to electric system emergencies. Both the electric corporations' emergency plans and NYISO emergency operating procedures are filed at the DPS offices.

5.5.9 Nuclear Power Plant Emergency

A nuclear power plant emergency is defined as an event or series of events at a nuclear power plant that results in a licensee declaring one of four emergency classification levels (ECL). The ECLs can range in severity from extremely low level events that pose no threat to the public safety but which warrant an increased awareness on the part of plant and offsite personnel to degraded conditions that threaten public safety and for which some form of protective actions will likely be initiated. Any protective actions taken are intended to minimize the risk to the general public. In the event of a nuclear power plant emergency, the New York State Radiological Emergency Preparedness Plan may be implemented. DOH is lead agency for radiological emergency response.

Impact of the loss of electric generation from one or more nuclear power plants to the State's electric system would be assessed by DPS as a potential electric system emergency in the same manner as any other electric system power supply loss.

5.6 Natural Gas Emergencies

A natural gas supply emergency is defined as a disruption in the ability of the pipeline transmission system causing a shortfall in the supply of gas needed to maintain safe and adequate service to either the State as a whole, or a specific geographic area within the State. There are two main causes of a gas supply emergency:

- Rupture in a major gas transmission line or a breakdown of transmission line equipment such as compressor stations.
- Curtailment of gas supplies.

5.6.1 Lead Agency

The New York State Department of Public Service (DPS) is the staff arm of the Public Service Commission (PSC). The Commission regulates the State's natural gas utilities and is charged by law with the responsibility of ensuring that such utilities provide adequate service. In the event of an in-State natural gas emergency, DPS will act as the lead agency and the DPS Emergency Plan will be implemented. Support agencies will implement their internal emergency response plans, as needed, and their activities will be coordinated by OEM.

5.6.2 Potential Response Measures

New York State may require the actions described below during an emergency in which available natural gas supplies are unable to satisfy demand. Coordination among industry representatives, Northeast Gas Association (NGA), and government officials is needed to ensure the effectiveness of these emergency response measures.

These measures may require action by DPS, at the direction of the PSC, or an emergency order issued by NYSERDA pursuant to a declaration of an energy emergency by the Governor. As with petroleum and coal emergencies, the State's response to natural gas emergencies follows the four-stage response hierarchy:

5.6.2.1 Stage I – Increased Monitoring

- Establish and maintain communications with the affected utility or utilities and the Northeast Gas Association (NGA)¹⁶.
- Gather and report data on utility demand, supply, storage inventories, peaking capabilities and supplemental supplies during the emergency.
- Report on a regular basis to the Director of the DPS Office of Electric, Gas and Water and the Chairman of the PSC regarding the severity of the situation, remedial activity and the effectiveness of those actions.

5.6.2.2 Stage II – Market Coordination

- Each Local Distribution Company (LDC) or marketer operating within the State may be requested to identify the essential-service customers within its service territory.

¹⁶ The Northeast Gas Association (NGA) is a trade association composed of the 32 LDCs that provide natural gas to customers in Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont.

Essential service includes, as specifically determined by each LDC (or marketer), minimum gas requirements for the following uses:

- Houses, apartments, prisons, dormitories, day care centers, nursing homes, and hospitals.
 - Essential food productions, processing, and distribution for basic human needs.
 - Essential services such as medical, pharmaceutical, police, fire protection, sanitation, communication, water, snowplowing, sanding and traffic signal maintenance.
 - Manufacturing products necessary on an immediate, short-term basis for protection of public health and safety.
-
- Determine the costs associated with obtaining additional emergency natural gas supply.
 - Assist the affected utility or utilities and NGA Gas Supply Coordinator(s), when requested, in obtaining additional supplies of gas during the emergency.
 - Notify the State Office of Emergency Management which may consider activation of a virtual MAC Group to address policy issues in the event the emergency progresses to Stage III or IV.

5.6.2.3 Stage III – Public Action

During periods of uncertain supply or emergencies that reduce gas supply, threatening loss or curtailment of service to non-interruptible customers, NGA implements its Standard Operating Procedures - Pooling of Gas Supply. The Standard Operating Procedures are divided into two sequential phases:

- Actions to be taken by a specific utility to bring supply and demand into balance.
- Coordinated actions to be taken by all LDCs in the region to correct a supply imbalance.

The Procedures, which establish specific steps to be followed in case of an emergency, are implemented on an upstate/downstate basis through gas supply coordinators for each region. The Gas Policy and Supply Section of the DPS Office of Electric, Gas and Water will gather data and report on utility demand, supply, storage inventories, peaking capabilities, and supplemental supplies during the emergency. Staff will also assist in preparing public appeals to help reduce consumption.

In addition, during a Stage III natural gas emergency:

- OEM may consider establishment of a more formal MAC Group to address policy issues in the event the emergency progresses to Stage IV.
- OEM may consider activating any or all of the functional annexes of the State CEMP.
- OEM may consider partial activation of the State EOC.

5.6.2.4 Stage IV – Emergency Declaration

Depending on the severity of the shortage and the degree to which essential service is threatened, one or more of the following actions may be taken:

- Curtailment of service to all large, non-essential commercial and industrial users by an amount sufficient to balance supply and demand.
- Curtailment of service to all non-essential industrial users to minimum levels required for plant protection.
- Curtailment of service to all non-essential commercial users to minimum levels required for plant protection.
- Complete interruption of service to large, non-essential commercial and industrial users.
- DPS Policy Section Staff will determine if curtailments instituted by the utility or utilities are proper;
 - if they call for the closing of non-essential businesses.
 - if they call for obtaining exemptions from requirements such as air quality standards and minimum temperature settings.
- DPS staff will aid essential businesses, such as hospitals and processors of perishable foodstuffs, in obtaining exemptions from curtailment to ensure the public welfare.
- DPS staff will maintain contact with DPS Gas Safety field personnel regarding the status of any needed repairs or proper steps to ensure curtailment compliance.
- OEM may consider full activation of the State EOC.

NGA will be asked to play an advisory role on questions of fuel substitution for emergency situations involving dual-fuel customers. NGA will also be asked to provide assessments of the impact government actions have on natural gas users.

Each LDC or marketer operating within the State may be requested to advise the essential-service customers within its service territory of actions to be taken during an emergency to minimize gas consumption while continuing to provide essential service.

5.7 Potential Waivers to be Requested During an Incident¹⁷

The oil and natural gas industry operates under a myriad of regulations to ensure safe operations, environmental quality and fair market competition. The industry has a deep commitment to complying with all regulations, all of the time, regardless of external conditions. However, during the response to an event affecting system integrity, some regulations can impede the quick restoration of services when access to specific resources is limited or workers and equipment are needed from other areas. Governments understand this paradox and the value of quickly restoring critical services when events affect their communities. Waivers, where government temporarily suspends regulations so that companies can, continue operations that will help alleviate the emergency and restore normal operating conditions, are the solution to this problem. The following document identifies many of statutes, related issues and waivers that can be requested during an event to speed recovery and a return to compliance.

The following is a “checklist” of all federal regulatory waivers needed to ensure the most efficient functionality of the fuel distribution system possible during a state of emergency (*i.e.* hurricane, blizzard). The checklist is organized by administrative department or agency, listing all necessary regulatory waivers within the department or agency’s jurisdiction underneath.

5.7.1 Environmental Protection

5.7.1.1 RFG Requirements

Issue: Reformulated gasoline (RFG) is a cleaner burning gasoline blend required in areas that are not meeting certain air quality standards. During times of emergency, it is imperative that distributors have the flexibility to get any available fuel into the affected area in any way possible, regardless of whether or not it is RFG.

Waiver Needed: 40 CFR 80.78(a)(7), prohibits persons from combining any reformulated gasoline blendstock for oxygenate blending with any other gasoline, blendstock, or oxygenate.

Agencies: U.S. EPA, NYSDEC

¹⁷ Oil and Natural Gas Industry Preparedness Handbook, American Petroleum Institute, October 2013.

5.7.1.2 Fuel Composition and Use – Sulfur Limitations

Issue: Residual and distillate fuels sulfur content is specified by NYSDEC by region. In the event a specified fuel is unavailable and the electric generator is required for reliability as determined by the NYISO an exception would need to be obtained from NYSDEC.

Exception Needed: A Subpart 225-1.3 exception would allow the use of a higher sulfur fuel oil for a specified period and would be requested by the affected generation owner. A protocol and contact list agreed to by and involving NYSDEC, NYSDOT, NYSERDA, NYSDPS and NYISO has been put in place to facilitate the exception request and approval process.

Agencies: NYSDEC

5.7.1.3 ULSD Requirements

Issue: Ultra Low Sulfur Diesel (ULSD) is a cleaner fuel, with a 15 parts per million (ppm) sulfur specification, required by U.S. EPA for vehicles and equipment. During times of emergency, it is imperative that distributors have the flexibility to get any available fuel into the affected area in any way possible, regardless of the sulfur content.

Waiver Needed: 40 CFR 80.510 and 80.520, which set ULSD standards. This waiver would allow the use of high sulfur heating oil in model year 2006 and older vehicles, generators and as home heating oil during the emergency.

Agencies: U.S. EPA, NYSDEC

5.7.1.4 Vapor Recovery Regulations

Issue: Fuel terminal loading and unloading systems and tank trucks that transport fuels are required to use specified vapor recovery equipment, which can differ from state to state. In the case of an emergency, is imperative that fuel can get from jurisdiction to jurisdiction by any transport means available. The states include these regulations in their state implementations plans (SIPs), which are approved and enforced by U.S. EPA.

Waiver Needed: 40 CFR Part 60 Subpart XX and Part 63 Subparts R, Y and BBBBBB, which set the standards for loading applicable to Bulk Gasoline Terminals, Pipeline Breakout Stations and Marine Tank Vessel Loading Operations, respectively.

Agencies: U.S. EPA, NYSDEC

5.7.1.5 Tank Roof Landing Emissions

Issue: During an emergency, when more fuel may be needed to pass through a facility's tanks faster than normal operations, the emptying and filling of tanks may result in higher air emissions due to the tank roof landing emissions in floating roof tanks.

Waiver Required: Air emission regulations are enforceable by U.S. EPA and air emissions for specific facilities are limited by their air permits. If U.S. EPA provides a waiver (or no-action assurance) during an emergency, each state may also waive the permit limits for an appropriate time during and following the emergency.

Agencies: U.S. EPA, NYSDEC

5.7.2 Department of Transportation (DOT)

5.7.2.1 General Administrative Requirements

Issue: The U.S. DOT's Federal Motor Carrier Safety Administration (FMCSA) sets general standards and requirements that apply to vehicle labeling, record keeping, etc. They also require transporters to follow all applicable state and federal requirements. Waiving this section could expedite shipments of fuel to recovery areas and to allow for other federal and state waivers to be effective.

Waiver Needed: 49 CFR 390, which provides the general basis for federal motor carrier safety regulations.

Agencies: U.S. DOT, NYSDOT

5.7.2.2 Pipeline Operator Qualification Training

Issue: The U.S. DOT Pipeline & Hazardous Materials Safety Administration sets requirements on operator qualification training for certain hazardous liquid and gas pipelines transportation functions or “covered tasks” that meet the components of the “four-part test”. This set of regulations is commonly referred to as Operator Qualification, and an example of a covered task is manual closure of valves. Due to the diversity of hazardous liquid and gas pipeline infrastructure across the Nation, operators train to satisfy the requirements as they apply specifically to their company’s equipment and infrastructure. These requirements, which may be appropriate under regular operating circumstances, hinder the effort for mutual aid from other hazardous liquid and gas pipeline companies in time-sensitive circumstances.

Waiver Needed: 49 CFR Part 192 and 195, subpart N lists the requirements of Operator Qualification, including ‘covered tasks’ and ‘four-part test’ in §192.801(b) and §195.505.

Agencies: U.S. DOT, NYSDOT, NYSDPS

5.7.2.3 Driver Qualification Regulations

Issue: The U.S. DOT’s Federal Motor Carrier Safety Administration (FMCSA) has certain rules requiring a driver’s physical fitness, fluency in the English language, level of fatigue, the thorough inspection of cargo, ensuring lighting and cargo standards are met and inspection repair and maintenance requirements, which may be appropriate under regular operating circumstances, hinder the effort to get as many loads into the disaster area as possible in a short amount of time.

Waiver Needed: 49 CFR Parts 391-3, and 396, which set driver standards, load standards, inspection standards and etc.¹⁸

Agencies: U.S. DOT, NYSDOT

¹⁸ Guidance for States on Relief from Federal Motor Carrier Safety Regulations in an Energy Emergency, National Association of State Energy Officials, November 2014.
<http://www.naseo.org/data/sites/1/documents/publications/FMCSA%20Regulations%20Relief%20Guidance%2011%2003%2020141.pdf>

5.7.2.4 Hours of Service Regulations

Issue: The U.S. DOT's Federal Motor Carrier Safety Administration (FMCSA) sets requirements on how many hours a truck driver can drive or be on duty in a given day and week. There are also certain rest time requirements between on duty periods. These requirements, which may be appropriate under regular operating circumstances, hinder the effort to get as many loads into the disaster area as possible in a short amount of time.

Waiver Needed: 49 CFR Part 395, which sets hours of service regulations.

Agencies: U.S. DOT, NYSDOT

5.7.2.5 Vehicles Not Meeting HazMat Specifications

Issue: The U.S. DOT's Pipeline and Hazardous Materials Safety Administrations (PHMSA) sets strict specifications on which vehicles can carry gasoline and other hazardous materials, and how they need to do it (i.e. shipping papers, markings, placarding, etc.). To get the needed quantities of fuel into the disaster area as quickly as possible, more vehicles are needed as long as they are fit to carry gasoline and diesel fuel, even if they do not meet the strict specifications.

Waivers Needed: 49 CFR Parts 173.242 and 172 Subparts C, D, F and I, which govern vehicle specifications and other shipping standards for tank trucks. These waivers will also affect 49 CFR Parts 106, 107 and 171-180.

Agencies: U.S. DOT, NYSDOT

5.7.2.6 Jones Act

Issue: The U.S. DOT's Maritime Administration has authority to waive The Merchant Marine Act, also called the Jones Act, which requires only U.S. built and flagged vessels carry goods from U.S. ports to other U.S. ports. During times of emergency it is imperative that disaster relief items, including fuel, get to the disaster area as quickly as possible regardless of country of origin. More eligible vessels mean that more disaster relief supplies arrive in a more timely fashion.

Waiver Needed: 46 USC 551, which codifies the restriction on non-U.S. flagged vessels delivering from U.S. ports to U.S. ports.

Agencies: U.S. DOT, U.S. DOE

5.7.2.7 Foreign Oil Spill Response Vessels

Issue: The U.S. DOT's Maritime Administration entered into a Memorandum of Agreement with the U.S. Coast Guard, the Environmental Protection Agency and the State Department to expedite requests for exemptions for foreign oil spill response vessels (oil skimmers, etc.).

Waiver Needed: 46 U.S.C. § 55113. This MOU essentially memorializes the process that these agencies created will continue to expedite allowances for foreign oil spill response vessels in the future.

Agencies: U.S. DOT

5.7.2.8 Anchor Handling Waiver Program

Issue: Similar to the Launch Barge Program, the U.S. DOT's Maritime Administration is authorized to make determinations under 46 U.S.C. § 501 allowing the use of foreign anchor handling vessels (used to position mobile offshore drilling units) if no U.S.-flag vessels are available, and if the companies that want to use foreign vessels have contracts in place to bring in replacement U.S.-flag vessels.

Waiver Needed: 46 U.S.C. § 501 allowing the use of foreign anchor handling vessels (used to position mobile offshore drilling units) if no U.S.-flag vessels are available.

Agencies: U.S. DOT

5.7.3 Internal Revenue Service (IRS)

5.7.3.1 Diesel Fuel Penalty

Issue: The U.S. Internal Revenue Service imposes 24.4 cents per gallon tax on diesel fuel sold for on road use, while dyed diesel fuel used for farming purposes, home heating use and etc. are not

ordinarily subject to the tax. Typically, if a diesel fuel that was not subject to this excise tax was converted to use for on road purposes, the IRS would require that use to be reported and the tax paid accordingly. In the case of emergency, the goal is to get as much transportation fuel into the market as possible to make up for supply shortages, and as such, this reporting and tax requirement becomes an impediment to bringing that fuel into the transportation mix.

Waiver Needed: Requirements under Publication 510, which governs excise taxes, of the Internal Revenue Code.

Agencies: U.S. IRS, NYS Tax & Finance

5.7.4 Other Federal Government Assistance Options

5.7.4.1 Vessel Movement Control

The U.S. Coast Guard has authority to control vessel traffic in areas subject to the jurisdiction of the United States which are determined to be hazardous or under other hazardous circumstances through enactment of safety and security zones. Coordination efforts with the U.S. Coast Guard and Department of Homeland Security (DHS) to provided exclusive access to ports in the disaster area to those bringing fuel and other necessary supplies in an effort to expedite barge movement.

Waiver Needed: Captain of the Port Order waiver under Ports and Waterways Safety Act (33USC 1221 et seq.).

Agencies: U.S. Coast Guard, Port Authority of NY&NJ

5.7.4.2 Fuel loans and distribution assistance from the Department of Defense's (DOD) Defense Logistics Agency (DLA) and DHS's Federal Emergency Management Administration (FEMA).

Agencies: U.S. DOD, U.S. FEMA

5.7.4.3 Fuel Loans from the Department of Energy (DOE).

Agencies: U.S. DOE

State Specific Waivers Needed to Transport Fuel Interstate

Other states may have other rules and requirements, such as:

5.7.4.4 Reid Vapor Pressure (RVP) Requirements

Issue: Many states allow a variance, up to 1 lb. RVP, from the most recent version of ASTM D4814 for gasoline blended with ethanol. NIST Handbook 130 also provides for this variance.

Waiver Needed: States that do not allow for an RVP variance may waive the applicable state law or regulation to allow fuel from states that do allow the variance to be used interchangeably across state lines during the emergency.

Agencies: U.S. EPA, NYSDEC

5.7.4.5 Biofuel Blending Requirements

Issue: Some states require a minimum amount of biofuels to be blended into all gasoline and/or diesel sold within the state.

Waiver Needed: States with minimum biofuel blending requirements may waive the applicable law or regulation to allow fuel that does not contain the specified volume of biofuels to be carried across state lines and sold in the state during the emergency.

Agencies: U.S. EPA, NYSDEC

5.7.4.6 Trucking Weight Limits

Issue: All states set weight restrictions (maximum weights allowable) for trucks that travel on their roadways. Because federal law allows each state to set their own weight requirements, not all states set the limits at the same weight. Additionally, these state specific weight limits typically require fuel tankers to be filled at levels below their capacity in most, if not all, states.

Waiver Needed: States may waive their typical weight limits and set temporary limits for trucks carrying emergency relief supplies (including fuel) to allow rapid movement of the largest amount of fuel that can be moved safely intrastate and across state lines. A typical waiver may allow truck from 92,000 lbs. to 100,000 lbs.

Agencies: U.S. DOT, NYSDOT

5.7.4.7 Distributor License

Issue: Many states require a carrier to pay a fee and obtain a Distributor’s License to transport motor fuel within the state.

Waiver Needed: States may waive the applicable fees and license requirements to ensure that all drivers, trucks and resources within the state, or brought across state lines to provide support, are available to contribute to the disaster relief effort.

Agencies: NYSDOS, NYS Tax & Finance

5.7.4.8 Retail Gasoline Label Requirements

Issue: States that have specific biofuel blending requirements may require labels that say things like “contains 10% ethanol,” while some fuel transported interstate may not have exactly 10%, but rather “up to 10% ethanol.”

Waiver Needed: States with content specific labeling requirements may waive those requirements to allow fuels that may not be blended with the exact volume depicted on the dispenser to be sold in the state during the emergency.

Agencies: NYS Dept. Agriculture & Markets Division of Weights & Measures

5.7.5 New York City (NYC)

5.7.5.1 Sulfur Content of Heating Oil

Issue: NYC regulations contain a low-sulfur content requirement for heating oil. Heating oil meeting this requirement may be in short supply.

Waiver Needed: New York City Department of Environmental Protection may temporarily suspend the low sulfur requirement for No. 4 fuel oil set forth in Section 24-169(b)(2) of the New York City Administrative Code.

Agencies: NYCDEP

5.7.5.2 Boiler Inspections

Issue: Annual inspections are required for low- and high-pressure boilers as per 2008 NYC Administrative Code §28-303.2, and are due by November 15th annually.

Waiver Needed: The due date for this requirement, and the subsequent required reporting, may be extended by requesting an “NYC Annual Boiler Inspection Extension.”

Agencies: NYCDEP

5.7.5.3 Emergency Boiler Repair Permits

Issue: The New York City Department of Environmental Protection (DEP) boiler work permit process can delay emergency boiler repairs.

Waiver Needed: The DEP has streamlined emergency boiler work permit guidelines that allow temporary work permits to repair or replace damaged boilers to be issued by providing DEP with basic information about the work being completed, type of boiler being installed, and information about the licensed installer or plumber. The new emergency boiler work permit guidelines allow work to begin immediately and cut the application process by as much as two weeks.

Agencies: NYCDEP

5.7.5.4 Tanker Truck Permits

Issue: The supply of fuel trucks with permits to load and unload fuel in New York City may need to be supplemented.

Waiver Needed: An “FDNY Tank Truck Modification” will allow motor vehicles that, pursuant to federal and state laws and regulations may lawfully operate as a cargo tank truck for transportation of flammable or combustible liquid motor fuel, to operate in New York City without a Liquid Motor Fuel Permit for the purpose of loading and unloading such fuel.

Agencies: NYC

5.8 Superstorm Sandy: Energy-Related Executive and Agency Actions to Aid Recovery

5.8.1 New York State Transportation Actions

- Executive Order (“EO”) No. 47, issued 10/26/2012. By this EO, the Governor declared a State Disaster Emergency in all 62 counties of the State. This EO also authorized all State agencies to take appropriate action to protect State property and assist local governments and individuals in responding to and recovering from the disaster. In addition, the declaration satisfied the requirements of 49 CFR § 390.23(a)(1)(A), which provides temporary emergency relief from Parts 390 through 399 of the Federal Motor Carrier Safety Regulations (relating to, e.g., hours of service of drivers; inspection, repairs, and maintenance) to hasten the movement of power restoration crews.
- EO No. 49 issued 10/31/2012. This EO suspended Vehicle and Traffic Law §§ 375, 385, and 401 to exempt from the equipment, dimension, and weight requirements vehicles registered in other states that enter New York State to assist in recovery efforts.
- EO No. 54 issued 11/1/2012. This EO suspended Tax Law §§ 282, 283, and 302 to suspend the distributor registration requirements for persons importing motor fuel (gasoline) and diesel motor fuel into NY. The EO also suspended Tax Law § 283-a to eliminate the requirement to register as an importing or exporting transporter. The EO also suspended Tax Law §§ 285, 285-a, and 285-b to ensure that fuel taxes were not payable by persons receiving motor fuel or diesel motor fuel from a person not required to register as a distributor because of this EO. The EO also suspended Tax Law §§ 286, 286-a, and 286-b to eliminate record requirements for motor fuel and diesel motor fuel transported into or out of NY by a person not required to register as a distributor or transporter because of this EO. Finally, the EO suspended Tax Law § 1134 to eliminate the requirement for a certificate of authority by a person not required to register as a distributor because of this EO.
- NYS DOT Waiver issued 10/26/2012. This Waiver suspended the hours of service rules in 17 NYCRR § 820.6 for drivers engaged in the intrastate transportation of propane and fuel oil for heating purposes and the transportation of heating fuels from terminal locations to heating fuel delivery companies.
- DOT Waiver, issued 12/3/2012. So many vehicles were damaged by the storm surge that it became difficult to remove them all to clear roads. This Waiver suspended the hours of service rules in 17 NYCRR § 820.6 for drivers and motor carriers engaged in the intrastate transportation of disabled motor vehicles by tow truck operators in the counties of Suffolk, Nassau, Queens, Kings, New York, Richmond, Bronx, Westchester, and Rockland from November 27, 2012 through January 2, 2013.
- NYSTA Toll Waiver issued 11/7/2012. In order to provide for the timely response to address the needs of Superstorm Sandy victims, the New York State Thruway Authority issued this memorandum to all toll personnel about the procedures to follow for vehicles that have been expressly approved for toll-free travel on the Thruway (including DOT vehicles with an approved letter, Red Cross vehicles with Red Cross identification, and fuel delivery vehicles) and for vehicles whose drivers claim they do

not have to pay because they are responding to Sandy (including outside agencies, relief organizations, utilities, and debris removal companies).

- Governor's Press Release announcing suspension of tolls on Rockaway bridges, issued 11/4/2012. Because the bridge that carries the A train to the Rockaways was damaged, many people were forced to drive over the two toll bridges that connect the Rockaway peninsula to the mainland. The Governor announced that the MTA would suspend the tolls for all cars on the two bridges, retroactive to when the bridges reopened. <https://www.governor.ny.gov/news/governor-cuomo-announces-suspension-tolls-mta-rockaways-bridges>
- LIRR Waiver to New York and Atlantic Railway. After the storm, the LIRR worked diligently to restore freight service. Within 48 hours of the subsidence of the storm surge, the LIRR had restored limited freight service east of Jamaica Station. In order to facilitate the movement of propane, food, and building materials, the LIRR granted the New York and Atlantic Railway a waiver to run heavier rail cars on LIRR tracks.

5.8.2 Federal Transportation Actions

- 1. FMCSA Interstate Petroleum Transport Team. The Federal Motor Carrier Safety Administration led an Interstate Petroleum Transport Team to ensure the fastest and most efficient movement of fuel to the region devastated by Hurricane Sandy. The team served as a single point of contact for states, the trucking industry, and other agencies to assist in the removal of barriers to the quick delivery of fuel. The team coordinated information on a variety of waivers to assist the flow of petroleum products to affected states, including: Driver Hours-of-Service; Oversize and Overweight; Low Sulfur Diesel Waivers; Toll Waivers; Vehicle Registration Waiver (International Registration Plan - IRP), and Fuel Tax Waiver (International Fuel Tax Authority - IFTA).

5.8.3 New York State Environmental Actions

- EO No. 59 issued 11/3/2012: This EO suspended the vapor pressure, distillation class, and vapor lock protections set forth in NY under 1 New York Code, Rules and Regulations (NYCRR) Part 224.3 – that is enforceable by the NYS Dept of Agriculture and Markets (NYDAM). This EO also suspended Environmental Conservation Law § 19-0325 relating to limits on the sulfur content of heating oil sold in New York.
- DEC Title V Permit Enforcement Discretion: Allowed marine terminals to increase throughput and/or continue distribution absent operated compromised pollution controls. DEC exercised its enforcement discretion for any exceedences or noncompliance with operating parameters contained in the facility's Title V permits, and required under 6 NYCRR Part 201, 225 and 227.
- Propane Tanks Guidance: DEC regulates all tanks which are stationary tanks at a facility which is otherwise required to be registered for petroleum bulk storage (PBS) purposes and issued guidance for temporary use after the storm.

5.8.4 Federal Environmental Actions

- EPA RFG Waiver issued 10/31/2012: The U.S. EPA issued a multi-state waiver of the reformulated gasoline requirements under the Clean Air Act, pursuant to a letter dated October 31, 2012, in order to minimize gasoline supply disruptions in NY and other states. <http://www2.epa.gov/enforcement/multistate-fuel-waiver-hurricane-sandy-october-31-2012>
- Vapor Capture Units Waiver, issued 11/2/2012: EPA issued a no action assurance letter to NY and NJ, which was extended, that allowed certain terminals to load and unload fuel at bulk gasoline and marine loading terminals without having to operate vapor recovery/combustion devices, so long as the terminal operator notified EPA and agreed to abide by other conditions. Only those terminal operations with damaged or inoperable vapor recovery/combustion devices, or that are not equipped with otherwise required vapor recovery/combustion devices, may take action in accordance with the terms of the letter. DEC has also issued a letter providing the identical waiver except applied to NY state law.
- ULS Fuel Waiver, issued 11/2/2012: EPA granted another waiver to NJ and PA that allowed the sale, distribution and use of diesel fuel in the five boroughs of New York City, and Nassau, Suffolk, Rockland and Westchester counties in the State of New York that exceeds a standard for sulfur-in-fuel content. The waiver was issued to minimize the disruption of the supply of diesel fuel for emergency response diesel-powered highway and non-road vehicles and non-road equipment in these areas. DEC issued a letter identifying categories of diesel-powered highway and non-road vehicles and non-road equipment that were eligible for EPA's waiver of sulfur-content in fuel requirements.

5.8.5 New York City Actions

- DEP Heating Oil Waiver, issued 11/7/12. New York City Environmental Protection suspended the low sulfur requirement for No. 4 fuel oil set forth in Section 24-169(b)(2) of the New York City Administrative Code until 1/18/13.
- DEP Heating Oil Enforcement Discretion, issued 12/31/12. New York City Environmental Protection allows users who have heating oil not meeting the 0.15 percent sulfur requirement already in the tank prior to 1/18/13 to use the remaining heating oil without the need to empty the tank as it would not be practical to empty the oil from such tanks.

6 Public Information

6.1 Overview

Communicating accurate and timely information to the media and public is essential to managing an energy emergency. Effective communication helps minimize public confusion and anxiety, encourages positive public response to appeals for voluntary conservation efforts, and improves public understanding of possible mandatory measures for dealing with the emergency.

If the OEM Emergency Operations Center (EOC) is activated for the energy emergency, OEM will take the lead role in coordinating and monitoring a Statewide public information process to support activities related to actual and potential energy supply emergencies. If the EOC is not activated, the lead role for communications in petroleum or coal emergencies will be taken by the NYSERDA Communications Unit, and the lead role for communications in electric system or natural gas emergencies will be taken by the DPS Public Affairs Office.

The Director of Communications (DC) for the lead communications agency will disseminate information to the media and coordinate with the Governor's Press Office and public information offices of other involved agencies. The DC will issue press releases, coordinate briefings and be responsible for disseminating timely and accurate information to the general public and providing guidelines that encourage emergency energy demand reduction.

The public information process will involve a Statewide, interagency, multimedia approach that informs the public of:

- The current energy situation.
- Appropriate background information.
- Contingency measures to be implemented, including those already in place.
- Special conservation efforts.
- Fuel supply availability.

For petroleum and coal emergencies that do not require activation of the EOC, NYSERDA will establish an internal Emergency Public Information Coordinating Group that would include Communications staff. Appropriate liaisons from the Energy Analysis, Energy Efficiency Services, and Energy Resources, Transportation, and Environmental Research Programs will be named to provide a direct information link from staff to the DC for briefings and specific

questions and concerns. The liaison will have primary contact with the group through the DC. The Coordinating Group will review all public announcements related to the energy emergency, with final sign-off by the DC, who will coordinate appropriate approvals by NYSERDA's President and the Governor's press office. Upon notification by NYSERDA's President, the DC will begin emergency operations as outlined below.

For natural gas and electric system emergencies, the DPS DC would work directly with Directors of the DPS Offices of Electric, Gas and Water and Consumer Services and Consumer Policy to coordinate communications. The DC and DPS Public Affairs staff will review all public announcements related to the energy emergency, with final approval to be made by the DC. The DC will then coordinate appropriate approvals by the Public Service Commission Chairman and the Governor's press office.

6.2 Establish Joint Information Center

The lead communications agency, NYSERDA or DPS, will establish a Joint Information Center (JIC) to provide a common location for all involved parties to share and disseminate information to the media and the public during an energy emergency. These parties could include NYSERDA, the State Office of Emergency Management (OEM), Department of Public Service (DPS), Department of Environmental Conservation (DEC), Empire State Development (ESD), Office of Temporary and Disability Assistance (OTDA), Department of State's Utility Intervention Unit (UIU), and the New York State Department of Health (DOH). This will enhance the coordination, timeliness, and accuracy of information released regarding the energy situation. Under the JIC, all involved parties will work together with the Director of Communications to coordinate public information during a declared energy emergency. The JIC could be located at the State EOC, if activated, or a virtual JIC could be established using computers, phones and other technology.

6.2.1 Information Release

Press releases will be prepared by the lead communications agency and issued after consulting with all involved parties. All State agencies will be encouraged to provide appropriate information about services or assistance for the public for inclusion in releases.

6.2.2 JIC – News Media Briefings

News media briefings will be held regularly during an energy emergency to provide accurate and timely information concerning the nature and scope of the emergency, protective or conservation measures, and possible health or other impacts.

Briefings will be held as need dictates, but to the extent possible, will be held at regularly scheduled times with advance written notice given to the media. All parties will be properly notified of, and afforded equal opportunity to participate in, the media briefings. Each press release issued would be timed, dated, numbered, and distributed in hard copy or electronically to appropriate sources, such as media, other State agencies, and concerned parties.

Supplies for the JIC may include:

- Appropriate materials such as maps, fact sheets, and fuel supply information.
- Copies of the State Energy Emergency Plan and current State Energy Plan.
- Telephone set-up and fax machine.
- T.V. Monitor and audiovisual equipment.
- Computers with internet access.
- Necessary office supplies and equipment.

After the decision is made to establish the JIC, the lead agency or OEM would be responsible for setting up and distributing supplies necessary to operate the Center.

6.3 Coordinated Information Release

Coordination with a specific energy industry may be warranted when distribution of guidelines, pamphlets, and bulletins through energy distributors would provide valuable information to energy users, helping to avoid a product shortage or alleviate problems during an actual shortage.

The lead agency may contact individual Chief Executive Officers (CEO) of energy suppliers to request their assistance and ask the CEO to name a contact person for lead agency's Director of Communications (DC). For example, the contact person could be the manager of government relations, marketing, or public information.

Materials provided through this joint effort could include lists of mandatory or voluntary conservation measures, telephone numbers, and contact people for special assistance and advice on dealing with potential or actual energy emergencies. The lead communications agency would provide individual companies with camera-ready materials to be printed and distributed through local dealers or retail outlets.

6.4 Emergency Alert System

The Emergency Alert System (EAS) enables State and local government officials, with voluntary cooperation by area broadcasters, to advise the public directly in the event of life threatening emergencies.

The NYSERDA President, the PSC Chair and the Chairperson of the State Disaster Preparedness Commission, or their designated representatives, would decide jointly to activate the EAS in a life threatening energy emergency. Upon such decision, the lead agency's DC would coordinate development of the appropriate public message and the DPC Chairperson would activate the EAS system.

In addition, NY-ALERT, the New York State All-Hazards Alert and Notification web-based Portal, went online June 1, 2007. This portal – www.nyalert.gov – offers one-stop shopping through which State and local governments can provide emergency information to a defined audience (local, county, regional, or statewide). OEM will coordinate appropriate use of the NY-ALERT system.

6.5 Energy Hotline/Public Inquiry/Media Monitoring

In an energy emergency, a toll-free Energy Hotline may be activated by the lead agency, which would establish hours, and provide staff and telephone lines as needed to respond to public inquiries.

Information provided through the Hotline would come from EAS messages, press releases, and briefings provided by a designated representative of the JIC. Regular briefings would be held to keep Hotline staff prepared to respond to inquiries. The Energy Hotline would serve as a primary source of information to the general public. The Hotline supervisor would oversee monitoring of both broadcast and print media news reports.

A daily news clipping package would be compiled and circulated by the lead agency. Any reports of inaccurate information would be brought to the attention of lead agency's DC or the appropriate representative at the JIC. Corrections would be made at press briefings, through press releases, through the Hotline, or by direct contact with the station or publication.

7 Recovery Phase

The Recovery Phase begins when the emergency situation has been brought under control, the initiation of response activities has ended, and the relaxation of protective response actions taken is being considered. During the recovery phase of an emergency, the lead State agency will:

- Review recovery actions and develop strategies for meeting ongoing local and State energy needs;
- Continue to monitor local, State and energy industry actions;
- Receive and assess requests for aid from local, State and federal agencies, energy suppliers and distributors;
- Work with OEM and other State and local emergency organizations to establish priorities to repair damaged energy systems;
- Update State and local news organizations with assessments of energy supply, demand and requirements to repair or restore energy systems;
- Keep accurate records of emergency responses;
- Draft recommendations and other reports, as appropriate; and
- Assess any environmental impacts from emergency response efforts and develop remedial strategies for restoring resources to the pre-emergency condition.

After any declared energy emergency requiring implementation of the Energy Emergency Plan, a post-emergency assessment report will be prepared by the lead State agency and will identify the strengths and weaknesses of the Energy Emergency Plan's response elements. The assessment report will review the causes of the emergency, private sector reaction to the situation, the effectiveness of governmental response to the emergency, and the resulting impact of the energy emergency and responses to it. Special attention will be paid to the effectiveness of mitigation efforts in terms of reduced health and welfare threats, energy consumption, and public response to such actions.

Appendix A

Definitions and Acronyms

A comprehensive glossary of energy terms and definitions and a wealth of energy information is available at the Department of Energy, Energy Information Administration's website <http://www.eia.doe.gov>.

Definitions of many of the terms and acronyms used in the New York State Energy Emergency Plan are presented below.

Agency	State department, local government, agency, board, public benefit corporation, public authority, or commission.
Allocation	apportionment of fuel based on purchases and consumption amounts for stated periods.
API	American Petroleum Institute; a trade association of the petroleum industry.
Assignment Order	an emergency fuel allocation issued by NYSERDA.
Aviation Fuels	petroleum-based fuels designed for use in aircraft, fuels designed to operate aircraft combustion engines, and refined-petroleum turbine engines.
Bbl	Barrel; 42 gallons; a unit of measurement.
Branded Product	the registered name of a prime supplier's petroleum fuel.
Bulk Plant	one or more storage tanks owned or leased by wholesale distributors or prime suppliers storing product for redistribution of product to end-users.
Coal	a solid fuel including bituminous (soft), anthracite (hard), metallurgical, and lignite types.
Customer of Record	a purchaser who has entered into an oral or written contract with a supplier at least 15 days prior to the Governor's declaration of emergency establishing a product volume requirement, method of delivery, and payment and credit terms.
Dealer	a person who resells product through retail sales outlets under consignment, lease, commission and proprietorship terms.
Degree Day	a unit measuring the extent to which the outside temperature falls below 65 degrees Fahrenheit in a day. One degree day is counted for each degree below 65 degrees for each calendar day on which such deficiency occurs. A number of systems based on degree days are used by fuel oil dealers for customers subscribing to automatic delivery services.
Diesel Oil	a petroleum fraction used as a fuel in internal combustion engines.
DOE	U.S. Department of Energy.

Distributor	one who purchases the major portion of their requirements from a major oil company and is authorized to use its trademark (branded) or an independent business who buys product from one or more suppliers and uses its own trademark (unbranded).
End User	consumers of allocated products, including wholesale purchasers and consumers.
Energy Emergency	an imbalance between fuel supply and demand sufficient to result in a general threat to the health and welfare of the State's citizens.
Energy Source	substances, such as petroleum, natural gas, and coal that supply heat and power; also electricity and renewable forms of energy.
Essential Services	means judicial proceedings, law enforcement, fire protection, emergency medical service, snow and ice removal, telecommunications, sanitation and water services and other necessary public services.
Fuel Oil	petroleum distillate product burned for the generation of heat and the generation of power.
Hardship/Emergency	an unforeseen combination of circumstances or the resulting state that calls for prompt action in order to ameliorate or eliminate something that causes or entails suffering or privation.
Hopper Car	a railway car used for transporting and delivering coal, each capable of carrying up to 100 tons of coal.
LNG	liquefied natural gas; gas that has been cooled to approximately minus 160 degrees centigrade for storage or shipment as a liquid under high pressure in cryogenic containers.
LPG	liquefied petroleum gas; a substance that is gaseous under normal atmospheric conditions and can be liquefied under moderate pressure at normal temperatures. Propane and butane are the principal examples; commonly known as bottled gas, tank gas, and LPG.
MAC Group	Multi Agency Coordination Group
Middle Distillates	refined products in the middle of the distillation range of crude oil including kerosene, home heating oil, range oil, stove oil, and diesel fuel.
Motor Fuels	fossil fuels including gasoline, diesel fuel, and propane used to drive internal combustion engines.
Motor Gasoline	a refined petroleum product which, by its composition, is suitable for use as a fuel in internal combustion engines.
Octane Rating	a rating of gasoline in terms of antiknock qualities as determined by dividing by two the sum of the research octane number plus the motor octane number. The higher the number the greater the antiknock qualities of the gasoline.
Peak Shaving	the use of supplemental supplies of gas (e.g., LNG, propane-air mixtures) for distribution by gas utilities to supplement the normal supply of pipeline gas during periods of extremely high demand of relatively short duration.

Petroleum Products	refined or re-refined petroleum product from synthetic or crude oil or oil extracted from other sources.
Petroleum Products Pipeline	a pipeline that performs the trunk function and carries petroleum products, including interstate, intrastate, and intracompany pipelines.
Pipeline Terminal	the entity (be it gas processing plant, refiner, importer, mining company or any reseller) that makes the first sale of any product that is subject to state set-aside or allocation control into the state distribution system for end-use in the State.
Priority Consumer	any end-user who is ranked for allocation purposes according to essential service performed, importance of consumption requirements or by gradation of alternate fuel capability.
Propane	a hydrocarbon fuel that is gaseous at ordinary atmospheric temperatures and is readily converted to a liquid state; commonly known as "bottled gas."
Residual Fuel Oil	heavier, high-viscosity fuel oil, which usually needs to be heated before it can be pumped and handled conveniently (Nos. 4, 5, and 6 fuel oil; Bunker C). Primarily used in industry, large commercial buildings, and electric generation.
Retail Sales Outlet	a site on which a supplier maintains an ongoing business of selling any allocated product to end-users or wholesale purchaser-consumer.
State Set-Aside	the amount of allocated product which is made available from the total supply of a prime supplier for utilization by the State to resolve emergencies and/or hardships due to fuel shortages during a declared energy emergency.
SEOC	State Emergency Operations Center
Surplus	an allocated product with no restrictions on its purchase.
Tanker Terminal	a facility for receiving and loading ocean-going tankers and barges.
Unbranded	used to describe the product sold by an independent marketer.
Wholesale Purchaser-Consumer	any person who is an ultimate consumer, who as part of normal business practices, purchases or obtains an allocated product from a supplier and receives delivery of that product into a storage structure substantially under the control of that person at a fixed location. References made to "direct purchaser" or "end-user" are the same as wholesale purchaser-consumer.
Wholesale Purchaser-Reseller	any person who purchases, receives through transfer, or otherwise obtains (as by consignment) an allocated product and resells or otherwise transfers that product to other purchasers without substantially changing its form or content.