

New York State 2022 Energy Emergency Plan:

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

Final Report | January 2023



NYSERDA

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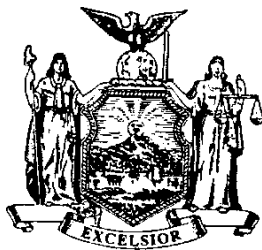
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New York is a global climate leader building a healthier future with thriving communities; homes and businesses powered by clean energy; and economic opportunities accessible to all New Yorkers.

Our Mission:

Advance clean energy innovation and investments to combat climate change, improving the health, resiliency, and prosperity of New Yorkers and delivering benefits equitably to all.



New York State Energy Emergency Plan:

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

Prepared by:

New York State Energy Research and Development Authority



January 2023

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1 Introduction

1.1 Energy Emergency Plan Objectives and Guidelines

The principal objectives of the Energy Emergency Plan are the following:

- 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 do the following:

- 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, to respond to a broad range of informational 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 the following:

- Provides 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.
- Protects public health and safety in times of critical need.
- Minimizes delays in establishing response mechanisms during energy emergencies.
- Promotes consumer and supplier cooperation during periods of emergency.
- Coordinates State, federal, and private sector actions for maximum effectiveness during an energy emergency.

1.2 New York State Legislative and Regulatory Mandate

New York State Executive Law, Article 2-B, Section 21 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 as well as to collectively

comprise the elements of the State's Comprehensive Emergency Management Plan (CEMP).¹ The CEMP provides general strategic guidance and an organizational structure of New York State agencies during emergency response and short-term recovery operations. This Energy Emergency Plan serves as an annex to the CEMP and utilizes all the existing powers and authorities that are realized in the CEMP.

When enacting the State Energy Law in 1976, the State Legislature recognized the need for a comprehensive plan to set forth response strategies during energy emergencies. 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.³ Upon declaration by the governor of an energy emergency threatening the health and welfare of the State's residents or economy, NYSERDA's president is granted broad authority to do the following:

- Allocate available supplies of energy or energy resources among areas, users, persons, or categories of persons or users. In allocating available supplies, the president gives priority to energy and energy resource use essential to public health and safety and thereafter attempts to allocate the remaining supply equitably and in a manner designed to avoid undue hardship.⁴
- Impose restrictions on any wasteful, inefficient, or nonessential use of energy or energy resources and on the promotion of such uses.⁵
- 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 30 days, provided however, that an additional 30 days may be granted for good cause. Only one waiver and one extension may be granted for any facility within any six-month period.⁶

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 the Fuel Set-Aside Act and the accompanying regulations.⁷ This program exists in "standby" status, to be implemented by NYSERDA's president if he or she "finds that implementation of the ... program for one or more liquid fuels is necessary to prevent or alleviate energy hardships or shortages."⁸ The set-aside

program may go into effect, in whole or in part, only upon termination, suspension, or failure by the federal government to implement all or part of the federal petroleum allocation program. When NYSERDA's president finds implementation of the program is necessary, he or she may implement only the portion of the State set-aside that is necessary to "prevent or alleviate energy hardships or shortages."⁹ Additionally, in exercising the power granted pursuant to Energy Law Section 5-117 (1) and (2), Section 5-117 (3) authorizes NYSERDA to supersede any emergency power previously vested in any other state agency.

Energy Law Section 10-105(2)(b) authorizes a monthly fuel set-aside by each prime supplier of liquid fossil fuels.¹⁰ In the event of a declaration by NYSERDA's president that activates the set-aside program, each prime supplier doing business in the State is directed to make available to the State up to 3% of its total available monthly supply for allocation to qualifying users under the set-aside program. Allocation of a set-aside product is granted on a month-to-month basis to priority users' wholesale supplier for delivery to end-priority 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 generally include those 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. NYSERDA 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.

The set-aside program has three major operational aspects: (1) allocation assessment, (2) data management, and (3) communications. When the set-aside program is activated, NYSERDA must 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 an excess of 25,000 gallons of product, and perform program review and reporting requirements.¹¹ In the event of a long-term fuel supply emergency, other State agencies' resources could be used to respond adequately to the situation.

New York State Executive Law, Article 26, Section 713 requires the Commissioner of the Division of Homeland Security and Emergency Services to conduct a review and analysis of measures taken by the Public Service Commission (PSC), other agencies, and divisions of the State to protect critical

infrastructure related to energy generation and transmission. To the extent practicable, the commissioner may review the measures taken by any federal entity regarding generation and transmission located in the State.¹²

New York State Agriculture and Markets Law, Article 16, Section 192-h, added in 2013, requires most downstate gas stations located within one-half mile of a controlled access highway exit or evacuation route to install a transfer switch, so a backup generator may be connected in the event of an energy emergency. Additionally, some large gas station chains must install transfer switches at 30% or more of their gas stations that are located beyond one-half mile of a controlled access highway or evacuation route.¹³ The New York State Department of Agriculture and Markets Division of Weights and Measures is responsible for ensuring compliance of gas stations with the law.

In addition to New York State's legislative mandate, numerous policy initiatives aim to better equip the State to respond to energy emergencies. The New York State Strategic Fuel Reserve, established in 2013 as part of Fuel NY Initiative, includes an upstate and downstate fuel reserve and is designed to mitigate disruptions of fuel dispersal during declared emergencies.¹⁴ A declaration by New York State of an energy supply emergency, and the written direction of NYSERDA, permits fuel from the reserves to 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 Initiative¹⁵ is intended to ensure access to motor fuel in the event of a declared energy or fuel supply emergency. Between May 2013 and January 2019, the program supported the deployment and installation of 851 transfer switches and 195 permanent generators to downstate retail motor fuel stations (i.e., Rockland, Westchester, Suffolk, and Nassau counties, in addition to New York City). The infrastructure investments at these locations have made more than a thousand stations capable of providing back-up power, a stark improvement in resilience, compared to approximately 20 stations that had these same capabilities prior to Superstorm Sandy.

Pursuant to its general authority regarding electric and gas corporations,¹⁶ the PSC has assumed a leadership role for electric system and natural gas emergencies. Following events that affect utility service, the staff arm of the PSC—the Department of Public Service (DPS)—conducts a detailed review of utility restoration efforts. In the event of power failures in a utility's service territory, the PSC publishes detailed reports of the event on its website and suggests mitigation efforts to be taken

by utilities.¹⁷ Additionally, DPS rules and regulations provide criteria for electric utility emergency plans¹⁸ designed for prompt restoration of service in an emergency event involving widespread outages.¹⁹

Additionally, under a State Declaration of Disaster Emergency,²⁰ 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 these powers must be exercised in a manner which (1) does not conflict with federal law, (2) may be exercised notwithstanding any State or local law or contractual agreement to the contrary, and (3) are in addition to any other emergency powers vested in the governor that he or she may choose to delegate to NYSEERDA's president. 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.

1.3 Involved State Agencies

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

- **Department of Agriculture and Markets (AGM)**
Obtains status of farm and agriculture fuel and energy requirements, maintaining liaison with farm and agriculture-related associations. Enforces the provisions of the Fuel-NY Initiative.
- **Department of Environmental Conservation (DEC)**
Issues waivers of environmental restrictions and acts as liaison with the United States Environmental Protection Agency (EPA).
- **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. When the State Emergency Operations Center (EOC) is activated, DPS serves as the primary agency for Emergency Support Function (ESF) #12 and coordinates the activities of ESF #12 in conjunction with other member agencies. ESF #12 will activate in situations where a State-level, multiagency response is needed to facilitate the restoration of damaged energy systems and components during an incident.
- **Department of Transportation (DOT)**
Assists in monitoring and expediting distribution of energy resources. Perform critical roadway maintenance. Coordinate with federal agencies for any necessary transportation system waivers.
- **Division of Military and Naval Affairs (DMNA)**
Identifies potential impacts on 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 identifies needed energy supplies.
- **Empire State Development (ESD)**
Provides information on impacts to market participants, maintaining liaison with regional tourism centers, business and trade groups, and utility companies.
- **New York State Energy Research and Development Authority (NYSERDA)**
Lead agency for petroleum and coal energy emergencies. DPC Support Member for ESF-12.
 - **Long Island Power Authority (LIPA)**
Non-DPC Support Member for ESF #12
 - **New York Power Authority (NYPA)**
Non-DPC Support Member for ESF #12
- **New York State Homes and Community Renewal (NYSHCR)**
Administers the Weatherization Assistance Program for low-income households.
- **Office of the Attorney General (AG)**
Supports enforcement actions as necessary.
- **The State Office of Emergency Management (OEM)**
This office is part of the Division of Homeland Security and Emergency Services (DHSES). Provides for the overall coordination of the State’s emergency response. State OEM can coordinate oversight and management of major staging areas during emergencies that could require on-site fueling depots. When the State Emergency Operations Center (SEOC) is activated, OEM provides oversight and coordination of the NYS Emergency Support Functions (ESFs), including NYS ESF #12 (Energy), and NYS ESF #15 (External Affairs).
- **Office of Counter Terrorism (OCT)**
This office is part of the Division of Homeland Security and Emergency Services. Oversees and coordinates State agencies’ homeland security resources. Prescribes protective measures commensurate with current terrorist threats. Oversees the State’s response to cybersecurity issues.
- **Office of General Services (OGS)**
This office maintains State-owned and managed facilities, collaborates on State-level centralized procurement of electricity, supports NYS ESF #7 (Logistics), and maintains contact with institutions supplied under State fuel contracts.
- **Office of Temporary and Disability Assistance (OTDA)**
Administers the Low-Income Home Energy Assistance Program and emergency residential fuel programs.

1.4 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 following are broad objectives of the management structure:

- 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 is assumed by either NYSERDA or DPS, depending on the type of energy involved. NYSERDA assumes lead agency status for petroleum or coal supply emergencies. DPS assumes lead agency status for electric system, natural gas, steam, and liquefied natural gas (LNG) emergencies. The State Office of Emergency Management (OEM) assumes responsibility for the coordination of the State response, including the activation and operation of the State Emergency Operations Center (SEOC), as necessary. DPS serves as the coordinating agency and NYSERDA serves as a supporting agency for ESF #12 Energy. NYSERDA and DPS also receive the full support of other State agencies and local distribution companies.

The lead agency for cybersecurity issues in New York State, including impacts on critical infrastructure and the energy system, is the Office of Counter Terrorism. The office is part of the Division of Homeland Security and Emergency Services. As demonstrated by the Colonial Pipeline cyber incident in May 2021, cybersecurity plays a key role in affecting critical infrastructure and potential disruptions of the energy

system. During a cybersecurity event affecting the petroleum system, NYSERDA will help facilitate and coordinate the petroleum industry response with the Office of Counter Terrorism and federal partners, including the U.S. Department of Energy Office of Cybersecurity, Energy Security, and Emergency Response (CESER). The New York State Cyber Security Annex provides additional information for preparedness and response actions taken in association with cybersecurity issues.

Together, the lead agency and OEM 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 the following:

- Monitor energy price, supply, and demand data received from primary and secondary sources:
 - All petroleum/propane railcar, barge, and tanker energy supply movements.
 - Natural gas, LNG, steam, and electric utility services.
 - Inventory of affected fuels in the wholesale and commercial sectors.
- Expedite appropriate waivers for truck, railcar, and waterborne shipments of liquid and solid fossil fuels (e.g., oil, propane, and coal).
- Coordinate alternative fuel substitution for natural gas and electricity users.
- Estimate the impacts of emergency measures on energy supply and demand levels, industry, and the economy.
- Develop energy emergency response recommendations.
- Initiate emergency measure implementation actions.
- Prepare information and analyses for decision-makers and the media.

The lead agency and OEM are responsible for coordinating information flow and fielding inquiries as needed from governments at all levels. 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 works with managers, and analysts have been assigned to the emergency response from various State agencies.²¹ The general responsibilities of NYSERDA, DPS, and OEM are presented in section 2.2.1 through 2.2.3.

2.2.1 New York State Energy Research and Development Authority

- Serves as lead agency for petroleum products, liquid biofuels, coal emergency response, and the Fuel NY Initiative for the New York State Strategic Fuel Reserve. Assists in implementing petroleum and coal emergency procedures. Assists in natural gas markets and infrastructure intelligence.
- Serves as a supporting agency for Emergency Support Function 12 Energy.
- Monitors the overall fuel price, supply, and demand situation.

- Discusses potential corrective actions or interventions with major energy suppliers and key State agencies.
- Issues emergency orders and directives as necessary and appropriate.
- Operates a public relations center in close coordination with the Joint Information Center (discussed later in this plan) and maintains liaison with the media and local governments.

2.2.2 Department of Public Service

- Serves as lead agency for electric system, natural gas, steam, and LNG emergency response, and assists in implementing electric, natural gas, steam, and LNG emergency procedures.
- Serves as the coordinating agency for Emergency Support Function #12 Energy.
- Monitors status of interruptible industrial and commercial natural gas users and users with dual fuel capability.
- Maintains 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.
- Maintains liaison with the New York Independent System Operator (NYISO) and Northeast Gas Association.
- Maintains communication with OEM.
- Maintains liaison and communication with the large electric and natural gas utilities, DHSES, New York State Intelligence Center (NYSIC), New York State Office of Information Technology Services (NYS ITS), and NYISO for cyber and/or physical security incidents which result in a severe or extended energy emergency.

2.2.3 The State Office of Emergency Management

- Coordinates the State response to the emergency.
- Coordinates 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 multiagency organization charged with responding to a wide range of natural and manmade disasters that could occur in the State.

2.3 The Role of Local Governments

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

- Local laws, regulations, and ordinances that might impede the success of emergency response programs.

- Local policies regarding traffic flow, routes, and transit service that have the potential for improving the effectiveness of energy emergency response measures initiated at the State level.²²
- Unusual energy use patterns not adequately represented by aggregate data.
- Fuel requirements for essential municipal services and alternative operational patterns.

2.3.1 County Emergency Managers

- The emergency manager for each county coordinates county emergency response activities for the county executive or chief elected official and advises the county executive or chief elected official 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 is expected to do the following:
 - Activate the county’s response organization and initiates county response activities.
 - Notify and brief county departments, agencies, and other organizations involved in an emergency response.
 - Maintain and manage an Emergency Operations Center.
- Facilitate coordination between the county and the following entities:
 - Lead agency.
 - Towns, cities, and villages in the county.
 - County executives or chief elected officials.
 - State of New York.
 - Private emergency support organizations.
 - Other stakeholders and parties, as applicable.

2.3.2 City and County Energy Coordinators

On a voluntary basis, local municipal government officials appoint staff to serve as energy coordinators and assist in processing emergency fuel inquiries,²³ conducting fuel-related surveys, submitting various reports, and generally identifying potential fuel problems in localities throughout the State. The network of city and county energy coordinators is a vital link between consumers and the State government. OEM maintains an up-to-date list of local energy coordinators and coordinates periodic training on the energy coordinators’ roles and responsibilities.²⁴

2.3.3 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. In 2004, the NYC-OEM established New York City's Citywide Incident Management System (CIMS). CIMS, the City's implementation of the National Incident Management System (NIMS),²⁵ established a formal command matrix and provided a protocol for governing how city agencies should respond to emergencies.

2.4 Federal and State Liaisons

In order to establish a coordinated response to energy shortages, NYSERDA maintains an ongoing liaison with federal officials and other states' emergency planners, particularly in the neighboring New England and Mid-Atlantic regions. 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. Several formal and informal mechanisms are available throughout the federal government to coordinate energy emergency information.

However, the emergency response management process in the United States Department of Energy (DOE) is now primarily limited to communication exchange. The DOE maintains an emergency contact list to expedite communications with the states. The DOE Office of Electricity Delivery and Energy Reliability 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 and Development Authority | <ul style="list-style-type: none"> • Serve as lead agency for petroleum, liquid biofuels, and coal emergency response and the Fuel NY Initiative. Assist in implementing petroleum and coal emergency procedures. • Monitor international and national energy markets and the effect on the fuel price, supply, and demand situation in New York State. 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, natural gas, steam, and LNG emergency response. Assist in implementing electric and natural gas emergency procedures. • Serve as the coordinating agency for Emergency Support Function #12 Energy. • Monitor status of interruptible industrial and commercial natural gas users and users with dual fuel capability. • Maintain liaison with the electric, natural gas and steam dispatch centers of the State's investor-owned local distribution companies (LDCs), electric generators, energy service companies and marketers, wholesale suppliers, and key State agencies. • Maintain liaison with the Independent System Operator (ISO) and Northeast Gas Association. • Maintains communication with OEM. • Maintains liaison and communication with the large electric and natural gas utilities, NYPA, LIPA DHSES, NYSIC, NYS ITS, and NYISO for cyber and/or physical security incidents that result in a severe or extended energy emergency. |
| 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 on-site fueling depots. • Runs the Joint Information Center; manages Emergency Support Functions and ad hoc taskforces under the State Comprehensive Emergency Management Plan. |
| NYS Agriculture and Markets | <ul style="list-style-type: none"> • Maintain liaison with farm and agriculture-related associations. • Obtain status of fuel requirements for seasonal agricultural production. • Enforces the provisions of the Fuel-NY Initiative as it relates to gas station compliance with Article 16 Section 192-h of the Agriculture and Markets Law for alternate generated power source at retail gasoline outlets. |
| 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 affect military operations. • Prepare inventory of available heavy equipment and supplies. • Assists with fueling missions with support to convoy escorts, security, traffic control, and staging area operations. |

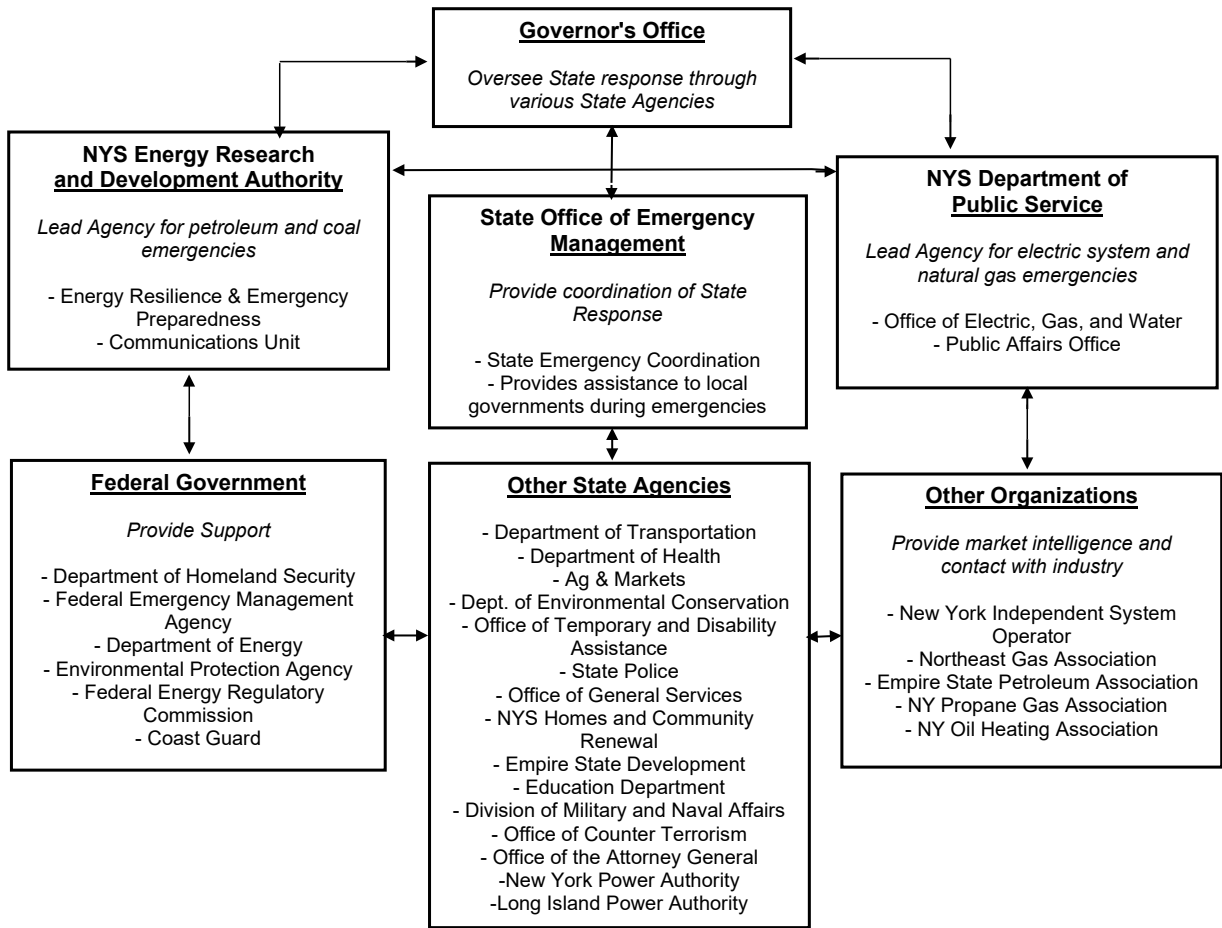
Table 1 continued

| Agency | Responsibility |
|---|--|
| 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. |
| NYS Office of General Services | <ul style="list-style-type: none"> • Provides total operation management of approximately 55 State-owned facilities statewide. Solely responsible for supporting and managing the energy needs for numerous State agencies that occupy these facilities. • Collaborates in the design, oversight, policy development and administration of the centralized procurement of electricity for all large OGS facilities and large facilities of other state agencies. • Receives emergency resource or assistance requests from NYS OEM or the SEOC when activated as a support member of ESF #7 (Logistics). • Maintains contact with all institutions supplied under State fuel contracts, including gasoline and E85 (flex fuel), diesel engine fuel, heating fuel oil, LP-gas (propane), and natural gas. |
| NYS Office of Temporary and Disability Assistance | <ul style="list-style-type: none"> • OTDA oversees and supervises local districts in administering the Home Energy Assistance Program to assist eligible households in meeting the costs of home energy. Program components include regular, emergency, heating equipment repair/replacement, clean and tune, and cooling. • OTDA provides funding to Homes and Community Renewal (HCR) for the Weatherization Assistance Program (WAP) and to the New York State Energy Research and Development Authority (NYSERDA) for energy efficiency services. • OTDA coordinates with the Public Service Commission, HCR, NYSEERDA, and the State Office for the Aging on HEAP energy related matters for low-income families. • OTDA manages relationships with over 3,000 energy vendors, including the large electric and natural gas utilities, municipal utilities, vendors of deliverable fuels such as oil, kerosene, propane, wood, and wood products, as well as vendors that perform heating and air conditioning services. Activities include negotiating vendor agreements, certifying participating vendors, and maintaining a central vendor database. |
| 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. |

Table 1 continued

| Agency | Responsibility |
|--|---|
| 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. • Takes the lead for cybersecurity issues. |
| 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 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. The DOE is the lead federal agency when the Federal ESF #12 is activated.²⁶ Within ESF #12, the DOE is responsible for the following:

- Forecast energy price, supply, and demand and estimate system damage.
- Advise local authorities on energy restoration, assistance, and supply priorities.
- Provide recovery coordination to affected parties.
- Provide regular incident situation reports.
- Provide a single point of access for departmental assets and expertise.
- Serve as an information clearinghouse on recovery assistance, funding, and emergency response resources and organizations for the energy sector. The DOE also offers the following:
 - Assisting in the provision of temporary fuel supply.
 - Recommending conservation actions.
 - Reviewing requests to the National Communications System for Telecommunications Service Priority.

The following are performed by the DOE to meet the above responsibilities:²⁷

- 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.
- Assists affected energy stakeholders in dealing with the 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 which respond to energy emergencies include the following:

- Environmental Protection Agency (EPA).²⁸
- Federal Energy Regulatory Commission (FERC).²⁹
- Federal Emergency Management Agency (FEMA).³⁰
- U.S. Department of Transportation (U.S. DOT).³¹ The U.S. DOT has several subagencies that may relate to an energy emergency, such as the following:
 - Office of Pipeline Safety (OPS).³²
 - Federal Maritime Administration (FMA).³³
 - Federal Motor Carrier Safety Administration (FMCSA).³⁴
 - Federal Rail Administration (FRA).
- Department of Homeland Security (DHS).³⁵
- Department of Defense (DOD).³⁶
- U.S. Coast Guard.³⁷

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.³⁸

3.2 Federal Policy Options

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

Increased Monitoring of Market Supply, Demand, and Price Fundamentals

The DOE's Energy Information Administration (EIA) administers the current federal market monitoring system for obtaining weekly petroleum fuel inventory reports at the federal, regional, and state levels. The EIA produces inventory reports for natural gas at the national and regional levels. The petroleum and natural gas inventory reports help to alert decision-makers to an impending emergency and are 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 ensure 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)**³⁹
The federal SPR program was authorized by the Energy Policy and Conservation Act of 1975 (EPCA).⁴⁰ 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**⁴¹
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 1 million barrels of ultra-low sulfur diesel (ULSD), is held in three terminals located in Connecticut, Massachusetts, and New Jersey.
- **Northeast Gasoline Supply Reserve**⁴²
In 2014, a 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 1-million-barrel emergency reserve gives Northeast consumers supplemental supplies for a few days in the event of a hurricane or other disruption, until existing distribution infrastructure can 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.
- **Encourage Fuel-Switching and Provide Environmental Waivers**
The EPA can expedite voluntary power generation at coal plants to facilitate interregional power transfers that displace oil or natural gas, pursuant to Section 202(c)(1) of the Federal Power Act.⁴³ Additionally, in states with fuel-burning stationary sources, the governor may petition the president to determine that a national or regional energy emergency exists, and thus, a temporary emergency suspension of any applicable implementation plan or any requirement under Section 411 of the Clean Air Act (concerning excess emissions penalties or offsets of Title IV of the Act) is warranted.⁴⁴
- **Restrict Use of Natural Gas or Petroleum as a Primary Fuel**
Under the Powerplant and Industrial Fuel Use Act of 1978,⁴⁵ the president has the authority to prohibit any power plant or major fuel-burning installation from using natural gas or petroleum as a primary fuel during an emergency.

4 Energy Markets Intelligence

NYSERDA continually 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 global, national, and New York State energy markets and trends. Relevant data is also received from federal agencies and the trade press regarding pricing and supply and demand fundamentals, as well as the status of the distribution networks serving the State.

NYSERDA staff communicates 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 compiles this data into the following reports:

- Weekly Energy and Fuel Markets Report⁴⁶ and Heating Fuels Prices Dashboard.⁴⁷
- Heating Fuels Inventory Review (monthly in July and August if need is determined).
- Transportation Fuels Market Assessment (spring and summer if need is determined).
- Patterns and Trends, NYS Energy Profiles (annual: released in fall/winter).⁴⁸
- Winter Fuels Outlook (annual: released in the fall).
- Monthly Wholesale Electric Price Report.
- Weekly Summer Electricity Outlook Report (summer months if need is determined).
- Transportation Fuels Dashboard (weekly: year-round).⁴⁹

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

- Continually update weekly and monthly petroleum, natural gas, and electricity price, supply, and demand data series, both nationally and regionally.
- Maintain up-to-date petroleum fuel price and supply information on NYSERDA's website.

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 petroleum shortage.

For liquid petroleum fuels, supply and demand data are studied to prepare for allocation or redistribution of supplies. Electric generators are 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, natural gas, steam, and LNG 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.⁵⁰ 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 State have been affected greatly by energy company mergers, buyouts, and market withdrawals. Over the years there has been 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. These factors combined with the 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.

4.1.1 Motor Gasoline and Transportation Diesel Fuels

New York State consumers and businesses rely on petroleum fuels to meet 91% of their transportation needs.⁵¹ Gasoline is the primary automotive fuel, accounting for 48% of all petroleum consumed in the State in 2020.⁵² 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 both as a home heating fuel and in the electric generation sector.

4.1.2 Distillate Fuels

The continuous flow of distillate fuels (e.g., 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 State's distillate requirements increases the risk to consumers of petroleum fuels in an 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 residents in New York State. In 2020, 20% of homes in the State were heated with home heating oil or kerosene.⁵³ These homes generally have a 275 gallon⁵⁴ storage tank, providing only limited protection in the 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 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 (3.6% in 2020) of total petroleum use in the State.⁵⁵ 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 67% of the State's propane demand in 2020.⁵⁶ These residential consumers, particularly those living in mobile homes, generally lack any alternative source of energy.

New York State receives a significant amount of propane from producing areas in the Marcellus and Utica shale regions via the Enterprise TE Products Pipeline owned by Enterprise Products Partners L.P. The company also maintains truck-loading terminals and storage facilities in the State at Selkirk, Oneonta, and Watkins Glen. In addition to the loading terminal, the Watkins Glen facility

has an underground cavern capable of storing over 1 million barrels of propane. The balance of supplies consumed in New York State are transported into the area by truck and train railcar to numerous rail distribution terminals located throughout the State. The transportation of this fuel originates from refineries and natural gas processing facilities in the U.S. mid-Atlantic and Midwest regions and Canada.

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 railcars. As overall New York State demand has increased, supply flexibility improvements have been made by the Enterprise TE Products Pipeline resulting in the increased throughput of volumes on the pipeline, and by the development of several rail supplied distribution terminals.

4.1.4 Liquid Biofuels—Ethanol and Biodiesel

Ethanol and biodiesel are important liquid biofuels used in New York State's energy economy. Biodiesel can be used both in transportation blended with on-road diesel as well as blended in heating oil. All heating oil sold for use in any building in New York State must contain at least 5% biodiesel by July 1, 2022, 10% by 2025 and 20% biodiesel by 2030. Blending requirements are already in effect in Long Island and New York City. This requirement for counties north of Westchester County, NY, have been temporarily suspended until July 1, 2023.

Ethanol is primarily used in New York State blended in with unfinished gasoline components to create a finished gasoline product. Most ethanol in New York State is blended at a level of 10% but ethanol can be blended up to 15% in gasoline in the State, also known as E15 but cannot be blended between 15% to 50%. Ethanol is allowed to be used as a fuel over 50% but is no longer considered gasoline such as E85 which contains 85% ethanol. New York State uses approximately 1.5 million gallons of ethanol per day. Ethanol is primarily moved into NYS by rail. Waterborne shipments of ethanol by barge travel across New York Harbor, to Long Island, and up the Hudson River transporting ethanol from larger petroleum terminals in New Jersey to smaller terminals in New York State. However, those facilities and supplies are nearly entirely dependent on unit trains of ethanol arriving from the Midwest. In 2021, East Coast

Fuel Ethanol supply primarily came by rail from the Petroleum Administration for Defense District (PADD) 2 (the Midwest) with 90% of supply from that transportation method and geographic area. The remaining ethanol supply came from regional production (4%), barge shipments from the Midwest (3%), and barge shipments from the Gulf Coast to the Lower Atlantic region (3%).

4.2 Coal

In 2020, 0.2 million tons of coal were used in New York State, representing less than 0.1% of the nation's demand. Electricity generation was 28% of this total, while the industrial sector, including cement plants, accounted for 72%, and the institutional and commercial sectors did not record any significant use. The use of coal in New York State for electric generation decreased from 0.2 million short tons in 2019 to less than 0.1 million short tons in 2020. The State ranked forty-second among the 50 states in coal use.

Coal generating plants produced 146 gigawatt hours, or 0.1% of New York State electric generation in 2020. As of April 1, 2020, there were zero operating coal-fired electricity generating plants in the State as the State's last coal-fired power plant closed in March 2020.

Also, in 2020, domestic coal delivered to New York State originated in Pennsylvania. Railroads carried 100% of the total coal delivered to the State. As rail companies servicing the State have consolidated and removed lines and tracks that are no longer economical—and therefore reduce 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 requires cooperation between the State and federal government as well as the coal and rail industries.

Trucks also move a minimal amount of coal to end users in New York State. 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 to 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 a large enough magnitude would make it increasingly difficult to meet demand after on-site stockpiles were 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 have the lead role in any electric system emergency affecting or occurring in the State. NYSERDA is responsible for emergencies involving petroleum 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 depends on the nature and expected duration of the problem. System blackouts and recovery might be handled entirely by the NYISO 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.⁵⁷ 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.

New York State utilities participate in the Northeast Power Coordinating Council (NPCC),⁵⁸ 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 New York State Public Service Commission (NYSPSC).

New York State agencies 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 NYISO, DPS, New York State Department of Environmental Conservation (DEC), NYSERDA, and the New York State 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.

Electric vehicle adoption is growing in the State, increasing the importance of the electricity sector in providing energy for the transportation end-use sector. As of December 2022, there were more than 122,000 electric vehicles on the road in New York State.⁵⁹

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 have the lead role in any natural gas system emergency affecting or occurring in the State. The degree of government involvement depends on the nature, the severity, and expected duration of the problem.

New York State used approximately 1,319 billion cubic feet of natural gas in 2021,⁶⁰ making it the sixth largest gas consuming state in the nation.⁶¹ The State has approximately 4.99 million natural gas customers⁶² served by various local gas distribution companies (LDCs).⁶³ These LDCs depend on major interstate and intrastate pipeline systems for access to domestic and imported natural gas supplies.⁶⁴ Gas production in New York State meets approximately 0.7% of its natural gas requirements.⁶⁵

4.5 Steam

Primary legislative authority for most types of heat, light, and power emergencies rests with the DPS. As a result, DPS staff have the lead role in any steam emergency affecting or occurring in the State. The degree of government involvement depends on the nature, the severity, and the expected duration of the problem.

4.6 Liquefied Natural Gas

Primary legislative authority for most types of natural gas system emergencies also rests with the DPS. As a result, DPS staff have the lead role in any liquefied natural gas (LNG) emergency affecting or occurring in the State. The degree of government involvement depends on the nature, the severity, and the expected duration of the problem.

5 Response Actions

Effective energy resilience and energy 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 (including liquid biofuels), coal, electric system, and natural gas emergencies. At the onset of any energy emergency situation, the Energy Emergency Plan is 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 consider 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 or natural gas emergency. The State's response to any energy emergency situation must be cognizant of the potential impacts to all State energy markets. The lead agency should consult with other affected agencies, as appropriate, in implementation of response actions.

The State's energy resilience and energy emergency response actions are based on a four-stage response hierarchy that generally reflects the severity of the energy or fuel supply situation. The response actions are presented sequentially by stages, but actual responses may be undertaken concurrently depending on the emergency.

- **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 State petroleum supplies, NYSERDA acts as the lead agency. Support agencies implement their internal emergency response plans, as needed, and their activities are coordinated by OEM.

5.1.2 Potential Response Measures

The response activities described below for petroleum product shortages may be initiated by New York State 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 dictate the appropriate response. A staged response involving pre-emergency and emergency elements is used in periods of market disruption.

In the case of petroleum products, the designation of pre-emergency stages I through III, discussed below, 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 determines which response options are most appropriate. Criteria for evaluating and selecting relevant emergency response options may include the following:

- Energy savings potential—amount of fuel saved or 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) 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

The response actions listed are presented sequentially by stages, but actual responses may be undertaken concurrently depending on the emergency.

5.2.1 Stage I—Increased Monitoring

- NYSERDA increases monitoring activities of weekly energy supply, demand, and price data by expanding fuel 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 and selected petroleum fuel distribution, pipeline, and terminal companies to alert them to the situation and asks them to encourage their membership to make all effort to coordinate supply activities.
- If necessary, request DOT to grant waivers for Drivers Hours of Operation Regulations to facilitate shipments and movements of petroleum fuels 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. DOT. A waiver allows non-U.S. flag tankers to operate between U.S. ports and may enhance fuel supplies.
- Notify the State Office of Emergency Management which may consider activation of a Multiagency 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 increase as NYSERDA determines, through ongoing monitoring and discussions with DOE and petroleum supply company representatives, that an energy supply problem is imminent.
- The governor's Office and other concerned State agencies are advised.

- NYSERDA works 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 identifies administrative resources that may be needed under an emergency scenario and keeps affected participants, the State Office of Emergency Management (OEM), and the governor's Office apprised of events.
- State OEM may assemble and host Multiagency Coordination (MAC) meetings with agencies that comprise the Disaster Preparedness Commission (DPC). Meetings may be virtual if required.
- State OEM may partially or fully activate the State EOC. If a JIC is warranted, NYS ESF #15 (External Affairs) may assist in establishing and maintaining a JIC.
- If fuel demand and consumption reduction efforts alone are not sufficient to mitigate the supply constraints, NYSERDA contacts DEC and AGM regarding issuance of waivers for use of nonconforming 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 nonessential travel.
- Encourage carpooling efforts by the public.
- Encourage the use of mass transportation systems in the State.
- Request the strict enforcement of posted speed limits in the State.
- Request all nonemergency 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 nonessential 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 heating and hot water temperatures.
- Request all nonemergency 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 nonessential 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 nonessential buildings of commercial and governmental users to 65°F during working hours and to facility maintenance levels during nonworking hours.

5.2.3.3 Propane Fuel

- Request all propane consumers to voluntarily curtail propane use.
- Request all nonessential commercial, office, governmental, and industrial operations to reduce their consumption.
- Request curtailment of deliveries to nonessential 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 nonemergency 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 serves 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 nonessential 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 nonessential buildings of commercial and governmental users to 65°F during working hours and to facility maintenance levels during nonworking hours.

5.2.4 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 are implemented pursuant to orders issued by NYSERDA's president.
- Enforcement is 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 the Fuel Set-Aside Act (NY Energy Law Article 10) and 9 NYCRR § 7900 may be activated. Enforcement is based on NY Energy Law § 10-107.

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

- Make formal requests for appropriate regulatory waivers to expedite fuel resupply and delivery efforts.
- Minimum Motor Fuel Purchase—Under a Minimum Motor Fuel Purchase Program, assist in the orderly distribution of supplies of motor fuel by discouraging customers from topping off their tanks and reducing the length of waiting lines at retail outlets.
- Odd/Even Purchase—Under the Odd/Even Motor Fuel Purchase Program, assist the equitable and orderly distribution of motor fuel by reducing consumer visits to retail outlets.⁶⁶
- Under the Petroleum Allocation Program, 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 to 60 days during each six-month period that the emergency is extant.
- Utilize the U.S. Department of Energy’s Northeast Home Heating Oil Reserve, a 1-million-barrel supply of ultra-low sulfur distillate (diesel), for homes and businesses in the northeastern United States, a region heavily dependent on the use of heating oil.⁶⁷
- Utilize the U.S. Department of Energy’s Northeast Regional Refined Petroleum Product Reserve, a 1-million-barrel supply of seasonally adjusted, regionally appropriate gasoline for consumers in the northeastern United States.⁶⁸
- Utilize New York State Strategic Fuel Reserves located in the downstate and upstate areas.⁶⁹
- Under the Fuel Set-Aside Program, 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 require identification and determination of priority energy and fuel supply uses. In such situations, NYSERDA relies on 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. NYSERDA has identified the following delivered heating fuels and transportation fuels priority guide for customers in the following section.

5.2.4.1 Delivered Heating Fuel Customer Priority Users Guide (Heating Oil, Kerosene, Propane)

Distillate fuel (a.k.a. heating oil), kerosene, and propane are primary delivered heating fuels in New York State. There are approximately 1.4 million residential households in the State using heating oil or kerosene as their primary household heating fuel. In the event of severe shortages, an allocation/curtailment for non-essential delivered heating fuel users may become necessary. Services critical to ensuring the health and general welfare of the public must continue to be provided. The following priority guide may be used to identify essential service customers and inform the priority of delivered heating fuel customers. As with any allocation/curtailment program, changes or exceptions to these priorities may be warranted. NYSERDA works directly with the petroleum industry associations to advise the industry in implementing any priority user effort.

Priority 1

- Residential facilities which include homes, assisted-living facilities, hotels, university dormitories, shelters, detention facilities or any other facility which houses people.⁷⁰
- Medical facilities which include hospitals, urgent care health facilities, medical laboratories or any similar facility providing medical services to the public.

Priority 2

- Police, emergency medical services and fire facilities.
- Essential government facilities which include public works departments, water and wastewater treatment plants, military facilities, and bases.
- Food processing and distribution facilities including groceries and distribution centers.
- Transportation fuel distribution facilities which include gas stations and convenience stores.
- Communications facilities which include wireless, wireline, broadband and satellite providers.

Priority 3

- Schools and religious institutions.

Priority 4

- All other users.

5.2.4.2 Transportation and Backup Power Generation Fuel Customer Priority Users Guide

Gasoline and on-road diesel are the primary transportation fuels in New York State. Diesel fuel also plays a critical role as a primary fuel for backup generators providing electricity to critical services in the event of a power disruption. In the event of severe shortages, an allocation/curtailment for non-essential transportation and backup power generation fuel users may become necessary. Services critical to ensuring the health and general welfare of the public must continue to be provided. The following priority guide may be used to identify essential service customers and inform the priority of transportation and backup power generation fuel customers. As with any allocation/curtailment program, changes or exceptions to these priorities may be warranted. NYSERDA works directly with the petroleum industry associations to advise the industry in implementing any priority user effort.

Priority 1

- Police, emergency medical and fire services.
- Diesel fuel for backup power at essential government facilities which include public works depts, water and wastewater treatment plants, military facilities, and bases.
- Diesel fuel for backup power at medical facilities which include hospitals, urgent care health facilities, medical laboratories or any similar facility providing medical services to the public.
- Diesel fuel for backup power at communications facilities which include wireless, wireline, broadband and satellite providers.
- Snow plows and other emergency response equipment.

Priority 2

- Food processing and distribution services.
- Transportation fuel distribution locations (e.g., gas stations and convenience stores) equipped with backup power capabilities.

Priority 3

- Diesel fuel for backup power at schools and religious institutions.

Priority 4

- All other users.

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 supplies, NYSERDA acts as the lead agency. Support agencies implement their internal emergency response plans, as needed, and their activities are coordinated by State 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 is implemented.

5.3.2.1 Stages I and II—Increased Monitoring and Market Coordination

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

5.3.2.2 Stage III — Public Action

The following action is taken if a problem in the supply or distribution of coal is identified by NYSERDA:

- The governor's Office and other concerned State agencies are advised.
- The media is informed and encouraged to promote appropriate conservation measures to reduce demand, with care taken to avoid hoarding caused by premature public notice.
- NYSERDA works with the DEC and other State agencies to call attention to the supply problem and guide steps or actions to reduce fuel demand and consumption.
- NYSERDA contacts or convenes 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 occur with appropriate DOE regional officials.

- If fuel demand and consumption reduction efforts alone are not sufficient to mitigate the supply constraints, NYSERDA contacts DEC regarding DEC issuance of waivers for use of nonconforming fuels to prevent escalation of the emergency situation.
- Notify OEM which may consider Multiagency 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 recommends that the governor declare an energy emergency and requires all suppliers, distributors, and direct purchasers to report the following:

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

NYSERDA then implements 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, and 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 is 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 implements 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 allocates coal supplies in response to applications for emergency assistance.⁷¹ Such allocations are 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, the following actions may be considered:

- State OEM may assemble and host MAC meetings with agencies that comprise the Disaster Preparedness Commission (DPC). Meetings may be virtual if required.
- State OEM may partially or fully activate the State EOC. If a Joint Information Center (JIC) is warranted, NYS ESF #15 (External Affairs) may assist in establishing and maintaining a JIC.

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 safe and reliable service. In the event of an in-State electrical emergency, as specified in Table 2, DPS acts as the lead agency, and the DPS Emergency Plan⁷² is implemented. Support agencies implement their internal emergency response plans, as needed, and their activities are 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.

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% 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% 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, steam, and LNG supply emergencies remain with DPS. |

Emergencies that fall into these categories are addressed under the NYISO Emergency Operations Manual or the DPS Emergency Plan. Fuel constraint emergencies involving petroleum and coal may involve action by NYSERDA.⁷³

5.5.1 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 brownouts, that might avoid a utility or system-wide blackout.

5.5.2 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.

5.5.3 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 reductions, partial load reductions, or rolling brownouts or blackouts may be necessary to prevent one or more individual utilities or the entire New York State system from experiencing a blackout.

5.5.4 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 works 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 makes recommendations to the New York State Department of Environmental Conservation (DEC) that necessary waivers be granted to specific generators, allowing the use of nonconforming fuels for a defined period of time. In the event of a declared emergency, NYSERDA directs DEC to issue any necessary waivers.⁷⁴

5.5.5 Potential Response Actions

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

- Electric generators, NYISO, transmission owners, local distribution companies, and DPS then make determinations implementing appropriate response actions, as detailed in their respective emergency response plans. Activities under this phase are likely increased if DPS determines that loss of power is imminent. Constant review and reassessment of the situation is 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 are based on DPS procedures, described in the DPS Emergency Plan.

Emergency response actions for fuel constraint emergencies entail the following:

- In response to information indicating an impending fuel supply or air quality problem affecting fuel use, NYSERDA or DPS works with generators or LDCs to evaluate the severity of the problem. The LDCs, generators, and NYSERDA or DPS then 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 assesses the type and severity of the emergency as described in Tables 2 and 3. Based on that assessment, a staged response is implemented as described in sections 5.5.6.1 to 5.5.6.4. The staged response is a guideline not 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 warrants activation of the Severity Class III—Catastrophic Event response detailed in the DPS Emergency Plan.

5.5.5.1 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.

5.5.5.2 Stage II—Market Coordination

- Maintain contact with NYISO.
- Activate Peak-Load Reduction Plan for State agencies and affiliates.⁷⁵
- Notify the State Office of Emergency Management which may consider activation of a Multiagency Coordination Group (MAC) to address policy issues in the event the emergency progresses to Stage III or IV.

5.5.5.3 Stage III—Public Action

- DPS Office of Consumer Services provides consumer assistance with resolution of issues where possible.
- Assist in developing State response and issue notices for voltage reduction, rolling blackouts, closures, etc.
- State OEM may assemble and host MAC meetings with agencies that comprise the Disaster Preparedness Commission (DPC). Meetings may be virtual if required.

- State OEM may partially or fully activate the State EOC. Based on operational needs, any or all of NYS ESFs may be activated to support the response.
- If a JIC is warranted, NYS ESF #15 (External Affairs) may assist in establishing and maintaining a JIC.
- Activated Regional Operational Centers are staffed by DPS.

5.5.5.4 Stage IV—Emergency Declaration

- Class III Catastrophic Event response by DPS is activated, as specified in the DPS Emergency Plan.
- Assess duration and estimates of service restoration time.
- State OEM may partially or fully activate the State EOC. Based on operational needs, any or all of NYS ESFs may be activated to support the response.
- If a JIC is warranted, NYS ESF #15 (External Affairs) may assist in establishing and maintaining a JIC.
- Activated Regional Operational Centers are staffed by DPS.

5.5.5.5 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) is the primary point of contact for press inquiries. Additional information on public communications is presented in section 6 of this plan.

Table 4. Lead Agencies

| 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 and coal) | DPS, DEC, OEM |
| | DPS (natural gas) | NYSERDA, DEC, OEM |

5.5.6 Coordination with NYISO and Utility Emergency Procedures

Under New York Public Service Law § 66(21), 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.⁷⁶
- Procedures for maintaining communications and responding to customer contacts during emergencies.
- Identification of, and procedures for, maintaining 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.⁷⁷
- 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 form the foundation for responding to electric system emergencies. The New York Public Service Law requires that electric utilities file electric emergency plans annually by December 15 with the DPS for review and approval. The DPS then certifies to the Department of Homeland Security and Emergency Services that each electric utility's emergency response plan is sufficient to provide for the timely and safe restoration of electric services after an event.⁷⁸

5.5.7 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 four classification levels are (1) unusual event, (2) alert, (3) site area emergency, and (4) general emergency.

Such events can range in severity from events that pose no threat to the public safety to an accident or malevolent act at a nuclear power plant that could release radiation to the atmosphere or water resources, including drinking water reservoirs. Such off-site radiation releases could result in large, destabilizing economic, public health, and environmental impacts to New York State communities. In such situations, county officials may identify protective actions that 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. The New York State Department of Health (DOH) is the lead agency for radiological emergency response.

The impact of the loss of electric generation from one or more nuclear power plants in New York State is 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 capability 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 in the State. There are two main causes of a gas supply emergency:

- Rupture in a major gas transmission or distribution line or a breakdown of transmission line equipment such as compressor stations.
- Curtailment of gas supplies due to various reasons, including inclement weather.

5.6.1 Lead Agency

In the event of an in-State natural gas emergency, DPS acts as the lead agency and the DPS Emergency Plan is implemented. Support agencies implement their internal emergency response plans, as needed, and their activities are coordinated by OEM.

5.6.2 Potential Response Measures

New York State may require the actions described in the following subsections 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).⁷⁹
- Establish and maintain communication with the affected customers.
- 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 in the State may be requested to identify the essential-service customers in its service territory. 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 OEM 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 for the 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 and Water Rates and Supply Section of the DPS Office of Electric, Gas, and Water gather data and report on utility demand, supply, storage inventories, peaking capabilities, and supplemental supplies during the emergency. Staff also assists in preparing public appeals to help reduce consumption.

In addition, during a Stage III natural gas emergency the following may occur:

- OEM considers establishment of a larger MAC Group to address policy issues in the event the emergency progresses to Stage IV.
- OEM considers activating any or all the Emergency Support Functions.
- OEM considers partial activation of the State EOC and Joint Information Center.

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, nonessential commercial and industrial users by an amount sufficient to balance supply and demand.⁸⁰
- Curtailment of service to all nonessential industrial and commercial users to minimum levels required for plant protection.
- Complete interruption of service to large, nonessential commercial and industrial users.
- DPS Gas and Water Rates and Supply Section staff determine if curtailments instituted by the utility or utilities are proper if they call for the following:
 - Closing of nonessential businesses.
 - Obtaining exemptions from requirements such as air quality standards and minimum temperature settings.

- DPS staff aids essential businesses, such as hospitals and processors of perishable foodstuffs, in obtaining exemptions from curtailment to ensure the public welfare.
- DPS staff maintains contact with DPS Pipeline Safety field personnel regarding the status of any needed repairs or proper steps to ensure curtailment compliance.
- OEM considers full activation of the State EOC and Joint Information Center (JIC).

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

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

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.⁸¹

If the State Emergency Operations Center (EOC) is activated for the energy emergency, OEM takes 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, NYSERDA or DPS works in conjunction with the governor's office to lead communications based on the type of emergency—the NYSERDA Communications Unit for petroleum or coal emergencies and the DPS Public Affairs Office for electric system or natural gas emergencies.

The Director of Communications (DC) for NYSERDA or DPS works in conjunction with the governor's press office and public information office of other involved agencies to disseminate information to the media. This may include press releases, coordinating briefings, disseminating timely and accurate information to the general public and providing guidelines that encourage emergency energy demand reduction.

The public information process involves a statewide, interagency, multimedia approach that informs the public of the following:

- 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 includes communications staff.⁸² Working in conjunction with the governor's office, the coordinating group reviews all public announcements related to the energy emergency. The DC coordinates appropriate approvals by NYSERDA's president and the governor's press office.

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

6.2 Establish Joint Information Center

During an energy emergency, the lead communications agency, NYSERDA or DPS, establishes 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. These parties could include NYSERDA, OEM, DPS, DEC, DOH, Empire State Development (ESD), Office of Temporary and Disability Assistance (OTDA), Department of State's Utility Intervention Unit (UIU). This enhances the coordination, timeliness, and accuracy of information released regarding the energy situation. Under the JIC, all involved parties 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. If the State EOC is activated, NYS ESF #15 (External Affairs) may assist in establishing and maintaining a JIC.

6.2.1 Information Release

Press releases are prepared by the lead agency in conjunction with the governor's office and issued after consulting with all involved parties. All State agencies are encouraged to provide appropriate information about services or assistance for the public for inclusion in releases.

6.2.2 Joint Information Center—News Media Briefings

News media briefings are 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 are held as need dictates, but, to the extent possible, are held at regularly scheduled times with advance written notice given to the media. All parties are properly notified and afforded equal opportunity to participate in the media briefings. Each press release issued is 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 the following:

- 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.
- Television 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 is responsible for setting up and distributing supplies necessary to operate the center. If the State EOC is activated, NYS ESF #15 (External Affairs) may assist in establishing and maintaining a JIC. Additional resources needed to maintain the JIC can be requested through the State EOC via New York Responds (NYR) by ESF #12 (if activated), or from the lead agency directly.

6.3 Coordinated Information Release

During an actual shortage, coordination with a specific energy industry through energy distributors may be warranted for the distribution of guidelines, pamphlets, and bulletins to avoid a product shortage or alleviate problems by providing valuable information to energy users.

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 the lead agency's Director of Communications. 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 provides individual companies with camera-ready materials to be printed and distributed through local dealers or retail outlets.

6.4 Emergency Alert System

As identified in the NYS Public Warning Annex, Presidential Executive Order 13407 (Public Alert and Warning System) created the Integrated Public Alert and Warning System (IPAWS) in 2006.

IPAWS is an internet-based gateway to alert the public via the following:

- (a) Emergency Alert System (EAS).
- (b) Wireless Emergency Alerts (WEA).
- (c) National Oceanic and Atmospheric Administration (NOAA) Weather Radio network.

Currently, IPAWS is a key public warning distribution system to issue an EAS alert, WEA, or NOAA radio alert. IPAWS sends alerting messages directly to the individual radio and television broadcast stations, multi-channel video distributors, and wireless operators via the internet.

In New York State, State agencies, local governments, hospitals, and schools also use a statewide mass notification system called NY Alert. NY Alert has approximately five million subscribers that receive public warnings such as AMBER Alerts, sex offender alerts, weather warnings, and evacuation notifications. NY Alert also sends out public information, such as traffic alerts, in addition to warnings. NY Alert disseminates messages through emails, text messages, phone calls, and/or faxes. Subscribers opt into NY Alert and may customize the alerts they receive based on the type of information and geographic location.

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 establishes hours, and provides staff and telephone lines as needed to respond to public inquiries.

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

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

7 Recovery Phase

The recovery phase begins when the (1) emergency situation has been brought under control, (2) initiation of response activities has ended, and (3) relaxation of protective response actions has been considered.

During the recovery phase of an emergency, the lead State agency will do the following:

- 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.
- 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 is prepared by the lead State agency and identifies the strengths of the Energy Emergency Plan's response elements, pointing out the opportunities for more effective response and coordination with other response agencies. The assessment report reviews the causes of the emergency, private sector reaction to the situation, the effectiveness of response strategies to the specific conditions of the emergency, and the recommendations for future emergency response activities where appropriate. Special attention is 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 <http://www.eia.doe.gov>, the Department of Energy, Energy Information Administration's website. Definitions of many of the terms and acronyms used in the New York State Energy Emergency Plan are presented below.

| | |
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| 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°F 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. |

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| 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 residents. |
| Energy Source | Substances, such as petroleum, natural gas, and coal that supply heat and power as well as electricity and renewable forms of energy. |
| Essential Services | Refers to 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 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 | Multiagency 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. |
| Pipeline | A pipeline that performs the trunk function and carries petroleum products, including interstate, intrastate, and intracompany pipelines. |

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| 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 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. |
| Steam | Water heated to vapor/gas form and delivered to an end user as an energy source for sanitizing, heating/cooling, cooking, or local power generation. |
| SEOC | State Emergency Operations Center |
| Surplus | An allocated product with no restrictions on its purchase. |
| Tanker Terminal Unbranded | A facility for receiving and loading ocean-going tankers and barges. |
| Wholesale Purchaser-Consumer | Used to describe the product sold by an independent marketer. |
| Wholesale | 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 is 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. |

Appendix B. Potential State Waivers to be Requested During an Incident

The oil and natural gas industry operates under a myriad of regulations to ensure safe operations, environmental quality, and fair market competition.⁸³ The industry has a deep commitment to complying with all regulations, all 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 are 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, the temporary suspension of regulations by the government to help companies continue operations that will alleviate the emergency and restore normal operating conditions, are the solution to this problem. The following section identifies many of the statutes, related issues, and waivers that can be requested during an event to speed recovery and a return to compliance.

The following is a list of State rules and requirements needed to transport fuel interstate and 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 in the department or agency's jurisdictional authority.

B.1.1 Reid Vapor Pressure (RVP) Requirements

Issue: Many states allow a variance, up to 1-pound Reid Vapor Pressure (RVP), from the most recent version of ASTM D4814 for gasoline blended with ethanol. NIST Handbook 130 also provides for this variance. NYSDEC regulation (6NYCRR 225-3) limits gasoline volatility to 9.0 psi RVP (Reid Vapor Pressure) from May 1 through September 15. EPA regulations (40 CFR 1090.215) limits gasoline volatility to 7.4 psi RVP in reformulated gasoline areas and 9.0 psi RVP in conventional gasoline areas during the same summer period. Reformulated gasoline is required from Dutchess and Orange counties south and east in New York State.

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. The most common emergency response is to allow the sale of winter blends (higher RVP) during portions of the summer season. This requires EPA waiver of federal RVP limits as well as NYSDEC exercising enforcement discretion regarding State RVP limits.

Agencies: EPA, DEC, AGM

B.1.2 Biofuel Blending Requirements

Issue: Some states require a minimum amount of biofuels to be blended into all gasoline and/or diesel sold in that state. The only biofuel blending mandate in New York State is the biodiesel requirement of the Environmental Conservation Law Section 19.0327 for heating oil.

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. The biodiesel blending requirement may be suspended by an Executive Order by the governor.

Agencies: EPA, DEC

B.1.3 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 constraints, not all states set the limits at the same weight. Additionally, these 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 trucks from 92,000 pounds to 100,000 pounds.

Agencies: U.S. DOT, DOT

B.1.4 Distributor License

Issue: Many states require a carrier to pay a fee and obtain a distributor's license to transport motor fuel in that state.

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

Agencies: DOS, NYS Department of Taxation and Finance

B.1.5 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: AGM

B.2 New York City

B.2.1 Sulfur Content of Heating Oil

Issue: New York City regulations specify 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 New York City Administrative Code § 24-169(b)(2).

Agency: NYCDEP

B.2.2 Boiler Inspections

Issue: Annual inspections are required for low- and high-pressure boilers as per New York City Construction Code § 28-303.2 (2008). The owner of each boiler shall file an annual written statement with the commission including (1) the location of the boiler and (2) whether the owner, agent, or

lessee has had the boiler inspected by a qualified boiler inspector...the name and address of the insurance company or other qualified inspector, the date of the inspection, and the policy number covering the boiler. New York City Construction Code § 28-303.6 (2008).

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

Agencies: NYCDEP

B.2.3 Emergency Boiler Repair Permits

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

Waiver Needed: The NYCDEP has streamlined emergency boiler work permit guidelines that allow temporary work permits to repair or replace damaged boilers to be issued by providing NYCDEP 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

B.2.4 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: A Fire Department of New York 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.

Agency: NYC

Appendix C. Potential Federal Waivers to be Requested During an Incident

The following is a list 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 list is organized by administrative department or agency, listing all necessary regulatory waivers in the jurisdictional authority of the department or agency.⁸⁴

C.1.1 Environmental Protection

C.1.1.1 *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 transport any available fuel into the affected area in any way possible, regardless of whether or not it is RFG.

Waiver Needed: Using conventional summer gasoline (9.0 psi RVP standard) in reformulated gasoline areas during the May 1 through September 15 period requires a waiver from EPA.⁸⁵

Agencies: EPA, DEC

C.1.1.2 *Fuel Composition and Use—Sulfur Limitations*

Issue: Sulfur content in residual and distillate fuels is specified by the DEC by region. In the event a specified fuel is unavailable, and an electric generator is required for reliability (as determined by the NYISO) an exception would need to be obtained from the DEC.

Exception Needed: A 6 NYCRR § 225-1.3 exception allows the use of a higher sulfur fuel oil for a period not longer than 45 days, or more than 45 days but less than a year upon the holding of a public hearing and is requested by the affected generation owner or fuel distributor. NYSERDA must certify that an insufficient supply of fuel exists before a sulfur-in-fuel exception may be granted.

Such an exemption may be preempted under the State Energy Law § 117 if the governor declares that a fuel supply emergency exists or is impending. A protocol and contact list agreed to by and involving DEC, DOT, NYSERDA, DPS and NYISO has been put in place to facilitate the exception request and approval process.

Agencies: DEC

C.1.1.3 *Ultra-Low Sulfur Diesel Requirements*

Issue: Ultra Low Sulfur Diesel (ULSD) is a cleaner fuel, with a 15-parts per million (ppm) sulfur specification, required by the EPA for vehicles and equipment. During times of emergency, distributors may need the flexibility to get any available fuel into the affected area in any way possible, regardless of the sulfur content. However, future ULSD waivers are highly unlikely. Many engines and boilers are damaged by operation on high-sulfur distillate and, according to EIA, over 94% of 2020 national⁸⁶ and 100% of New York State⁸⁷ No. 2 distillate sales were ULSD. In terms of the available pool of distillate, according to EIA, in 2020, in the Central Atlantic region (including New York State), 89% of total distillate stocks were comprised of ULSD.⁸⁸

Waiver Needed: 40 C.F.R. § 1090.305 set ULSD standards. Enforcement discretion from NYSDEC regarding 6NYCRR 225-4 is needed for highway diesel. This waiver allows the use of high-sulfur heating oil in model year 2006 and older vehicles, generators, and home heating oil during the emergency.

Agencies: EPA, DEC

C.1.1.4 *Vapor Recovery Regulations*

Issue: Fuel terminal loading systems, 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, it 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 the EPA.

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

Agencies: EPA, DEC

C.1.1.5 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 EPA and air emissions for specific facilities are limited by their air permits. If 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: EPA, DEC

C.1.2 Department of Transportation

C.1.2.1 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 allow for other federal and state waivers to be effective.

Waiver Needed: 49 C.F.R. § 390, which provides the general basis for federal motor carrier safety regulations.

Agencies: U.S. DOT, DOT

C.1.2.2 Pipeline Operator Qualification Training

Issue: The U.S. DOT Pipeline and Hazardous Materials Safety Administration sets requirements on operator qualification training for certain hazardous liquid and gas pipelines transportation functions or “covered tasks” (such as the manual closure of valves) that meet the components of a “four-part test” commonly referred to as “Operator Qualification.” 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 C.F.R 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, DPS

C.1.2.3 *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, and permissible level of fatigue. The FMSCA rules require the thorough inspection of cargo to ensure lighting and cargo standards are met and inspection repair and maintenance requirements—which may be appropriate under regular operating circumstances—do not hinder the effort to get as many loads into the disaster area as possible in a short amount of time.

Waiver Needed: 49 C.F.R Parts 391-3 and 396, which set driver standards, load standards, inspection standards, repair standards, and maintenance standards.⁸⁹

Agencies: U.S. DOT, DOT

C.1.2.4 *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 C.F.R. Part 395 Subpart A, which sets hours of service regulations.

Agencies: U.S. DOT, DOT

C.1.2.5 *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 that are fit to carry gasoline and diesel fuel are needed, even if they do not meet the strict specifications.

Waivers Needed: 49 C.F.R 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 C.F.R. Parts 106, 107 and 171-180.

Agencies: U.S. DOT, DOT

C.1.2.6 *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 timely, fashion.

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

Agencies: U.S. DOT, DOE

C.1.2.7 *Foreign Oil Spill Response Vessels*

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

Waiver Needed: 46 U.S.C.S. § 55113. This MOU essentially memorializes the process that these agencies created and ensures continued expedited allowances for foreign oil spill response vessels in the future.

Agencies: U.S. DOT

C.1.2.8 *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) provided that no U.S.-flagged vessels are available and the companies that want to use foreign vessels have contracts in place to bring in replacement U.S. flagged 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.-flagged vessels are available.

Agencies: U.S. DOT

C.1.3 Internal Revenue Service

C.1.3.1 *Diesel Fuel Penalty*

Issue: The U.S. Internal Revenue Service (IRS) 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, etc. are not ordinarily subject to the tax. Typically, if a diesel fuel that was not subject to this excise tax were converted to use for on-road purposes, the IRS requires that use 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 fuel into the transportation mix.

Waiver Needed: Internal Revenue Code Publication 510, which governs excise taxes.⁹⁰

Agencies: IRS, NYS Department of Taxation and Finance

C.1.4 Other Federal Government Assistance Options

C.1.4.1 Vessel Movement Control

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

Waiver Needed: Captain of the Port Order waiver under Ports and Waterways Safety Act (33 U.S.C.S. § 1221 *et seq.*).

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

C.1.4.2 Fuel Loans from the Department of Energy

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: DOD, FEMA, DOE

Appendix D. Superstorm Sandy: Energy-Related Executive and Agency Actions to Aid Recovery

The following is a list of executive orders and waivers that were issued in response to Superstorm Sandy. The list is separated according to the type of action at the State and federal level.

D.1.1 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. The 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 C.F.R § 390.23(a)(1)(A), which provides temporary emergency relief from Parts 390 through 399 of the Federal Motor Carrier Safety Regulations (e.g., relating to hours of service of drivers, inspection, repairs, and maintenance) to hasten the movement of power restoration crews.⁹¹
- **EO No. 49 issued 10/31/2012.** suspended Vehicle and Traffic Law §§ 375, 385, and 401 to exempt vehicles registered in other states that enter New York State from the registration, equipment, and dimension requirements to accelerate their ability to assist in disaster preparedness and recovery efforts.⁹²
- **EO No. 54 issued 11/1/2012.** suspended Tax Law §§ 282, 283, and 302 to suspend the distributor registration requirements for persons importing motor fuel (gasoline) and diesel motor fuel into the State. The EO also suspended Tax Law § 283-a to eliminate the requirement to register as an importing or exporting transporter. The EO 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 New York State 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.⁹³
- **NYS DOT Waiver issued 10/26/2012.** 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.** The large number of vehicles damaged by the storm surge made it 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.⁹⁴
- **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.

D.1.2 Federal Transportation Actions

- **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).

D.1.3 New York State Environmental and Fuel Quality Actions

- **EO No. 59 issued 11/3/2012.** suspended the vapor pressure, distillation class, and vapor lock protections set forth in New York under 1 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 State.

- **DEC Title V Permit Enforcement Discretion.** allowed marine terminals to increase throughput and/or continue distribution with compromised pollution controls. DEC exercised its enforcement discretion for any exceedances 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 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.

D.1.4 Federal Environmental Actions

- **EPA RFG Waiver issued 10/31/2012.** The EPA issued a multi-state waiver of the reformulated gasoline requirements under the Clean Air Act, pursuant to a letter dated October 31, 2012, to minimize gasoline supply disruptions in New York and other states.⁹⁵
- **Vapor Capture Units Waiver issued 11/2/2012.** EPA issued a no action assurance letter to New York and New Jersey, 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 were 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 New York State law.
- **ULS Fuel Waiver issued 11/2/2012.** EPA granted another waiver to New Jersey and Pennsylvania 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 New York State 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 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.

D.1.5 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% 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.

Appendix E. Post-Superstorm Sandy: Energy-Related Executive and Agency Response Actions

The following is a list of State-level Executive Orders and statewide initiatives that were issued post-Superstorm Sandy following storm-related incidents impacting the State's energy resources and infrastructure.⁹⁶ The list is separated according to the type of action.

E.1.1 Emergency Weather Response

- **EO No. 73, issued 11/13/2012.** Pursuant to Executive Law Section 6,⁹⁷ the governor appointed a commission to study, examine, investigate, and review the emergency preparedness and response of utilities during and following emergency weather events—including the performance of utilities during and following emergency weather events; the adequacy of present laws, rules, regulations, practices, and procedures with respect to utilities' emergency preparedness and response; the adequacy of existing oversight and enforcement mechanisms; the structure, organization, ownership, financing, control, management and practices of utilities as they affect emergency response and preparedness; the provision of utility services to the State under the existing legal regulatory framework—including but not limited to the jurisdiction, responsibilities, and missions of NYPA, LIPA, NYSERDA, and the PSC; report and make recommendations for legislative, policy, and regulatory changes, as well as reforms in utility structure, management and practices, to best protect and serve the public's interest; and review any other matters or activities that may affect these issues.⁹⁸
- **EO No. 103, issued 6/28/13.** Following Tropical Storm Andrea, the governor declared a State of Disaster Emergency in Broome, Chenango, Clinton, Delaware, Essex, Franklin, Herkimer, Madison, Montgomery, Oneida, Otsego, Tiago, Schoharie, St. Lawrence, and Warren counties. The disaster state indicated the inadequacy of local governments to respond to the emergency. The EO directed the implementation of the State Disaster Preparedness Plan and directed State agencies to assist affected governments in responding and recovering from the disaster. Additionally, the EO satisfied the requirements of 49 C.F.R. § 390.23(a)(1)(A), which provides relief from Federal Motor Carrier Safety Regulations Parts 390 - 399.⁹⁹
- **EO No. 108, issued 7/5/13.** Following Tropical Storm Andrea, the governor amended EO 103 to declare a State Disaster Emergency in Niagara County as a result of severe flooding that disrupted public transportation and utility service. EO 108 further directed the implementation of the State Disaster Preparedness Plan and directed State agencies to take appropriate actions to protect State property and assist affected local governments in responding to and recovering from the disaster.¹⁰⁰

- **New York State Climate Change Science Clearinghouse.** Developed by NYSERDA, the Clearinghouse provides users with access to immediate, interactive, and best available FEMA floodplain maps. The ability to overlay maps with other data gives utilities and emergency preparedness groups a common platform for designing hazard mitigation and response plans. In consultation with the Department of State (DOS), the DEC provides guidance on the use of flood-hazard maps, climate change information, and resilience design criteria as part of its Community Risk and Resilience Act guidance.¹⁰¹
- **New York Office of Temporary Disability Assistance (OTDA) Home Energy Assistance Program (Heap).**¹⁰² HEAP offers an emergency benefit for households in a heat or heat-related energy emergency that do not have resources above the established limits. The emergency benefit component eligibility and benefits are based on income, available resources, and the type of emergency.¹⁰³

E.1.2 Electrical System Infrastructure

- **EO No. 75, issued 11/14/2012.** By this EO, the governor suspended Public Authorities Law Section 1020-cc and State Finance Law Section 112 to the extent that both require the approval of contracts to conduct surveys of electrical systems in residences and buildings on Long Island. The suspension followed LIPA's undertaking of such surveys to determine whether visual evidence of flood damage from Hurricane Sandy would affect electrical equipment, and whether a licensed electrician or electrical inspection agency certificate would be required to restore power. The EO further suspends State Finance Law Sections 138 and 142 to the extent it prohibits the assignment of such contracts.¹⁰⁴
- **NYS2100 Commission, convened 11/15/12.** Realizing the compounding threat of Superstorm Sandy, Hurricane Irene, and Tropical Storm Lee to the State's critical energy infrastructure and essential public services, the governor commissioned panels of experts to study the situation. The commission made recommendations to improve the strength and resiliency of critical energy infrastructure.¹⁰⁵
- **PSC Standby Tariff Policies.** In the aftermath of Sandy, Irene, and Lee, combined heat and power (CHP, also known as cogeneration) kept the lights on at multifamily apartment buildings, hospitals, nursing homes, elementary schools, and college campuses. In 2015, the PSC began investigating standby tariff policies to ensure that customers seeking CHP solutions are supported by appropriate regulations.¹⁰⁶

E.1.3 Transportation Infrastructure Recovery

- **EO No. 99, issued 1/28/2014.** By this EO, the governor temporarily suspended Public Authorities Law Sections 1209, 1265-a, and 2879(3)(b)(ii). Sections 1209 and 1265-a authorizes the Executive Officer or Executive Director of the Metropolitan Transit Authority (MTA) to approve the award of contracts without the use of sealed bids or other competitive procurement processes for the repair, reconstruction, or rehabilitation of bridges, tunnels, subway or rail lines, facilities, infrastructure, or equipment that was damaged as a result of, or during, Superstorm Sandy.¹⁰⁷

E.1.4 Petroleum Shipments

- **EO No. 125, issued 5/17/2013.** By this EO, the governor directed the DEC, DOT, DHSES, DOH, and NYSERDA to strengthen the State's oversight of shipments of petroleum products. The EO requires the relevant agencies to work together to upgrade tanker car and rail line safety, assess federal agency needs and risks, and pre-deploy appropriate spill response equipment. The agencies should submit a report summarizing the State's existing capacity to prevent and respond to accidents involving the transportation of crude oil and other petroleum products by rail, ship, and barge.¹⁰⁸

E.1.5 Public Information/Preparedness

- **Citizen Preparedness Corps.** Governor Andrew M. Cuomo tasked the New York National Guard, in coordination with OEM, with training New York State residents to prepare for any type of disaster, respond appropriately, and recover as quick as possible. The training emphasizes what organizations can provide additional support, how to register for NY-Alert (the statewide emergency alert system), and how to be aware of notifications from sources like the Emergency Alert System (EAS). The training further instructs residents on how to develop family emergency plans and stock up on emergency supplies.¹⁰⁹

Appendix F. Post-Superstorm Sandy: Legislative Enactments

The following is a list of legislation enacted post-Superstorm Sandy to further equip the State to respond to weather-related energy emergencies.¹¹⁰ Some codes and statutes directly affect emergency preparedness, while others are aimed at strengthening the State's existing energy statutory and regulatory scheme to withstand climate change and future extreme weather events that could result in an energy emergency.

The list supplements the legislative mandates requiring agency action in energy emergency situations discussed in section 1.2.

F.1.1 Long Island Power Authority Reform Act

The Long Island Power Authority (LIPA) Reform Act restructured LIPA and implemented a new model focused on customer service, emergency preparedness, and improved performance.¹¹¹ The Act amends Section 3 of the Public Service Law to require the Authority to prepare an emergency response plan pursuant to the Act's guidelines; empower the Long Island office of the Department to annually review the Authority's emergency response plan in accordance with set requirements; require that the emergency response plan consider written comments, made publicly available alongside transcripts of public hearings; and ensure that emergency response plans are filed with a copy of all written mutual assistance agreements among utilities.¹¹²

F.1.2 Community Risk and Resiliency Act

The Community Risk and Resiliency Act (CRRA)¹¹³ amends the Environmental Conservation Law,¹¹⁴ Agriculture and Markets Law, and Public Health Law to ensure that State funds, facility-siting regulations, and permits consider the effects of climate risk and extreme-weather events. The CRRA includes five major provisions relevant to strengthening the State's energy scheme and emergency response:

- **Sea Level Rise Projections.** The CRRA adds a new section, inter alia, requiring the DEC to adopt science-based, sea level rise projections into regulations.
- **Facility Siting, Permitting, and Funding.**¹¹⁵ Requires that applicants for the following energy-relevant siting and permit programs demonstrate consideration of future physical climate risks:

- Permitting Programs:
- Oil and natural gas wells.¹¹⁶
- Major liquefied natural gas and liquefied propane facilities.¹¹⁷
- Facility-Siting Programs: Petroleum bulk storage.¹¹⁸
- **Smart Growth Public Infrastructure Criteria.** Amends the Environmental Conservation Act to add mitigation of risk due to sea level rise, storm water surge and flooding to the list of smart-growth criteria. The DEC, in consultation with DOS, must develop guidance for implementing the CRRA. Implementation is the responsibility of each affected infrastructure agency.
- **Model Local Laws.** Requires DOS, in cooperation with DEC, to develop model local laws that include consideration of future risks associated with sea level rise, storm surge, and/or flooding.
- **Natural Resilience Measure Guidelines.** Requires DEC, in consultation with DOS, to develop guidance on the use of natural resources and natural processes to enhance resiliency.

For more information on this plan, please contact Frank Ciampa at Frank.Ciampa@nyserda.ny.gov

Endnotes

- ¹ The CEMP is comprised of three main volumes, one of which is the Response and Short-Term Recovery portion of the plan. The CEMP includes numerous functional annexes to address various response activities. Each annex brings together the collective resources of various response disciplines.
- ² New York Public Authorities Law § 1854(15) (2014).
- ³ New York Energy Law § 5-117(4) (1976).
- ⁴ New York Energy Law § 5-117(1)(a) (1976).
- ⁵ New York Energy Law § 5-117(1)(b) (1976).
- ⁶ NY Energy Law § 5-117(1)(c) (1976).
- ⁷ NY Energy Law, Article 10 (1979); 9 NYCRR § 7900.1 (1990). This authority was also transferred to NYSERDA in 1995.
- ⁸ 9 NYCRR § 7900.2(a).
- ⁹ NY Energy Law § 10-105(1) (1972).
- ¹⁰ A prime supplier is any individual, trustee, agency, partnership, association, corporation, company, municipality, political subdivision, or other legal entity who makes the first sale of any liquid fossil fuel into the New York State distribution system for use in the State. NY Energy Law § 10-103(4).
- ¹¹ In the event the set-aside program is activated, NYSERDA works with local county energy coordinators, through the State Office of Emergency Management (OEM), to implement the program in a rapid and effective manner.
- ¹² Executive Law § 713.
- ¹³ Agriculture and Markets Law § 192-h.
- ¹⁴ The Downstate Strategic Gasoline Reserve (SGR) holds approximately 2.5 million gallons of gasoline. The Upstate Strategic Fuels Reserve (SFR) holds approximately 2.8 million gallons, evenly divided, of gasoline and diesel fuel at six separate terminals located across the Upstate area.
- ¹⁵ For more information on the Fuel NY Initiative, see <https://stormrecovery.ny.gov/fuel-ny>
- ¹⁶ See, e.g., New York Public Service Law §§ 65, 66 (2014).
- ¹⁷ For more information see the Department of Public Service website, <http://www.dps.ny.gov>
- ¹⁸ See 16 NYCRR Part 105 for electric utility emergency plan criteria.
- ¹⁹ Utility emergency plans must be updated annually and include a requirement that utilities conduct emergency and storm-related drills, or training exercises, to test the adequacy and effectiveness of its personnel who are assigned service restoration responsibilities. 16 NYCRR § 105.3(b) (2011).
- ²⁰ New York Executive Law, Article 2-B § 28.
- ²¹ 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.
- ²² 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.
- ²³ 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.
- ²⁴ 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.
- ²⁵ NIMS compliance is required for local governments to receive future federal domestic preparedness funding.
- ²⁶ ESF #12 describes the roles and responsibilities of federal departments for energy emergency response.
- ²⁷ For more information, see the U.S. Department of Energy website, www.doe.gov

- 28 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 nonconforming, higher-sulfur petroleum products or coal, which may be more readily available during an emergency than conforming fuels. See www.epa.gov
- 29 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 the allocation of available supplies. Emergency measures for electricity are limited to authorizing the temporary connection or use of surplus transmission or generating facilities. See www.ferc.gov
- 30 FEMA has the lead responsibility for coordinating federal responses to civilian emergencies and disasters. See www.fema.gov
- 31 For more information see the U.S. Department of Transportation website, www.dot.gov/
- 32 Located in 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 and augment the federal requirements.
- 33 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 U.S.-flagged vessels (Jones Act) is sought through the FMA. DOE can assist with the waiver.
- 34 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.
- 35 In the event of a terrorist attack, natural disaster, or other large-scale emergency, DHS assumes primary responsibility for ensuring that emergency response professionals are prepared to act. See www.dhs.gov
- 36 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. See <https://www.defense.gov>
- 37 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 New York Harbor area, Sector New York, is located on Staten Island. The following web site is specific to the New York Harbor area. Visit <https://www.atlanticarea.uscg.mil/Our-Organization/District-1/District-Units/Sector-New-York/> for more information. New York State is also served by Coast Guard Sector Buffalo. Visit <https://www.atlanticarea.uscg.mil/Our-Organization/District-9/Ninth-District-Units/Sector-Buffalo/>, Sector Long Island Sound <https://www.atlanticarea.uscg.mil/Our-Organization/District-1/District-Units/Sector-Long-Island-Sound/>, and Station Burlington (Lake Champlain) which reports to Sector Northern New England <https://www.atlanticarea.uscg.mil/Our-Organization/District-1/District-Units/Sector-Northern-New-England/> for more information. Sector coverage maps are available on these web sites.
- 38 This document (dated June 2009) is available at the NASEO website. Visit <http://www.naseo.org/eaguidelines> for more information.
- 39 U.S. Department of Energy Strategic Petroleum Reserve. See <http://energy.gov/fe/services/petroleum-reserves/strategic-petroleum-reserve>
- 40 Energy Policy and Conservation Act, 42 U.S.C. § 6201 (2000).
- 41 U.S. Department of Energy Northeast Home Heating Oil Reserve. <http://energy.gov/fe/services/petroleum-reserves/heating-oil-reserve>
- 42 U.S. Department of Energy Northeast Gasoline Supply Reserve. <http://energy.gov/fe/services/petroleum-reserves/northeast-regional-refined-petroleum-product-reserve>
- 43 Section 202(c)(1) states, "During the continuance of any war in which the United States is engaged, or whenever the Commission determines that an energy emergency exists by reason of a sudden increase in the demand for electric energy, or a storage of electric energy or of facilities for the generation and transmission of electric energy... the Commission shall have the authority, either upon its own motion or upon complaint... to require by order such temporary conditions of facilities and such generation, delivery, interchange, or transmission of electric energy as in its judgement will best meet the emergency and serve the public interest." 16 U.S.C. § 824(c)(1), Visit <http://energy.gov/oe/does-use-federal-power-act-emergency-authority> for more information.

44 “A temporary emergency suspension shall be issued to a source only if the governor of such state finds that (A) there
exists in the vicinity of such source a temporary energy emergency involving high levels of unemployment or loss
of necessary energy supplies for residential dwellings; and (B) such unemployment or loss can be totally or partially
alleviated by such emergency suspension.” 42 U.S.C.S. § 7410(f)(1)-(2).

45 Powerplant and Industrial Fuel Use Act of 1978, 42 U.S.C. § 8301-8484 (2002).

46 NYSERDA Weekly Energy and Fuel Markets Reports. [https://www.nyserdera.ny.gov/About/Publications/Energy-
Analysis-Technical-Reports-and-Studies/Weekly-Energy-and-Fuels-Markets-Reports](https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/Weekly-Energy-and-Fuels-Markets-Reports)

47 NYSERDA Weekly Heating Fuels Dashboard. [https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-
Technical-Reports-and-Studies/Weekly-Heating-Fuels-Dashboard](https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/Weekly-Heating-Fuels-Dashboard)

48 Patterns and Trends New York State Energy Profiles: 2004-2018, NYSERDA, June 2022.
<https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/Patterns-and-Trends>

49 [https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/Weekly-
Transportation-Fuels-Dashboard](https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/Weekly-Transportation-Fuels-Dashboard)

50 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.

51 Patterns and Trends New York State Energy Profiles: 2004-2018, NYSERDA, June 2022.
<https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/Patterns-and-Trends>

52 Patterns and Trends New York State Energy Profiles: 2004-2018, NYSERDA, June 2022.
<https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/Patterns-and-Trends>

53 Patterns and Trends New York State Energy Profiles: 2004-2018, NYSERDA, June 2022.
<https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/Patterns-and-Trends>

54 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.

55 Patterns and Trends New York State Energy Profiles: 2004-2018, NYSERDA, June 2022.
<https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/Patterns-and-Trends>

56 Patterns and Trends New York State Energy Profiles: 2004-2018, NYSERDA, June 2022.
<https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/Patterns-and-Trends>

57 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.

58 The NPCC includes all the New England states and the provinces of Quebec, Ontario, and New Brunswick
in Canada.

59 EvaluateNY. <https://atlaspolicy.com/evaluateny/>. December 2022

60 Visit <http://www.eia.gov/naturalgas/data.cfm> for more information. The breakdown of the volumes by sector:
residential 33.8%; commercial/ industrial 29.4%; power generation 34.0%; transportation 0.1%; and the remaining is
pipeline distribution use and lease fuel.

61 Behind Texas, California, Louisiana, Pennsylvania, and Florida.

62 Visit <http://www.eia.gov/naturalgas/data.cfm> for more information. The breakdown by sector is: 4.56 million
residential customers and 0.43 million commercial/industrial/power generation/transportation customers.

63 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).

64 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).

65 Patterns and Trends New York State Energy Profiles: 2004-2018, NYSERDA, June 2022.
<https://www.nyserdera.ny.gov/About/Publications/Energy-Analysis-Technical-Reports-and-Studies/Patterns-and-Trends>

66 This measure involves retail sales of motor fuel based on vehicle license plate numbers and letters.

67 U.S. Department of Energy Northeast Home Heating Oil Reserve. <http://energy.gov/fe/services/petroleum-reserves/heating-oil-reserve>

68 U.S. Department of Energy Northeast Gasoline Supply Reserve. <http://energy.gov/fe/services/petroleum-reserves/northeast-regional-refined-petroleum-product-reserve>

69 The Downstate Strategic Gasoline Reserve (SGR) holds approximately 2.5 million gallons of gasoline. The diesel fuel at six separate terminals located across the upstate area Upstate Strategic Fuels Reserve (SFR) holds approximately 2.8 million gallons, evenly divided, of gasoline.

70 Residential facilities that do not have alternative fuel sources are priority one.

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

72 The DPS Emergency Plan provides the internal coordination and actions of the Department’s offices and sections, including their interface with utilities, during emergencies.

73 See sections 5.1 and 5.2.

74 See sections 5.1 and 5.2 for more detailed discussion of NYSERDA’s response actions for petroleum and coal supply emergencies. Section 5.6 provides discussion of the DPS response actions for natural gas emergencies.

75 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 will 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.”

76 That is, 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.

77 Limited to the provision of power which does not include the provision of fuel.

78 PSL Section 66(21).

79 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.

80 Large customers and nonessential customers, sometimes referred to as nonhuman needs customers, are defined by individual gas utilities in their respective tariffs.

81 In July 2016, the Columbia Center on Global Energy Policy published recommendations for improving communications and situational awareness between the public and private sectors to facilitate effective response to fuel emergencies. Situational awareness refers to quick, reliable, and efficient communication of information critical to understanding the fuel supply system in real time and restoring its operations during emergencies. Visit http://energypolicy.columbia.edu/sites/default/files/energy/CGEP_Tri_State_Situational_Awareness_July%202016.pdf for the final report and <http://energypolicy.columbia.edu/publications/report/improving-regional-situational-awareness-during-fuel-emergencies-new-york-tri-state-areas-lessons> for more information.

82 Appropriate liaisons from the Energy and Environmental Analysis Program are named to provide a direct information link to the DC for briefings and specific questions and concerns.

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

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

85 U.S. Environmental Protection Agency. Final Rule. December 2020. <https://www.epa.gov/diesel-fuel-standards/final-rulemaking-streamlining-and-consolidating-existing-gasoline-and-diesel>

86 U.S. Energy Information Administration, U.S. Petroleum Product Supplied. November 2022. Visit https://www.eia.gov/dnav/pet/pet_cons_psup_dc_nus_mdbl_a.htm for more information.

87 U.S. Energy Information Administration, New York Prime Supplier Sales Volumes. December 2022. Visit https://www.eia.gov/dnav/pet/pet_cons_prim_dcu_SNY_a.htm for more information.

88 U.S. Energy Information Administration, Weekly Petroleum Stocks Central Atlantic Region. December 2022. Visit https://www.eia.gov/dnav/pet/pet_stoc_wstk_dcu_r1y_w.htm for more information.

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

90 Department of the Treasury, Excise Taxes (Including Fuel Tax Credits and Refunds), Cat. No. 150141 (Revised January 2016).

91 Codified at 9 NYCRR § 8.47 (2012).

92 Codified at 9 NYCRR § 8.49 (2012).

93 Codified at 9 NYCRR § 8.54 (2012).

94 MTA Rockaways Bridge Suspension. <https://www.governor.ny.gov/news/governor-cuomo-announces-suspension-tolls-mta-rockaways-bridges>

95 EPA Hurricane Sandy Fuel Waiver. <http://www2.epa.gov/enforcement/multistate-fuel-waiver-hurricane-sandy-october-31-2012> for more information.

96 The EOs and initiatives listed in Appendix E span the years following Superstorm Sandy to present (2012-2016).

97 New York Executive Law § 6 authorizes the governor, at any time, to examine and investigate the management and affairs of any department, board, bureau, or commission of the state.

98 See Executive Order No. 73: Designation Pursuant to Section 6 of the Executive Law, Visit <https://www.governor.ny.gov/news/no-73-designation-pursuant-section-6-executive-law> for more information.

99 See Executive Order No. 103: Declaring a Disaster in the Counties of Broome, Chenango, Clinton, Delaware, Essex, Franklin, Herkimer, Madison, Montgomery, Oneida, Otsego, Tioga, Schoharie, St. Lawrence, and Warren, Visit <https://www.governor.ny.gov/news/no-103-declaring-disaster-counties-broome-chenango-clinton-delaware-essex-franklin-herkimer> for more information.

100 See Executive Order No. 108: Directing a Disaster in the County of Niagara, Visit <https://www.governor.ny.gov/news/no-108-declaring-disaster-county-niagara> for more information.

101 Visit <https://www.nyclimatescience.org/> for more information on the Climate Change Science Clearinghouse and http://www.dec.ny.gov/docs/administration_pdf/climbkgncrra.pdf for the DEC's Community Risk and Resiliency Act implementing guidance.

102 HEAP is a federally funded program that assists low-income New Yorkers with the cost of heating their homes. For more information on the federal program, see <http://www.acf.hhs.gov/ocs/programs/liheap>. More information on New York's HEAP program can be found at: <https://otda.ny.gov/programs/heap/>

103 Visit <https://otda.ny.gov/programs/heap/program.asp#emergency> for more information.

104 Executive Order 75: Temporary Suspension of Provisions Relating to Contracts to Conduct Surveys of Electrical Systems in Residences and Buildings on Long Island. Visit <https://www.governor.ny.gov/news/no-75-temporary-suspension-provisions-relating-contracts-conduct-surveys-electrical-systems> for more information.

105 The NYS 2100 Commission produced a report on Recommendations to Improve the Strength and Resilience of the Empire State's Infrastructure. Visit <http://www.governor.ny.gov/sites/governor.ny.gov/files/archive/assets/documents/NYS2100.pdf> for more information.

106 The PSC's ongoing standby policy assessment was noted in the 2015 State Energy Plan and the PSC Order Continuing and Expanding the Standby Rate Exemption, Case Nos. 09-E-0109, 14-E-0488 (effective Apr. 20, 2015). Visit https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwiusrCL2cPOAhXFESwKHeEvDUEQFggiMAE&url=http%3A%2F%2Fdocuments.dps.ny.gov%2Fpublic%2FCommon%2FViewDoc.a_spx%3FDocRefId%3D%257BBC90F4A6-4156-4E1A-A936-4E984EB57147%257D&usg=AFQjCNF9P8K-xGUwnVAFWWDmfZACY6ediw for more information.

107 See Executive Order No. 99: Temporary Suspension of Provisions Relating to Transportation Infrastructure Recovery for the State Disaster Emergency. Visit <https://www.governor.ny.gov/news/no-99-temporary-suspension-provisions-relating-transportation-infrastructure-recovery-state> for more information.

108 See Executive Order 125: Directing DEC, DOT, DHSES< DOH, and NYSERDA to Strengthen the State's Oversight of Shipments of Petroleum Products. Visit <https://www.governor.ny.gov/news/no-125-directing-dec-dot-dhses-doh-and-nyserda-strengthen-states-oversight-shipments-petroleum> for more information.

109 Prepare NY. Visit <http://www.dhses.ny.gov/aware-prepare/nysprepare/> and <http://prepare.ny.gov/> for more information.

- ¹¹⁰ The EOs and initiatives listed in Appendix E span the years following Superstorm Sandy to present (2012-2016).
- ¹¹¹ Enacted July 20, 2013. The LIPA Reform Act established a Long Island branch of the DPS to provide regulatory oversight and review of electric service operation and customer service practices on Long Island. Visit <http://www3.dps.ny.gov/W/PSCWeb.nsf/All/CF9AE5BB7330DB3F85257F5600717B7D?OpenDocument> and <https://www.governor.ny.gov/news/governor-cuomo-signs-legislation-restructuring-utility-operations-long-island> for more information.
- ¹¹² Long Island Power Authority. Visit <http://www.lipower.org/pdfs/company/papers/LIPAPSEG/LIPABills5844.pdf> for more information.
- ¹¹³ Enacted Sept. 22, 2014. Visit <http://www.dec.ny.gov/energy/104113.html>. The Act's provisions will apply to all applications and permits no later than January 1, 2017 for more information.
- ¹¹⁴ Specifically, the CRRA amends Article 6 of the Environmental Conservation Law (also known as the Smart Growth Public Infrastructure Act).
- ¹¹⁵ The funding programs identified in the CRRA are not directly relevant to energy-funding programs.
- ¹¹⁶ CRRA § 14-a.
- ¹¹⁷ CRRA § 15.
- ¹¹⁸ CRRA § 9.

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