## Agreement for Enhanced Federal and State Energy Emergency Coordination, Communications, and Information Sharing

- The U.S. Department of Energy (DOE), the National Association of State Energy Officials (NASEO), the National Association of Regulatory Utility Commissioners (NARUC), the National Governor's Association (NGA), and the National Emergency Management Association (NEMA) do hereby agree to implement the following actions as further explained in the attached titled "Terms of Reference to the Agreement on Federal and State Energy Emergency Coordination, Communications, and Information Sharing", dated: June 24, 2015.
- 1. DOE's Office of Electricity Delivery and Energy Reliability, Infrastructure Security and Energy Restoration Division (OE/ISER), NASEO, NARUC, NGA, and NEMA will work with the states to encourage voluntary participation to develop, maintain, and distribute the contact lists of state and federal officials responsible for energy market monitoring, consequence assessments, and energy emergency response. States and DOE OE/ISER will update the list at least annually with names, titles, organizations, work addresses, phone numbers, and email addresses as well as other government contact information as may be relevant. States will be responsible for updating the list any time there is a change or turnover in staff designated as points of contact. The list will be accessible through a restricted website maintained by DOE OE and will be accessible by those officials whose names appear on the list.
- 2. NASEO, NARUC, NGA, and NEMA will support participating states in the implementation of this agreement. Participating states will agree to provide timely situational assessments in the event of a disruption to energy supplies to facilitate effective coordination, communications, and information sharing. States will share their assessments of energy disruptions with surrounding states and DOE using (1) a restricted website maintained by DOE OE/ISER, (2) email, and (3) conference calls and other means as appropriate. States should consult the websites of the U.S. Energy Information Administration and OE to access publicly-available energy data, information and analysis, emergency situation reports, and other available information. State should compile information on impacts and consequences in their state including input from energy suppliers.
- 3. DOE will provide in a timely manner to states information about the risk of significant regional, multistate, or state-level energy market disruptions as it becomes available to DOE. When an event that could have or has had a significant impact on energy infrastructure and/or supply occurs, DOE OE/ISER will share with affected states and regions situational assessments that provide details about the consequences of the disruption, its severity, geographic scope, and duration and federal action taken. These assessments will draw upon information gathered by states as well as other information, data, or analysis available to DOE.

4. The communication system shall be tested and evaluated by DOE and states every two years.

Signature	Signature	Signature Votte	My Pulic Signature	Tima heets Signature
Ernest J. Moniz	David Terry	Scott D. Pattison	Greg R. White	Trina Sheets
Secretary	Executive Director	Executive Director/CEO	Executive Director	Executive Director
U.S. Department of Energy	National Association of State Energy Officials	National Governors Association	National Association of Regulatory Utility Commissioners	National Emergency Management Association

## Terms of Reference to the Agreement on Federal and State Energy Emergency Coordination, Communication, and Information Sharing

U.S. Department of Energy,

National Association of State Energy Officials, National Association of Regulatory Utility Commissioners, National Governors Association, and National Emergency Management Association

Introduction – These Terms of Reference (Terms) to the Agreement on Federal and State Energy Emergency Coordination, Communication, and Information Sharing (Agreement) outline and detail the key roles and responsibilities of the parties to the Agreement and provide a protocol for the parties to the Agreement to share data and information in the event of an energy emergency and situations that could potentially lead to a serious energy supply disruption. The Agreement focuses on communications, data collection and analysis, and situational awareness in the event of an energy disruption. The value of the information available to the public as well as the private sector can be enhanced by sharing and making better use of existing information sources, analytical capabilities, and communications tools.

This version of the Agreement replaces the original agreement signed by the National Association of State Energy Officials (NASEO) and the U.S. Department of Energy (DOE)<sup>1</sup> in 1996 under which the Energy Emergency Assurance Coordinators Program was established and continues to operate. Technology, communications, data, and analysis have dramatically changed since 1996 and staff turnover at the state and federal levels has challenged efforts to maintain a contact list of state and federal officials responsible for energy market monitoring, consequence assessments, energy emergency response and training. In addition, the creation of state energy assurance plans has led to an evolution in roles and responsibilities related to energy emergencies within the states, emphasizing greater intra-state coordination. This has often included state energy offices, public utility commissions, the executive offices of the governor, working collaboratively with state emergency management agencies and local governments. As a result, the Agreement has been updated and expanded to include the National Association of Regulatory Utility Commissioners (NARUC), the National Governors Association (NGA), and the National Emergency Management Association (NEMA). These organizations will support and encourage their members' ongoing participation in this effort.

Understanding and responding appropriately to energy emergencies requires accurately measuring or gauging the severity and consequences of emergencies. This in turn requires a thorough knowledge and understanding of energy supply, demand and infrastructure, including energy distribution networks, network capacity and flows, patterns of energy production and usage at the state, regional, and national levels, along with the ongoing monitoring of energy markets. All of these benefit from good communication with energy industries – electricity, natural gas, petroleum – and reliable systems for gathering, analyzing, and sharing data and information about energy emergencies.

Most state energy offices and public utility commissions have a role in energy emergency response and preparedness, and most are responsible for preparing and maintaining some, or all, of the energy emergency plans that have been developed over the last five years, in part with the financial assistance of DOE. In addition other programs also complement this planning and response effort. For example, the State Heating Oil and Propane Program (SHOPP) that monitors residential propane and heating oil prices weekly over the winter months is a joint partnership between states and the U.S. Energy Information

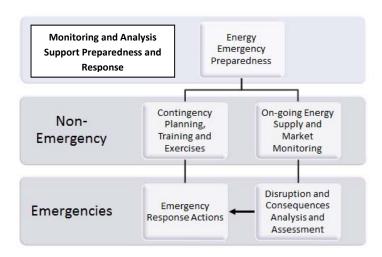
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<sup>&</sup>lt;sup>1</sup> This included the U.S. Energy Information Administration as well as the Office of Emergency Management. The responsibilities of the latter now largely fall to the DOE's Office of Electricity Delivery and Energy Reliability.

Administration (EIA) within DOE. Thirty eight (38) states are currently involved in this program, which is a good example of a state and federal partnership to more closely monitor important energy markets.

Energy Emergency Preparedness – Preparedness involves two basic steps: (1) response and planning for response, and (2) monitoring/assessment. Response and planning for response include all activities associated with contingency planning, training, and the actual response to an emergency. At the federal level, coordination of these activities is largely the responsibility of DOE's Infrastructure Security and Energy Restoration (ISER) Division within the Office of Electricity Delivery and Energy Reliability (OE) and the Federal Emergency Management Agency (FEMA). At the state level, state energy offices, public utility commissions, and state emergency management agencies are typically involved.

Monitoring and assessment informs response and planning for response. Many industries, businesses and energy consumers monitor energy markets (supply, demand, and prices) on an ongoing basis to ensure efficient day-to-day operations. States and the federal government also monitor energy markets to inform how various policies and programs have and will affect the use, cost, and supply of energy. At the federal level, EIA, the statistical and analytical agency within the U.S. Department of Energy, conducts a comprehensive data collection program that covers the full spectrum of energy sources, end uses, and energy flows. EIA collects, analyzes, and disseminates data and analysis on energy supply, distribution, demand and prices. At the state level energy market monitoring is generally the responsibility of the state energy office and public utility commission.



When energy supply disruptions occur, enhanced monitoring and analysis provides data and information to inform emergency response. Disruptions could be due to world events, weather, and problems with major power plants, refineries, pipelines, or other key energy distribution facilities. During and after a natural disaster one of the first steps is to assess the costs and impacts of the damage so that an appropriate level of response can be initiated. When energy supplies have been disrupted, an assessment is needed

to determine the severity and duration of the disruption. Energy disruptions can result in sudden and large price jumps, rapidly declining inventories, and localized outages of specific fuels and energy resources. The assessment is used to determine what actions are needed to manage and resolve the disruption.

The focus of the assessment also depends on the triggering event and the energy source(s) involved. The price, supply, and availability of electricity are largely determined by events within a state or region; natural gas supplies and price are more closely tied to regional and North American supply and price trends; and oil is affected by both international events and domestic market conditions. As a result, monitoring of energy markets during an emergency needs to focus on these different areas to assess how changes will affect a state or region. If the triggering event is sudden, or due to world events, media reports will be an important aspect of the assessment as they may raise questions that will need to be addressed.

**Monitoring of Energy Markets** – This monitoring is presently well served by the data and information collected, analyzed and disseminated by EIA, as well as by other federal agencies, the

private energy sector, and some states. States need to maintain the capability to analyze energy market conditions in their states based on state- and regional-level data available and ongoing communication with energy suppliers in their state.

Energy Emergency Market Monitoring – Such monitoring is required by decision makers to determine an appropriate response and course of action. During an energy emergency, DOE collects and disseminates data and information on electricity outages, fuel supply disruptions, and other energy market impacts that may prevent the reliable delivery of energy to the marketplace. This assessment draws upon publicly available data collected by EIA and is supplemented with other information that DOE collects from industry and federal interagency partners, as needed. Additionally, in the event of a federal Stafford Act declaration (the state requests the declaration), DOE/OE manages the deployment of emergency support function #12 (ESF#12 – Energy) subject matter experts to state and regional operations and coordination centers to assist state emergency managers and energy officials during energy emergencies. DOE and states can become more efficient by improving their coordination of this market assessment process and through relevant and timely analysis. SHOPP and electric utilities outage reports collected by DOE/OE on form OE-417<sup>2</sup> are two examples of existing DOE data that can inform emergency response.

Information Requirements – A data and information exchange protocol should define the general scope and content of the information to be shared by the state and federal government in the event of an energy emergency. The protocol should draw upon existing data when possible, supplementing as needed based on the nature of specific events. The protocol should also provide for collecting data and information from other state and federal agencies as well as the local energy industry and local governments through a coordinating point. For example, in the event of a gasoline distribution problem, information on traffic flows may be useful. This information can be obtained by state energy offices from state departments of transportation, and state petroleum associations. In the event of a natural disaster, affecting energy supply availability, state emergency management agencies will typically serve as the point of coordination and will need an assessment of the energy situation.

The data used to assess markets includes the following:

- International and national data on crude oil supply and prices;
- National and regional data on refinery operations and production and prices of refined petroleum products;
- North American, national, regional and state data for natural gas; and
- Regional and state data for electricity.

National and regional data should include:

- Storage and transportation capacities and flows;
- Weather conditions;
- Pipeline operations, availability and, capacity utilization;
- Waterborne transportation availability and capacity;
- Relevant policy decisions which affect energy prices or supply; and
- Demand trends and infrastructure changes (e.g., terminal, pipeline or refinery closings).

State-level data should include the following:

<sup>&</sup>lt;sup>2</sup> https://www.oe.netl.doe.gov/oe417.aspx

- Energy supply, demand, and prices;
- Local market indicators (e.g., weather and prices);
- Transportation and distribution capabilities, pipeline, terminals, storage capacity;
- Fuel switching capabilities (industrial and electric utilities); and
- Any effects on deliveries to end-use consumers.

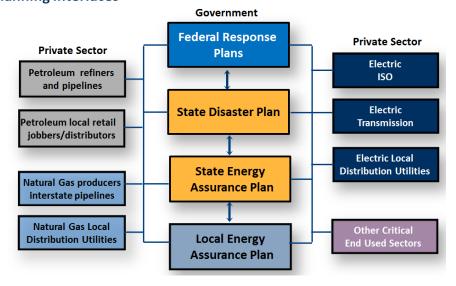
EIA will share data in a manner consistent with the legal authorities, confidentiality protections, and stated uses in effect at the time the data were collected, subject to reasonable requirements for use of the data set by EIA.

Communication Protocol – Timely state-level energy disruption information is typically provided by multiple, local, state, federal, and private sector sources to the state emergency operations centers (SEOC) and can be used in combination with the information available from DOE to develop a detailed picture of the overall situation. This information is in turn shared with states via a publically-posted DOE Situation Report that is available on the OE website. DOE and states have also established this protocol to share timely and relevant information that is not publicly available. The protocol includes:

- 1. In regional and national emergencies DOE should make available a preliminary assessment of the emergency situation to states as soon as it is available.
- 2. States should develop an assessment of the situation within the state and region using some general guidelines on the type of information and scope of analysis to be made available. This effort should not duplicate the effort of other state or federal agencies. This assessment could be prepared at either the state's initiative or at DOE's request. This type of assessment should also be included as part of any well-developed state energy assurance plan (energy emergency plan) and state emergency plan. It is important that these plans are coordinated and effectively interface from local to state to federal levels and also with the private sector (see "Coordination of Plans" diagram below). Historical information from similar past events from the State Supply Disruption Tracking Process may help to inform the situation assessment. Information from the current event should also be recorded for future reference in the State Supply Disruption Tracking Process developed by states as part of their energy assurance planning efforts.

## **Coordination of Plans**

## Planning interfaces



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- 3. States should send the assessments to DOE and to a predefined list of regional state contacts designated as Energy Emergency Assurance Coordinators.
- 4. DOE should summarize the state data and supplement it with information available to DOE. This analysis should be sent out to states as an update.
- 5. State energy agencies and DOE should continue to coordinate energy information activities with FEMA and state emergency management agencies. This is especially important during any actual energy shortage or other emergency situation. However, for the purpose of this protocol, the ISER Division within DOE/OE will be the central point for collecting and disseminating incoming energy emergency data from the states and to the state and other federal agencies.

For purposes of the Agreement, "region" is defined as adjoining states and states which are mutually dependent on a regional energy distribution infrastructure. DOE will benefit by having an analysis including state input, and states will benefit by receiving DOE's synthesis of the situation as well as the assessment of surrounding states.

The Energy Emergency Assurance Coordinators (EEAC) contact list has been established and utilized for state governments and identifies, by function, those government representatives within each state who are responsible for energy emergency response and energy supply and market assessment. The DOE/OE manages the EEAC lists on behalf of DOE. States are responsible for assuring their EEAC contacts are kept up to date. It should be updated at such time as there is any change to staff designated as an EEAC and should be reviewed and updated at least annually. All states should have at a minimum two government representatives designed as an EEAC and, at their option, may designate additional EEAC contacts to reflect those government representatives who may have an expertise in electricity, natural gas, petroleum, or other energy resources. States may also elect to designate contacts in multiple agencies as specified in their energy assurance plans. This could include representatives in the state energy office, public utility commission, emergency management agency, and the governor's office. In any instance where a state energy office and public utility commission may not have the responsibility or capacity for energy market monitoring or energy emergency response that role would fall to the state's emergency management agency that then should provide points of contact to DOE/OE. Separate from the EEAC contact list, states will also need to maintain, for their own use, a list of key energy industry contacts and industry associations that can be used to assist them in analyzing market disruptions.

**Information Flows** – Typically there will be two-way communications between DOE and state energy agencies with responsibilities as defined by state energy assurance plans and state emergency management plans. Usually state energy offices and/or public utility commissions have the energy subject matter expertise and assessment capabilities. In many states the state energy agencies may be designated as the Emergency Support Function (ESF) 12 – Energy primary state point of contact. Information from DOE and state assessments will flow from the appropriate state energy agencies to the emergency management agency and information on the impacts to other sectors affected by the energy disruption will flow from the state emergency management agency to the responsible state energy agencies. In some states if the state emergency operations center (SEOC) is activated the state energy agency(ies) will have a seat in the SEOC. In these cases, the SEOC will be the principal point of communications and coordination. Those state energy agencies that do not have a seat directly in the SEOC the state energy agency should communicate with the point of contact in the SEOC that has responsibility for the energy sector or the ESF-12 function. The SEOC is also the point of contact for local governments and information of the status of the energy supply disruption should be shared with local government. Many states use WebEOC which is incident management software to manage incident reporting and information flows and some state energy assurance plans

incorporate the use of this system. In more minor energy supply disruptions when the SEOC is not activated or a state of emergency or disaster has not been declared, the state energy assurance plans should describe the roles of state agencies the procedures for sharing information between the governor's office, state energy office, public utility commissions, and emergency management agencies.

Communications Tools – Various communications tools are available to transmit the information and need to be considered as part of this process. One or more communication tools will be needed given the diversity of the states and the personnel that would be involved. OE currently hosts a restricted website which provides the database of the EEAC contacts and which both OE and states can access to update their own information and view other states' information. This restricted OE website, OE's and EIA's public websites, and email communications will be the primary tools for EEAC coordination. E-mails and website postings will be supplemented with direct phone calls for follow-up and clarifications along with conference calls as may be needed. At a state-level incident, management systems such as WebEOC may be used to share situation and response reporting. Regardless of the methods used the communication procedure should be defined at a state level, and periodic training and exercises conducted.

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