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EXECUTIVE SUMMARY

Response to energy sector incidents, whether natural or manmade, begins at the state, local, tribal, and territorial (SLTT) levels. As a key lifeline function, the energy sector is crucial to the economic and personal welfare of the people of the United State and requires communities to be prepared to ensure energy is available and reliable. This 2016 year-in-review document for the SLTT Energy Assurance Program of the Infrastructure Security and Energy Restoration Division of the Department of Energy's Office of Electricity Delivery and Energy Reliability highlights important events relevant to the energy assurance community.



Starting with the renewal of the Energy Emergency Assurance Coordinator (EEAC) Agreement in February, which lays the groundwork for information sharing amongst SLTT governments across the country, the SLTT Energy Assurance Program took important actions to reach its goal of protecting the Nation's energy supply. The agreement itself was put into practice shortly after a refresher training for EEACs in July with the Colonial Pipeline incidents and Hurricane Matthew following during the fall months of 2016.

In addition to reinvigorating communication networks throughout the country, the SLTT Energy Assurance Program seeks to regularly test and evaluate existing hazard response plans relevant to energy supplies.

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The Clear Path IV Exercise in April simulated a scenario in which a major earthquake and subsequent tsunami caused severe damage to the Pacific Northwest. As a result of the functional exercise, it was identified that fuel allocation, planning, and coordination need to be a priority at the state and regional levels. This finding has shaped and will shape energy assurance planning efforts in the coming years.

As the threat to cybersecurity continues to evolve, the Liberty Eclipse Tabletop Exercise was convened in December to discuss cyber incident coordination between Federal, SLTT, and private industry officials. This topic is part of a larger, ongoing dialogue that will be at the forefront of efforts to address challenges that the energy sector will face in the future.

Because SLTT governments do not always have the means to regularly develop their own resources, the SLTT Energy Assurance Program has created a vast network leveraging communication tools and technical expertise from the Federal Government to ensure the Nation's grid is as secure as it possibly can be.

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Local communities often feel the first impacts of any energy emergency. Whether at the pump or confronted with a long-term power outage at home, state and local governments must work with energy providers to ensure their communities have access to energy. The State, Local, Tribal, and Territorial (SLTT) Energy Assurance Program within the Infrastructure Security and Energy Restoration (ISER) Division of the Office of Electricity Delivery and Energy Reliability (OE) promotes the mission of the Department of Energy (DOE) throughout the Nation, but with an emphasis on building the capabilities of local communities. To this end, the SLTT Energy Assurance Program strives to:

- Build relationships
- Educate, train, and exercise SLTT stakeholders
- Encourage comprehensive planning.

In 2016, the SLTT Energy Assurance Program engaged with all 50 states, five territories, and the District of Columbia. These interactions included updating state energy assurance contact information; hosting workshops and exercises on emergency fuel planning and cyber incident coordination; and providing valuable analysis and actionable information on fuel supply disruptions. With a state-focused approach, the program leveraged DOE's robust partnership with the electricity and oil and natural gas subsectors, as well as the full capabilities of DOE, including the Energy Information Administration (EIA) and DOE's national laboratories. The end result for the year was a better

connected and more integrated energy assurance community ready to respond to energy emergencies.

Building and maintaining meaningful relationships was the cornerstone of this effort. The establishment of relationships through the updated Energy Emergency Assurance Coordinators (EEAC) Agreement created an interdisciplinary and nationwide network to promote energy resilience and accelerate response.

Through this vast network, the energy assurance community improved its emergency response capabilities and built a stronger knowledge base of energy systems and supply chains that includes better integration of sector subject matter expertise regarding emergencies. This knowledge was then tested in exercises designed to challenge SLTT officials and identify additional gaps for further work. The network and new capabilities of partners were further tested by and further relied upon during real-world events such as Hurricane Matthew and incidents involving supply disruptions related to ruptures of the Colonial Pipeline.

Building upon these events, states leveraged the SLTT Energy Assurance Program to conduct comprehensive planning activities and further develop in-house expertise on interdependencies, emergency fuel planning, cybersecurity, and other related vulnerabilities. These actions will continue in future years to further improve the Nation's energy resilience.

This 2016 year-in-review report summarizes the SLTT Energy Assurance Program's efforts to promote energy assurance across state and local governments and build the resilience of the Nation's energy sector.



KEY EVENTS AND ACTIVATIONS IN 2016

Throughout 2016, the SLTT Energy Assurance Program supported OE/ISER initiatives designed to ensure a secure and reliable flow of energy to the nation through exercises and situational awareness. The program engaged SLTT stakeholders and industry partners on a number of fronts with the goal of improving awareness of energy supply chains, revealing gaps in existing energy assurance plans, and improving situational awareness.

Signing of an Updated EEAC Agreement

In February 2016, Secretary of Energy Ernest Moniz and David Terry, Executive Director of the National Association of State Energy Officials (NASEO), signed an updated EEAC Agreement between DOE and NASEO, as well as the National Association of Regulatory Utility Commissioners (NARUC), the National Governors Association (NGA), and the National Emergency Management Association (NEMA). Updating the EEAC Agreement was a critical step in helping the Federal Government and states work together to provide a unified response to energy emergencies, and it provided the basis for the SLTT Energy Assurance Program.

The updated EEAC Agreement laid out concrete items to improve the Nation's collective ability to share information, which is essential for making sound response and restoration decisions during emergencies. It called for a comprehensive list of contacts at the state and Federal levels who understand energy markets and supply chains, are capable of gathering information on energy supplies and systems before and during energy emergencies, and can share this information across the network of contacts to make everyone aware of the current situation. These individuals monitor energy markets through publicly available sources such as EIA, and post information on a secure website to help decision makers at the state and Federal levels make unified and coordinated decisions. The agreement then called for DOE and state associations to provide training and seminars to make sure these personnel would have the tools to provide the best information possible.

To support this effort, the agreement called on DOE and states to develop informationsharing protocols and processes to streamline response operations and then to test them through routine drills and exercises. Lessons learned from these drills and exercises would inform and improve state energy assurance plans and DOE-specific energy response plans.



Updating the EEAC Agreement is a critical step in helping the Federal and state governments work together to provide a unified response to energy emergencies.

The updated agreement expanded upon the original agreement signed by NASEO and DOE in 1996, under which the EEAC Program was initially established.

Over the last 20 years, information technology, communications, and data analysis have dramatically changed. In addition, the creation of state energy assurance plans has led to an evolution in the states' roles and responsibilities as they relate to energy emergencies. The plans emphasize intra-state coordination and can









include various agencies within a state. For these reasons, the EEAC agreement has been updated and expanded to include NARUC, NGA, and NEMA. These organizations will support and encourage their members to participate in this effort on an ongoing basis.

For the memorandum of understanding (MOU) and the Terms of Reference, which provide further background of the agreement, click here. To read DOE's announcement on the MOU, click here.

Clear Path IV Exercise

Clear Path IV, the fourth installment of DOE's flagship exercise series, addressed the challenges that the energy sector may face during a catastrophic Cascadia Subduction Zone earthquake and tsunami. Its focus was on the collaboration between the different levels of government and private industry during efforts to organize response; assess impacts to energy systems; communicate information to develop situational awareness and a common operating picture; and facilitate the delivery of capabilities across internal and mutual assistance networks.

This exercise was divided across two days of play in Portland, Oregon, and Washington, D.C. Clear Path IV included representation from 10 Federal agencies, seven states, five local governments, 15 oil and natural gas companies, 18 electric utilities, six trade associations, and four state associations with a total of more than 175 participants.

One of the main findings to come out of this exercise was that few states have a fuel set-aside program or backup generation plan.



The DOE Energy Response Team took part in the functional exercise in the Emergency Operations Center, located in Washington, DC.

An executive summary, including key recommendations, can be found on DOE's website.⁴



Clear Path IV included Federal, state, local, international, and industry participants.

The next installment, Clear Path V, will be held at the end of May 2017 and will focus on a hurricane impacting energy and communication sector assets along the Gulf Coast and the southeastern United States. It will build upon the lessons learned from previous events, including the importance of engaging with SLTT partners in planning and designing a scenario that will test how energy assurance stakeholders work together.

August 2016 Field Hearing on DOE's Functions and Capabilities to Respond to Energy-Related Emergencies

On August 15, 2016, in Seattle, Washington, Secretary Moniz testified before a field hearing of the Senate Committee on Energy and Natural Resources. In his testimony, Moniz called for increased investments in U.S. energy emergency response efforts. Secretary Moniz highlighted DOE's expanded emergency response duties and the need for comprehensive and coordinated response capabilities in the face of increasingly integrated energy systems amidst an evolving threat environment. Many of these capabilities are essential components of the SLTT energy assurance community. The Secretary detailed the roles of OE/ISER in emergency response coordination as it relates to recovery from natural and man-made events, such as severe weather, natural disasters, electromagnetic pulses (EMP), aging infrastructure, and cyber threats. Secretary Moniz also described the essential operational priorities of DOE

and the urgency required to ensure that the agency can continue to serve its most critical functions in the face of increasingly dynamic threats.

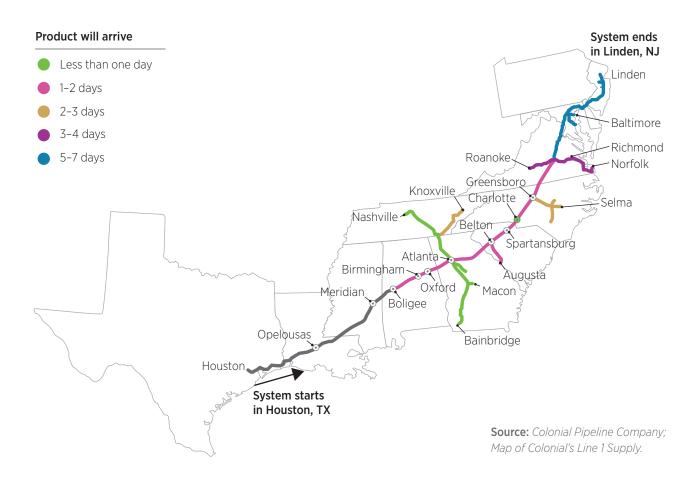
In addition to looking at lessons learned from previous disasters, Secretary Moniz also highlighted the importance of emergency preparedness exercises to coordinate response to future disasters, such as Clear Path IV. The full text of Secretary Moniz's testimony can be found here.³

Colonial Pipeline Incidents

On September 9, 2016, the Colonial Pipeline Company (Colonial) discovered a leak in Line 1 of their pipeline near Helena, Alabama. The Colonial system is critical for the supply of transportation fuels in the Southeast. As a response, ISER established an incident coordination plan to manage information sharing among key stakeholders.

The EEAC Agreement was leveraged to conduct conference calls with affected states along the Eastern Seaboard and in the Southeast. State governments provided updates on their current fuel supply situation and preliminary plans to manage impending shortages. ISER's other efforts included validating waivers and producing daily situation updates to SLTT entities, the National Security Council, and the U.S. Department of Homeland Security (DHS).

On October 31, a large explosion and fire occurred near Helena, Alabama, where contractors were conducting work on Line 1 near the site of the September gasoline leak. A very similar response to the September incident was engaged for this incident, in which the EEAC agreement was heavily leveraged to share up-to-date information on the unfolding situation.





Hurricane Matthew, the second major hurricane of the 2016 Atlantic Hurricane Season, achieved wind gusts of over 100 mph and caused widespread flooding.

Hurricane Matthew

Hurricane Matthew, which affected the coastal United States from October 6 to 10, 2016, left more than three million customers without power. The industry and SLTT stakeholder-led response resulted in an efficient recovery. Regular communication amongst the Federal Government, SLTT stakeholders, and industry was integral to the response.

In addition, DOE supported the response to the storm by deploying 11 total Emergency Support Function (ESF) #12 responders. Four responders provided 24/7 coverage at the Federal Emergency Management Agency (FEMA) National Response Coordination Center in Washington, D.C. Three responders were deployed to the FEMA Region IV Regional Response Coordination Center in Atlanta, Georgia. The state emergency operations centers (EOCs) of Florida, Georgia, South Carolina, and North Carolina were staffed by one ESF #12 responder each.

Although many EEACs were stationed at state EOCs in the impacted states, additional individuals were actively monitoring energy infrastructure and coordinating with the Federal Government, state and local governments, and with partners in industry during the storm.

Liberty Eclipse

In December 2016, DOE and NASEO cosponsored Liberty Eclipse, a regional energy assurance exercise intended to promote state and local-level preparedness and resilience for future energy

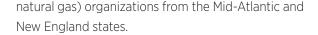


Nearly 100 exercise participants were drawn from key state, local, Federal, and industry (electric, oil, and





President Richard Mroz of the New Jersey Board of Public Utilities spoke on a panel for state agencies' cyber incident response.



Participants confronted a fictitious significant cyber incident that cascaded into the physical sector and discussed the challenges of restoring electric and fuel systems. Liberty Eclipse reinforced the interest and attention that both government and industry place on improving cyber resilience. It also highlighted the many gaps in both capability and perception that exist for the cyber incident hazard.

During the exercise, the importance of industry and government efforts to improve the energy sector's ability to prepare for, respond to, and recover from catastrophic incidents was identified. In order to advance this shared goal, the following recommendations were made:

DOE should support Federal, SLTT, and industry
partners to improve communication and information
sharing consistent with forthcoming cyber incident
coordination mechanisms and should strengthen
procedures to facilitate energy restoration. Particular
attention needs to be paid to public communication
and expectation-setting during significant cyber
incidents.



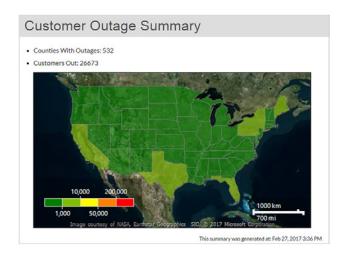
Exercise participants from different industries and government agencies discussed measures they would take if a cyber incident were to unfold.

- The Federal Government needs to better define its roles and responsibilities for a significant cyber incident and communicate those roles clearly to SLTT partners and industry.
- 3. DOE should continue its work with SLTT partners, other Federal agencies, and the private sector to ensure that appropriate resources and capabilities are available to reduce the risks to the energy sector from a cybersecurity threat. DOE, DHS, and private industry should also work together to ensure that measures for the recovery of critical information technology systems are in place to ensure a more rapid system restoration and to minimize impacts.
- 4. DOE should facilitate further dialogue between governments at all levels and industry on developing fuel-shortage response plans and evaluating these plans in future regional exercises that focus on the oil and natural gas subsector.
- 5. DOE should maintain and expand its Energy
 Assurance Program to encourage and support
 planning and preparedness through regular
 education, training, and exercises for SLTT partners
 with the goal of promoting a better understanding
 of energy sector supply chain interdependencies.
 These efforts should culminate in updated energy
 assurance plans at all level.

The After Action Report from the exercise will identify key findings and proposed actions that DOE and SLTT stakeholders can implement to improve resilience.

EAGLE-I Pilot

DOE's Environment for Analysis of Geo-Located Energy Information (EAGLE-I) is a tool for mapping disaster impacts on the energy sector. It provides better awareness of the status of energy infrastructure by collecting publicly available information from energy utilities and operators into one system. To increase



its situational awareness of electrical distribution, petroleum distribution, and natural gas pipelines, ISER has continued to evolve EAGLE-I.

Prior to the 2016 hurricane season, EAGLE-I was expanded to provide geo-locational information on retail gas stations and layer that data with real-time power outage data.

More recently, the EAGLE-I portal has been completely redesigned to improve user functionality.

The EAGLE-I team at Oak Ridge National Laboratory strives to improve the platform's capabilities, such as infrastructure mapping, holistic coverage, and data reliability. ISER has identified that an efficient way to get useful feedback is to have state stakeholders test out EAGLE-I's capabilities. In December 2016, representatives from the states of Florida, South Carolina, North Carolina, Tennessee, and Washington were given access to and an accompanying tutorial for the EAGLE-I system. DOE is seeking feedback on EAGLE-I to identify how it can better serve the energy assurance community.

More information about recent EAGLE-I developments can be found here.⁵



NATIONAL ASSOCIATION ACCOMPLISHMENTS

ISER's SLTT Energy Assurance Program focuses on building stronger relationships with state energy offices, emergency managers, utility commissioners, and state and local government officials. DOE leverages national associations to communicate and

coordinate with states as part of broader OE activities with these groups to strengthen and protect the nation's electric grid from cyber and physical attacks. OE's activities occur across a broad spectrum of activities, including research and development for cybersecurity technologies, developing tools to improve operation of the grid, and technical assistance for state officials. Calendar year 2016 saw many important steps forward from these groups, particularly in the Energy Assurance Program. Through cooperative agreements, many of our partners were able to fund trainings, exercises, and webinars to engage, educate, and train other SLTT stakeholders.

American Public Power Association (APPA)

Public Power Ready

In early August, APPA launched the new Public Power Ready page on its website.⁶ The website was designed to provide resources for public power utility customers to both understand the restoration process and find additional preparedness tools and information sources.



Public Power Mutual Aid Playbook

In August 2016, the second version of the Mutual Aid Playbook (MAP) was published and shared with APPA's membership. The document outlines roles and responsibilities of Utility Coordinators, Network Coordinators, and the National Coordinator (APPA) in the case of a disaster. An executive summary of the MAP is available to the public on this page.⁷

National Table Top Exercise

On October 4 and 5, 2016, APPA hosted its first-ever tabletop exercise in Arlington, Virginia. The National Public Power Tabletop Exercise brought together

Participants from

17 States 23 Unique Utilities

were in attendance.

representatives from the public power community, DOE, the Edison Electric Institute, the National Rural Electric Cooperative Association, and other industry partners to exercise a response to a catastrophic earthquake along the New Madrid Fault. The exercise helped to identify gaps and areas of improvement for future planning efforts and updates to the Mutual Aid Playbook.

National Association of Regulatory Utility Commissioners (NARUC)

Risk Management in Critical Infrastructure **Protection Study**

In September 2016, the National Council on Electricity Policy & Energy Assurance Program, a project of NARUC's Research Lab, published Risk Management in Critical Infrastructure



Protection: An Introduction for State Utility Regulators. The report explored how regulators use risk management when making decisions around critical infrastructure protection and energy assurance. It is available here⁸ in its entirety. In support of this paper, NARUC hosted a risk management webinar in December, in which 59 people participated. This paper and webinar will lay the foundation for creating a training program for the states.

NARUC Critical Infrastructure Committee Meetings

The SLTT Energy Assurance Program partners with NARUC to enhance state regulators' understanding of threats facing critical energy infrastructure and to provide an opportunity to discuss resilience and energy assurance best practices through its Critical Infrastructure Committee.⁹ The committee serves as an important interlocutor between public utility commissions (PUCs) and their Federal and industry counterparts. The committee holds monthly conference calls and in-person meetings to discuss trends and suggest opportunities for further work.

The committee also meets in person on a tri-annual basis. The first meeting of the year was held in February 2016 in Washington, D.C., where NARUC's Research Lab ran an interactive cyber mutual assistance exercise. In this exercise, conference attendees were walked through a scenario that involved companies across utility sectors getting exposed to harmful ransomware. The committee also met in July 2016 in Nashville, Tennessee, and again in November in La Quinta, California, on the margins of the NARUC Summer and Annual Meetings. Committee meetings have included panels on cybersecurity challenges facing the utilities, subject-matter-expert briefings on EMP and physical security threats, and state and industry panels on the costs associated with physical and cybersecurity upgrades and ongoing challenges of quantifying these costs. The Committee also launched an effort on behalf of regulators to create a catalog of information on cyber and/or physical measures taken by states to protect critical infrastructure.

The Critical Infrastructure Committee's monthly calls and in-person meetings are important forums that guide the work of the SLTT Energy Assurance Program and tailor the program to support state PUCs.

National Association of State Energy Officials (NASEO)

EEAC Training

NASEO hosted an EEAC training webinar on July 14, 2016, to support the recently renewed EEAC Agreement. The training covered the roles and responsibilities of EEACs, communication procedures, and useful tools that EEACs can use in the event of an energy emergency. The training also highlighted the overall importance of the EEAC to the Federal Government and private industry. Publications from DOE, the National Petroleum Council,

and the American Petroleum Institute all recommended improving the capacity of states and localities to identify potential energy disruptions and opportunities for engagement with the oil and natural gas industry.

The training itself was integral to response efforts for both the Colonial Pipeline incidents and Hurricane Matthew.



Western Regional Emergency Fuel Coordination Meeting

The California Energy Commission (CEC) and NASEO hosted an Emergency Fuel Coordination Meeting for western states and industry partners from September 28 to 30, 2016, at the CEC offices in Sacramento, California. This meeting was a unique opportunity for state and industry partners in the West to work toward the development of more coordinated, detailed, and effective energy emergency response plans.

The purpose of the meeting was to explore how states might develop more comprehensive plans to respond to fuel shortages. It was intended to set the stage for the creation of model plans that can be used by states in the western region to update their energy assurance plans. The meeting also explored how states can make better use of data and analysis through the use of energy market indicators to provide a more consistent picture of the situation. It further built upon the work completed by NASEO over the past two years as part of DOE's State Energy Risk Assessment Project, as well as the state and regional risk assessment profiles. Finally, the meeting provided participants with an opportunity for discussions on the various types of Federal, state, and





Matt Duncan, Program Manager for the SLTT Energy Assurance Program, met with partners at the California Office of Emergency Services to discuss the importance of effective fuel plans.

local jurisdiction waivers that can be used to increase fuel supplies and diminish panic-induced buying in the aftermath of a regional catastrophic event that results in a fuel shortage for the southwestern United States.

The meeting had 50 participants from six states, further emphasizing the fact that energy disruptions do not stop at state borders. Fuel planning and coordination is a regional effort and a renewed focus stemming from findings in Clear Path IV.

Presentations from the event can be found here.¹⁰

National Conference of State Legislatures (NCSL)

NCSL/NARUC Energy Resilience and Risk Management Workshop

From May 24 to 26, 2016, NCSL and NARUC cohosted a workshop on energy risk and critical infrastructure. The

SLTT Energy Assurance Program participated in this OE-sponsored event to provide energy assurance and resilience perspectives to state legislators. The workshop discussed near and long-term energy outlooks, grid modernization, threats to the power system, grid security against cyber incidents, resilience, restoration, and reliability and included a tour of Western Area Power Administration's Electric Power Training Center.



Engaging state lawmakers on the importance of energy assurance can help ensure they emphasize it in state legislative policies around the country.

2016 NCSL Energy Policy Summit Federal and Industry Actions to Address Risks

On August 8, 2016, ISER's Deputy Assistant Secretary, Devon Streit, spoke on the "Weathering the Storm - Risk, Vulnerability, and the Electric Grid" panel at NCSL's Annual Legislative Summit¹¹ in Chicago. The panel, which also included Scott Aaronson of Edison Electric Institute and Duane Highley of Arkansas Electric Cooperative Corporation, explored the risks confronting the modern grid, the costs of power failure, and approaches for securing the grid against all types of threats.



National Emergency Management Association (NEMA)

National Homeland Security Consortium

On July 26, 2016, the National Homeland Security Consortium (NHSC) was held in New York City. The NHSC, made up of governors' homeland security advisors and emergency managers, meets biannually and discusses a wide variety of topics from law enforcement to emergency preparedness. OE/ISER's Director of Preparedness and Exercises, Puesh Kumar, spoke on a panel featuring industry and Federal partners on threats to the Nation's energy supply.

National Exercises Lessons Learned Webinar

NEMA and DOE hosted a joint webinar on November 18, 2016, focused on lessons learned and priority issues from the Clear Path IV and Cascadia Rising exercises. Speakers represented DOE, the Oregon Department of Energy, and the Washington Emergency Management Division. There were 219 participants from around the country, representing both the public and private sectors, who attended the webinar.

The webinar is available for viewing here.¹²

219 participants

attended the

Clear Path IV/Cascadia Rising Seminar.

These participants represented the private and public sector and all levels of government.



National Governors Association (NGA)

Preparing States for Extreme Electrical Power Grid Outages

In 2014 and 2015, NGA hosted two roundtable discussions to better understand the consequences

for states in the event of a prolonged and widespread power outage. From these meetings, NGA hosted state-specific retreats in 2016 in Madison, Wisconsin, and Camp Murray, Washington, to help identify key issues associated with and develop actions that will improve their planning and response efforts in the event of a prolonged, widespread long-term outage of the electric power grid.

During these retreats, participants did the following:

- Identified gaps in existing energy assurance and emergency management plans
- Clarified roles and responsibilities of state, local,
 Federal, and private entities
- Improved their understanding of communication strategies and technologies
- Developed a draft list of action steps, including draft recommendations to the governor.

As a direct result of these state retreats, NGA published its Preparing States for Extreme Power Grid Outages report in November 2016. It highlighted the actions that governors can take to better prepare their states for a potential prolonged and widespread electrical power outage. This paper captures key findings from the roundtable discussions and state retreats previously hosted by NGA.

The paper can be found here.¹³

Improving State Coordination for Energy Assurance Planning

At the end of 2015, NGA hosted a 3-day learning lab that helped governor-designated teams from six states examine lessons learned from New Jersey's experience



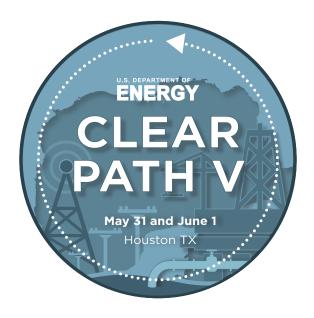
with Hurricane Sandy. In continuing to examine these lessons learned, *Improving State Coordination for Energy Assurance Planning and Response*¹⁴ was released in October 2016. This paper summarizes key takeaways and insights from the learning lab to help other states gain from New Jersey's experience, and it explores what governors and their staff can do to effectively coordinate relevant resources within their respective state before, during, and after a disaster.



THE YEAR AHEAD

In this constantly evolving threat landscape, persistence is just as vital as ever to protect and secure our national grid. SLTT responders are the first line of defense and warning to energy sector emergencies. Through the SLTT Energy Assurance Program, building resilience and implementing

measures to mitigate future impacts to critical energy infrastructure will help reduce the likelihood of a major disruption and reduce the time of recovery. For the coming year, there will be efforts to work with states to renew energy assurance plans, convene exercises to test our current capabilities, and create a comprehensive waiver library.



Clear Path V will be held on May 31 and June 1, 2017 at CenterPoint Energy in Houston, TX. The exercise will continue DOE's objective of bringing industry and government response partners together on an annual basis to advance lessons learned from real-world energy sector responses, energy focused exercises, industry recommendations, and DOE's desire to focus on cross-sector industry and government coordination. Clear Path V will also address the desire to conduct more issue-focused exercises that explore coordination between industry, state, and Federal partners in managing interdependencies within and between infrastructure sectors.

12 STATES

will update their

Energy Assurance Plans in 2017

The ISER Waiver Library will be a publicly available resource that provides states with information on declaring waivers during an emergency response.

Conduct training and exercises focused on regional cybersecurity, fuel planning, and resilience throughout the country.

APPENDIX A: POINTS OF CONTACT

This report was prepared by the U.S. Department of Energy's Office of Electricity Delivery and Energy Reliability under the direction of Patricia Hoffman, Acting-Assistant Secretary, and Devon Streit, Deputy Assistant Secretary.

For questions about the State, Local, Tribal, and Territorial Energy Assurance Program, please contact Matthew Duncan (matthew.d.duncan@hq.doe.gov).

For general inquiries about OE/ISER, please contact the Energy Response Center Inbox (EnergyResponseCenter@hq.doe.gov) or call 202-586-2264.

Matt Williams of BCS, Incorporated contributed to the development of this report.

APPENDIX B: ACRONYMS

APPA American Public Power Association

CEC California Energy Commission

DHS U.S. Department of Homeland Security

DOE U.S. Department of Energy

EAGLE-I Environment for Analysis of Geo-Located Energy Information

EEAC Energy Emergency Assurance Coordinator

EIA U.S. Energy Information Administration

EMP Electromagnetic Pulse

EOC Emergency Operations Center

ESF Emergency System Function

FEMA Federal Emergency Management Agency

ISER Infrastructure Security and Energy Restoration

MAP Mutual Aid Playbook

MOU Memorandum of Understanding

NARUC National Association of Regulatory Utility Commissioners

NASEO National Association of State Energy Officials

NCSL National Conference of State Legislatures

NEMA National Emergency Management Association

NGA National Governors Association

NHSC National Homeland Security Consortium

OE Office of Electricity Delivery and Energy Reliability

PUC Public Utility Commission

SLTT State, Local, Tribal, and Territorial

APPENDIX C: REFERENCES

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