

Enabling States and Localities to Improve Energy Assurance and Resiliency Planning

Our communities depend on a secure, reliable energy infrastructure that is also resilient. At the same time, our Nation's energy infrastructure — a complex network of interconnected producers, pipelines, transmission and distribution lines, electricity substations, operational and business processes and supply chains — may be vulnerable to a variety of hazards. Stretching across jurisdictions and States to national borders, this "system of systems" is subject to a range of disruptions, from destructive weather to possible deliberate attacks. Although it is the job of the Nation's energy service providers to keep energy flowing, it is also the responsibility of State and local officials to work toward energy assurance and resiliency.

Energy Assurance and Resiliency Defined

For the purposes of the EAP grant initiative, the terms energy assurance and resiliency have closely related but distinct definitions. Energy assurance is an activity; resiliency is the ultimate goal of that activity.

Energy assurance involves a vast array of activities and falls into three main categories: preparation and planning, mitigation and response, and education and outreach. Preparation and planning involve identifying key assets and points-of-contact, designing and updating energy emergency response plans, training personnel, and conducting exercises that test the effectiveness of response plans. Mitigation and response activities include monitoring events that may affect energy supplies, assessing the severity of disruptions, providing situational awareness, coordinating restoration efforts, and tracking recoveries. Education and outreach activities include communicating and coordinating with key stakeholders, increasing public awareness, and forming partnerships across sectors and jurisdictions.

Resiliency is the ability to respond effectively to an energy emergency and to recover quickly from damage. A resilient energy system is not necessarily damage-resistant. Rather, it is able to continue operating despite damage, and to return quickly to normal operations when damage occurs. Since energy systems are not 100 percent damage proof, resiliency is considered to be as important as damage prevention.

U.S. Department of Energy State and Local Energy Assurance Planning Initiative

The Infrastructure Security and Energy Restoration (ISER) Division of the U.S. Department of Energy's Office of Electricity Delivery and Energy reliability (DOE/ OE) announced an unprecedented grant opportunity under the American Recovery and Reinvestment Act of 2009 (ARRA 2009). This grant provides funds for States and localities to develop new energy assurance plans or refine existing ones.

The resulting Energy Assurance Planning (EAP) Initiative for State and Local Governments is a major element of DOE's effort to improve the Nation's energy sector resiliency. The overall goal of the three-year program is to work toward a more uniform, comprehensive energy assurance and resiliency approach that benefits localities, States, and the Nation.

Office of Electricity Delivery and Energy Reliability — Applying the Department of Energy's technical expertise to ensure the security, resiliency and survivability of key energy assets and critical energy infrastructure at home and abroad.

State Awards and Responsibilities

In August 2009 nearly \$38 million was awarded to States across the Nation to improve their emergency preparedness plans and to enable quick recovery and restoration from any energy supply disruption. States are using the funds to address energy supply disruption risks and vulnerabilities, with the aim of mitigating the devastating impacts that such incidents can have on the economy and on public health and safety. As a participant in the EAP Initiative, each State is required to track energy emergencies, to assess the restoration and recovery times of any supply disruptions, to train appropriate personnel on energy infrastructure and supply systems, and to participate in State and regional energy emergency exercises that will evaluate the effectiveness of their energy assurance plans. States are also required to address cyber security concerns and to prepare for the challenges of integrating smart grid technologies and renewable energy sources into their plans.

"These awards will help communities plan for quick, effective responses to a range of potential energy emergencies."

> - U.S. Department of Energy Secretary Steven Chu

Local Awards and Responsibilities

In February 2010 more than \$8 million was awarded to 43 cities and towns in 25 States to develop new or improve existing energy assurance plans. These grants are making it possible for local officials to enhance their ability to deal with disruptions to the regional energy supply systems, including the electricity grid; the refining, storage, and distribution of fossil fuels; and renewable energy sources. As grant recipients, localities will identify and assess energy disruption events, train personnel on energy infrastructure systems, and increase their knowledge of regional energy interdependencies.

To reach their common goals, both State and local grant recipients are encouraged to participate in outreach activities and to share information with each other and with their respective key stakeholder communities.

DOE Assistance for Plan Enhancement

Along with funding, DOE is providing interested grant recipients with guidance, support, and training to help with planning activities. For example, DOE is:

- Seeking input from State and local officials on their grant planning objectives.
- Supplying background information on infrastructure interdependencies, cyber security, smart grid technologies, and energy supply systems.
- Developing useful tools and resource materials to help State and local officials meet their grant requirements.
- Promoting information sharing and the coordination of disaster preparedness activities.
- Encouraging State and local officials to reach out and involve other relevant organizations in their planning efforts. Collaboration with DOE, other Federal agencies, and essential service providers (such as those in the public health field) will help build partnerships that bring energy providers together with those who have a stake in energy assurance.
- Helping State and local officials to develop new plans or refine existing ones, and encouraging the revision of policies and procedures to reflect these plans.
- Providing guidance on preparing for energy emergencies, assisting in developing and conducting energy assurance exercises; and documenting lessons learned from energy assurance exercises and events.
- Encouraging officials to develop comprehensive, uniform energy assurance plans across jurisdictions and to integrate them into broader emergency preparedness planning and homeland security activities.

For further information contact:

Alice Lippert, Senior Technical Advisor Office of Electricity Delivery and Energy Reliability U.S. Department of Energy Alice.Lippert@hq.doe.gov

