

Energy Assurance Program Update



Alice Lippert, U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability



Jeffrey Pillon, Energy Assurance Program
National Association of State Energy Officials

NASEO & ASERTTI

State Energy Policy and Technology Outlook Conference

Energy Data & Security Committee Meeting

February 9, 2012

Regional Multi-State Energy Assurance Exercises

Red Wave

Phoenix, AZ
November 29-30, 2011

West

Midwest

White Prairie

Chicago, IL
August 31 & Sept, 1, 2011

Amber Borealis

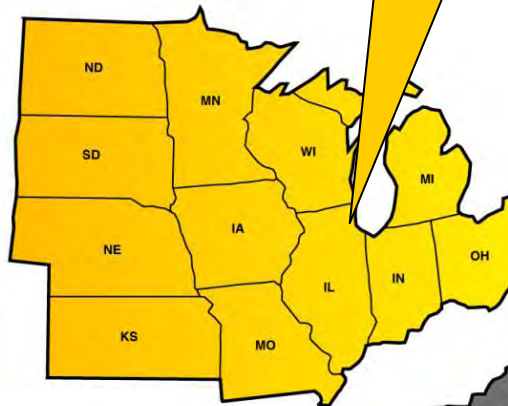
Boston, MA
June 16-17, 2011

Northeast

South

Red Earth

Raleigh NC
March 1-2, 2011





Regional Energy Assurance Exercises Goals

- Help participants to evaluate their energy emergency preparedness and test their energy assurance plans
- Provide the opportunity to participate in informational workshops on specific topics relevant to energy assurance and energy emergency response
- Increase participants' understanding of key aspects of energy markets and infrastructure in their region
- Help to satisfy State and Local grant recipients' interstate/regional exercise requirements

Scenarios explored

- Drought and low wind availability effecting energy production and demand.
- A hurricane making landfall in the Southeast, a disruption in a shipping channel, an explosion at an energy facility.
- A hurricane hitting the East Coast and the Northeast, the same track Hurricane Irene later followed. A Geomagnetic storm causing massive power outages.
- Cyber attacks on petroleum and natural gas infrastructure with cascading impacts on electric infrastructure in the Midwest region.
- Simultaneous explosions at multiple ethanol production plants and an attack on the electric grid with cascading effects on natural gas and petroleum operations.
- A 9.0 magnitude Cascadia earthquake and resulting tsunami, cyber attacks to the petroleum and natural gas infrastructures with cascading impacts on the electric infrastructure in the Western region.
- A wildcat trucking strike was also examined as part of each exercise.

Regional Exercises Lessons Learned

We can either carefully look at lessons learned from the 4 regional exercises and then work to improve our State Energy Assurance plans

OR



Regional Exercise Lessons Learned

Communications

- Keep industry, federal, State, and local contact information up to date, and maintain relationships. Identify the technologies that will be used (primary and back-up) and what will be communicated.
- Effective communication with the public is a critical component of emergency response, and can help manage public expectations. The public message should be coordinated within the State and among the effected States.
- Even if critical communications systems are in place, they can always be improved, both in terms of technology and methodology. Most often, the crucial issue is not so much what is known, but what is communicated and to whom.
- Establishing more robust communication mechanisms can significantly improve response. While emergency communication via email and cell phone is common, land-line including use of GETS cards, Wireless Priority Service (WPS) and/or satellite phones are other options. Phone numbers of key contacts should be readily available if electricity and cellular telecommunications are impacted by an emergency.

Regional Exercises Lessons Learned

Interdependencies

- Energy interdependencies must be understood and considered in the energy assurance planning process.
 - What impacts will port closures, pipeline problems; drought, hurricanes, etc. have on energy supplies? How will these affect establishment of energy supply priorities as well as response actions in other sectors?
- Interdependencies can compound the effects of an energy supply disruption, thereby limiting the response resources available from partner agencies that are also impacted. Maintain awareness of “just in time” deliveries and interdependencies for critical sectors when planning for disruptions.

Regional Exercises Lessons Learned

Roles and Responsibilities

- Clarifying response roles and responsibilities is critical; all relevant stakeholders must understand who is responsible for what, and when. Staff turnover and retirement issues will continue to pose challenges for building institutional knowledge and continuity.

Collaboration and Coordination

- Coordinating with Federal organizations and at the State and local level is critical. Collaborating with neighboring States, sharing data, and threat and consequence assessments is important for energy assurance planning and response.
- Energy assurance planning has helped increase the collaboration between States and private sector partners. Even if relationships have already been established they can always be improved, both in terms of planning and understanding. Include private sector partners and relevant stakeholders in planning and exercises.

Regional Exercises Lessons Learned

Resource Allocations

- Establishing priorities for allocating response resources and restoring services is an ongoing challenge, and one that must be tackled through consistent communication with infrastructure owners and operators during response. Responders must have some understanding of plans maintained by the private sector and other regional partners.

Planning and Preparedness

- Energy Assurance Plans need to be regularly updated to reflect the full range of energy emergency issues in an all-hazards environment.
- Regular training and exercises are needed. Plans need to be exercised. Participation in exercises allows senior-level officials and new staff to understand interdependency impacts. Exercises present strong opportunities to build and sustain relationships with other agencies and the energy industries.
- Increase efforts to plan for non-weather related events and how they could affect response efforts. Make certain interdependencies and cyber security are addressed in the EAP.

NOAA: 2011 a year of climate extremes in the United States



http://www.noaanews.noaa.gov/stories2012/20120119_global_stats.html

Sustainment of Energy Assurance Capabilities

- Last year the United States had a record 10 weather disasters costing more than a billion dollars.
- Hurricane Irene alone caused 6 million homes and businesses to lose power, and resulted in an estimated \$7 billion in overall losses plus \$3 billion in insurance coverage.
- Over \$38 million has been invested nationally to enhance the EA capability at the State and local level.
- How do we maintain this capability?
- What type of training and exercises may be needed?
- What may be additional options?



The 370-foot tanker Renda, heading to Nome Alaska with more than 1.3 million gallons of fuel

Some Options for Sustainment of EA Capabilities

- Include in your plans requirements for periodic review and updates every two or three years.
- Request the Governor's office to issue an executive order or directive to maintain the plans and capabilities. Public Utility Commissions could also take actions to order or direct Staff to do the same.
- Require annual updates to State, local and energy industry contact lists.
- Include or reference your EA plan in the State's Emergency Response Plan and as part of any ESF-12 Annex.
- Include Energy Assurance responsibilities as part of individual position descriptions.
- Require as part of your workforce development plan, or as part of the training requirement in your EA, plan training for new people and refresher training for existing staff.

State EA Plans on the ISErnet

- State have been encouraged to post their Energy Assurance Plans on the ISErnet.
- This is intended to:
 - Encourage regional collaboration;
 - Share best practices;
 - Promote more consistent approaches and responses to facilitate implementation;
 - Increase awareness of actions that might be taken by other States within your region; and
 - Improve communications.

Energy Assurance Training

- Staff turn over, retirements, reorganizations, and elections can all create the need for training new Staff and policymakers.
- Periodic refresher training is also needed for existing staff.
- Part of workforce development plans funded by the EA grant
- Training requirements should also be part of your Energy Assurance plans that address preparedness.
- Work is underway to develop on-line training for Energy Assurance.
 - Basic introductory training will be offered as soon as a pilot is developed and is intended for staff and policymakers new to Energy Assurance. Topics for an advanced training are also being considered.
 - Your thoughts on training topics that would be most helpful are welcome.

Intra and Inter State Exercises

- State have learned how to conduct Energy Assurance Exercises
- Table-Top-in-the Box is an important resource that can simplify planning and conducting an exercise
- State are encouraged to have periodic State level exercises and have a multi-State regional exercise every two to three years.



Energy Assurance National Meeting

- A national capstone for the Energy Assurance program
- Highlight lessons learned
- Showcase innovative and well developed plans and procedures
- Identifying approaches and strategies to sustain State and local Energy Assurance capabilities.
- Discuss the next steps
- Ideas for topics and issues to be address are welcome.

***Save the Date: June 28-29, 2012
Gaylord Hotel, National Harbor,
Washington, D.C.***



Video from the Midwest Regional Energy Assurance Exercise

To view the video go to: <http://naseo.org/energyassurance/index.html>

Questions and Discussion

For more information contact:

Alice Lippert, DOE/OE

Alice.lippert@hq.doe.gov

201-586-9600

Jeff Pillon, NASEO

jpillon@naseo.org

517-580-7626

