



## State Energy Assurance Planning Framework & Multi-State Energy Assurance Exercise



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*November 2010 Webcasts*

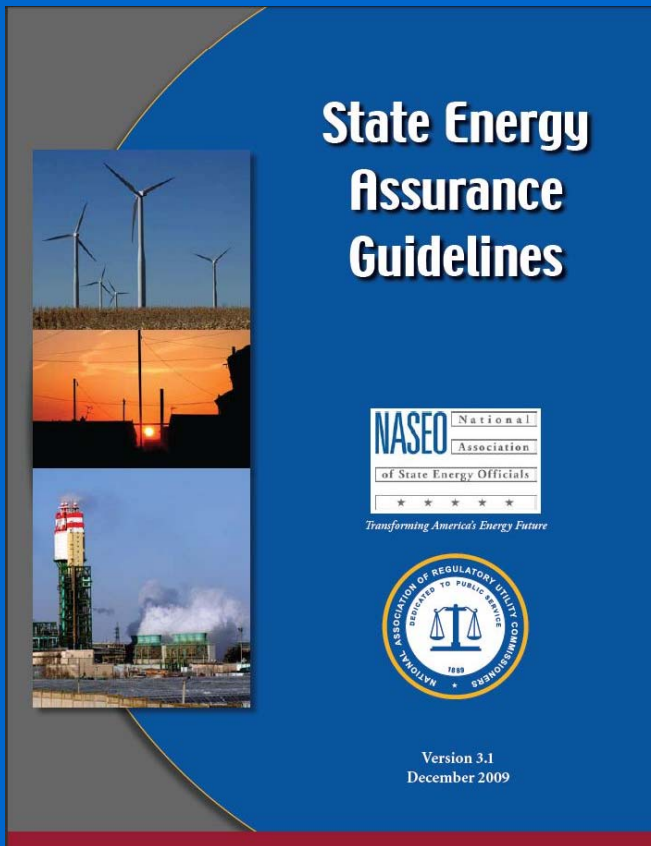
Regional Energy Assurance Coordination

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## Energy Assurance Planning (EAP) Schedule

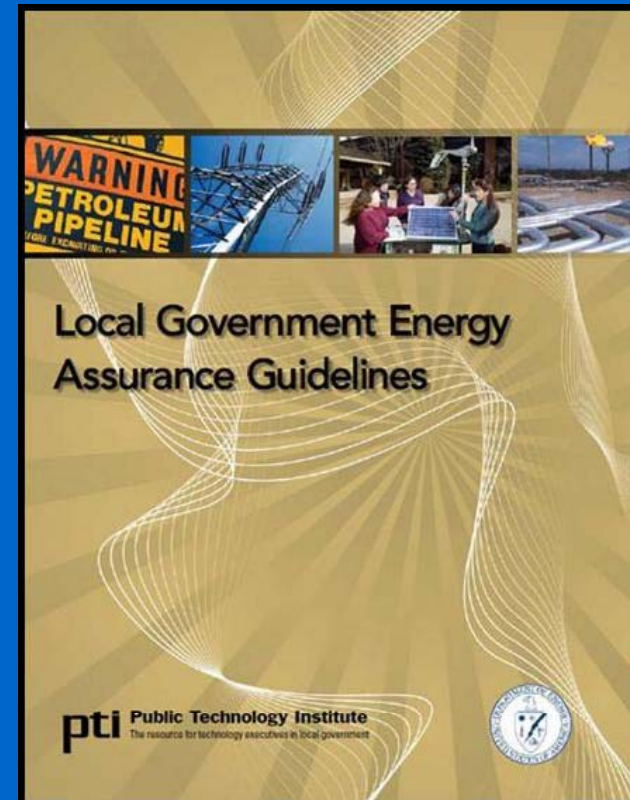
- Management Plan
  - (October 2009)
- Workforce Development Plan
  - (November 2009)
- Energy Supply Disruption Tracking Process
  - (August 2010)
- Energy Assurance Plan(s) due within 18 months.
  - (February 2011)

# EAP Available Resources



[www.naseo.org/eaguidelines](http://www.naseo.org/eaguidelines)

[www.energyassurance.us](http://www.energyassurance.us)



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# Energy Assurance -- Response & Prevention

## ***Energy Emergency Preparedness***

Because you can't protect everything, being ready to rapidly respond can minimize the consequences

## ***Critical Infrastructure Protection***

Building Resiliency & Reducing Risk



## ***An All Hazards Approach***



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• [naseo.org/eaguidelines/framework/](http://naseo.org/eaguidelines/framework/)

## EA Planning Framework

- Executive Summary and Management Guide to the Plan
- Introduction and purpose of the document(s)
- Summary Description of the State's Energy Used and Expenditures.
- Description of events that have cause energy shortages, the state's response and the risk of future events.
- State agencies and their roles and responsibilities (include organizational charts) and relationship with Federal, Regional and Local Authorities.
- Linkage and Coordination with:
  - other states and federal response plans
  - Local government plans
  - private sector/energy sector plans



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- [naseo.org/eaguidelines/framework/](http://naseo.org/eaguidelines/framework/)

## EA Planning Framework (Cont.)

- Methods for assessing the consequences, severity and potential duration of an energy emergency and tracking the rate of recovery.
- Emergency Communication Procedures
  - Use of the Energy Emergency Assurance Coordinators (EEAC)
  - Internal notification and situation updates
  - External Public Information Programs and Outreach
- Management Decision Process
- Legal authorities



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# Natural Gas Shortage Plan

- Description, location, points of contact, capacity and throughput of natural gas Infrastructure
- Monitoring Supply and Demand
  - Describe how the disruption or energy emergency will be monitored and the data, tools and methods that will be used.
  - Describe how response and recovery efforts will be monitored and how estimated of the rate of recovery to normal conditions will be monitored.
- Managing Supply and Assuring Essential Public Needs
  - Curtailment provisions in Local Distribution Utilities tariffs, or Public Utility Commission rules or orders for
    - End use customers
    - Transportation customers
    - Gas fired electric generation
- Reducing Demand
  - Emergency Conservation Measures



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## Emergency Electrical Procedures

- Description and location capacity and throughput of electric generation, transmission and distribution Infrastructure including renewable energy resources and energy efficiency programs
- Description of systems used to supply energy resources for power generation
- Monitoring Supply and Demand
  - Describe how the disruption or energy emergency will be monitored and the data, tools and methods that will be used.
  - Describe how response and recovery efforts will be monitored and how estimated of the rate of recovery to normal conditions will be monitored.
- Independent System Operator Emergency Response Plan Summary
- Transmission System Operator Emergency Response Plan Summary
- Local Distribution Utility Emergency Response Plan Summary



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# Emergency Electrical Procedures

- Public Utility Commissions involved in outage monitoring & recovery
- Smart Grid role and use in outages (if applicable)
- Renewable energy resources, wind, solar, hydroelectric, geothermal
- Managing Supply and Assuring Essential Public Needs
- Reducing Demand
- Expanded Energy Efficiency
- Demand response
  - Public Appeals Peak Load days
  - Appeals from State Government

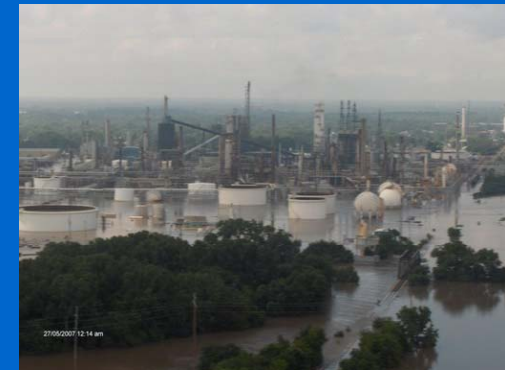


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# Petroleum Shortage Response Plans

Gasoline, Diesel Fuel, #2 Heating Oil, Propane, Ethanol, Biodiesel, Other.

- Description, location, points of contact, capacity and throughput of petroleum Infrastructure
- Monitoring Petroleum Supply and Demand
  - Describe how the disruption or energy emergency will be and the data, tools and methods that are available to undertake the assessment
  - Describe how response and recovery efforts will be monitored and how estimated of the rate of recovery to normal conditions will be monitored



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# Petroleum Shortage Response Plans

Gasoline, Diesel Fuel, #2 Heating Oil, Propane, Ethanol, Biodiesel, Other.

- Managing Supply and Assuring Essential Public Needs, examples include, but are not limited to:
  - Driver Hour Waivers
  - Fuel Specification (Environmental) Waivers
  - Priority Energy Users Programs/Policies
  - State Set-aside program
  - Plans for resupply of gas stations on evacuation routes
- Reducing Demand, examples include, but are not limited to:
  - Flexible work schedules and telecommuting
  - Ridesharing/vanpooling programs
  - Programs to increase the use of mass transit
  - Improved vehicle maintenance
  - Public Information emergency conservation actions
  - Home energy saving recommendations (propane, fuel oil)



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<http://naseo.org/eaguidelines/framework/level3.html>

## Elements of Response Measures

- **Program Elements**

- Description of the Measure
- Intent of the Measure
- When the Measure should be used
- Legal Authority

- **Coordination**

- Private and public sectors
- State Disaster Plan
- Affects on other jurisdictions, regionally and federally
- Role of local governments

- **Implementation**

- budget and staffing
- computer requirements and security
- Implementation lead time

- **Impact Assessment**

- Demand reduction
- Reductions in fuel consumption
- Increase in supply
- Interdependency effects
- Economic/financial impacts

- **Risk Management**

- Historical performance and deviation of response measure (i.e. lessons from the past)
- Define and monitor critical elements for the successful performance of the response measure
- Identify medium-to-long term impacts to reduce unintended consequences.

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## *Critical Infrastructure Plans*

### Enhancing Critical Energy Infrastructure Resiliency

- Description and prioritization of critical state energy infrastructure and key assets
- Assessing risk, vulnerabilities, criticality and the nature of the threats
- Identifying Protective Measures
- Developing investments that build resiliency
  - Diversification of energy sources (Energy Efficiency & Renewables)
  - Build redundant systems to enhance reliability
  - Increased efficiency of systems
  - Investments in Smart Grid & Cyber Security
- Protecting sensitive information
- Building partnerships Public/Private Sectors, Federal, state, local and tribal governments.

***Who in your state is working on critical energy infrastructure issues?***

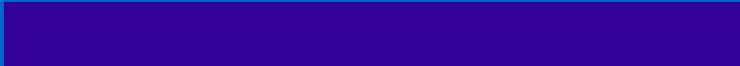
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# Questions and Discussion



Framework – are there other elements in your planning that also should be considered?

What are mechanism that could enhance multi-state regional planning and coordination?



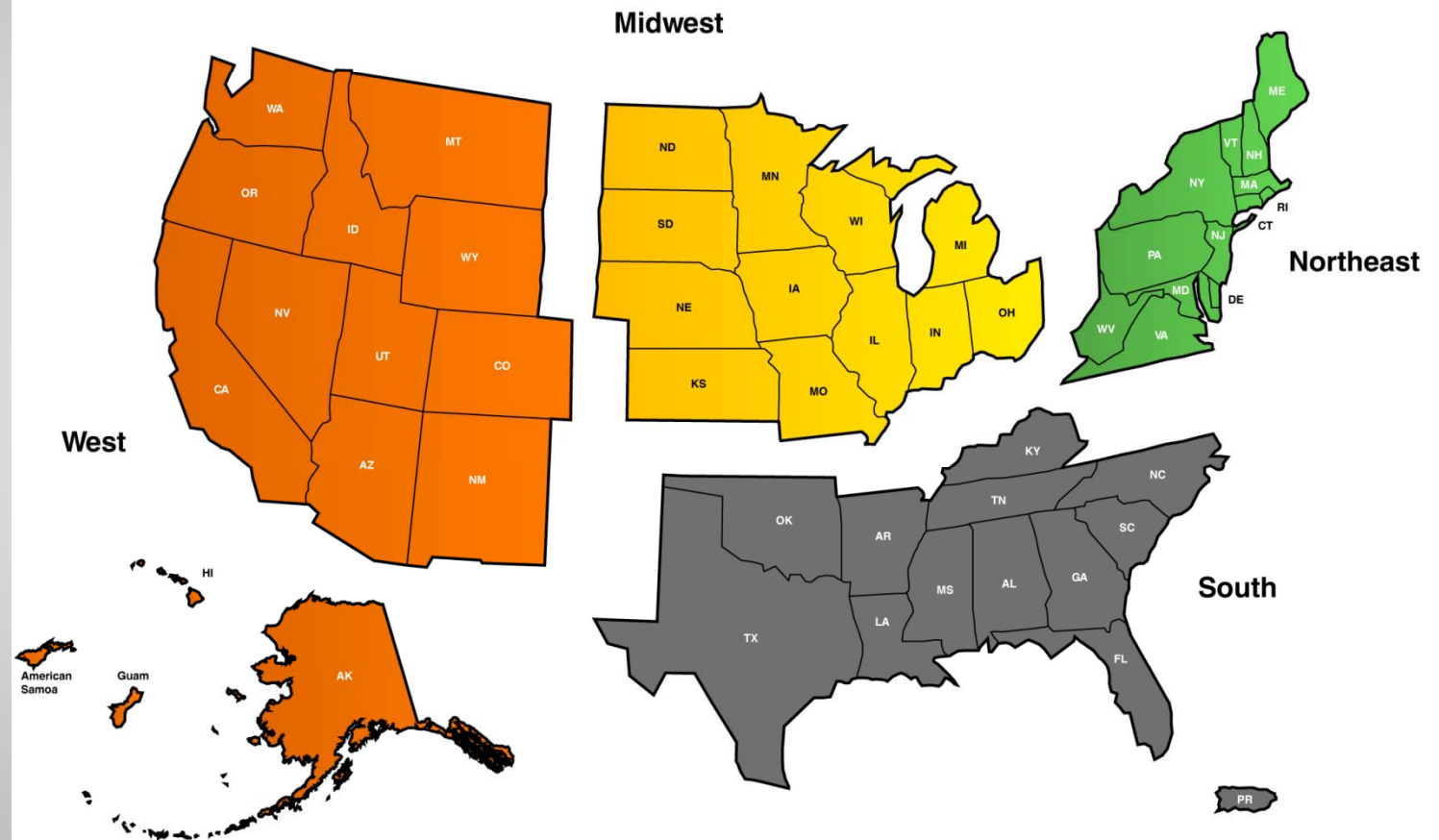
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# Schedule for Exercises & Final Plans

- **Energy Assurance Plan(s)** due [February 2011](#)
- **Energy Assurance Exercise:**
  - Intra-state training/exercise(s) due [August 2011](#)  
After-action exercise report due [September 2011](#)
  - Inter-state/regional training/exercises due [February 2012](#)  
After-action exercise report due [March 2012](#)
- **Final Energy Assurance Plans**
  - Revision to Energy Assurance Plans as suggested by the Exercises and Final Plans due [August 2012](#)

# Regional Energy Assurance Exercises

The regional exercises are designed for the State and Local Energy Assurance grantees and will satisfy the grant requirements for the interstate exercise. Each regional exercise will be held in conjunction with an educational workshop designed to help participants with specific topics related to energy assurance planning.





# Timeline & Participation

## Timeline:

- *South – March 2011*
- *Northeast – June 2011*
- *Midwest & West – 2<sup>nd</sup> half of 2011*

## State and Local Participation:

- *What staff from your agency and other State agencies would you like to invite and have involved in this exercise?*
- *Which of your private sector partners would you recommend be invited to the exercise?*
- *Local EAP grant recipients will be invited*

# Local Government Participants



# Exercise Objectives

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Regional Exercise objectives include:

- *Exercising and reviewing energy assurance plans to identify gaps and areas of improvement, including new energy portfolios and smart grid applications*
- *Examining energy emergency response and recovery policies and legal authorities*
- *Identifying and understanding energy assurance roles and responsibilities of respective stakeholders*

# Discussions *cont.*



**What energy related interdependencies would you like to have explored in an exercise scenario?**



# Discussions

## **Potential Exercises workshop topic areas could include:**

- *Cyber Security*
- *Federal Government roles & responsibilities during response*
  - *Fuel and Driver Hour Waivers*
- *Crises Communication*
- *Multi-State Coordination*
- *Understanding Energy Infrastructure Supply Systems*
- *Smart Grid and New Energy Portfolios*
- *Identifying and Analyzing Interdependencies*

**What areas are you most interested in?**

**Are there other topics you'd like to see presented?**

# Technical Assistance & Training

- Energy Assurance and the National Level Exercises (NEL) New Madrid Earthquake for Midwest States (November 18<sup>th</sup> tentative)
- What other topics or subjects would be helpful to address?
  - Incorporating Smart Grid and Cyber Security in Energy Assurance Plans
  - A review of the DOE study titled Hardening and Resiliency: U.S. Energy Industry Response to Recent Hurricanes Seasons
  - Development of state critical energy infrastructure plans and risk, vulnerability, and consequence analysis of critical energy infrastructure
  - Measures to consider including in petroleum contingency plans
    - Assuring petroleum supplies for essential public service
    - Model contingency measures
    - Utilizing Waivers – EPA Fuel and Driver Hour
  - Supply disruption tracking process improvements
  - Table Top in A Box Energy Emergency Exercise Tool Kit
- Means for delivering assistance and training?
  - Webinars
  - Planning guides
  - Website resources
  - Copies of other states planning efforts

# Questions and Other Issues

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