Enabling States and Localities to Improve Energy Assurance & Resiliency Planning

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DOE/OE Recovery Act Funding

American Recovery and Reinvestment Act (ARRA)

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Department of Energy

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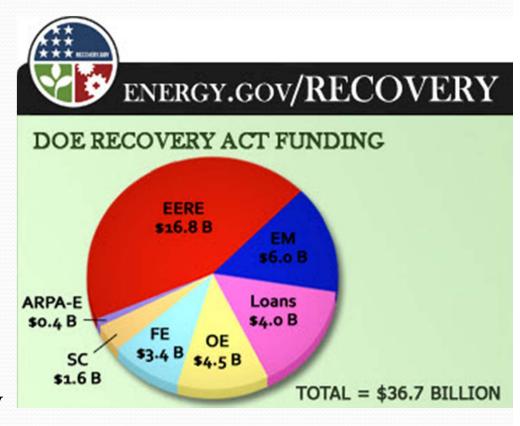
Office of Electricity Delivery and Energy Reliability (OE)

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Infrastructure Security and Energy Restoration Division (ISER)

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States & Localities

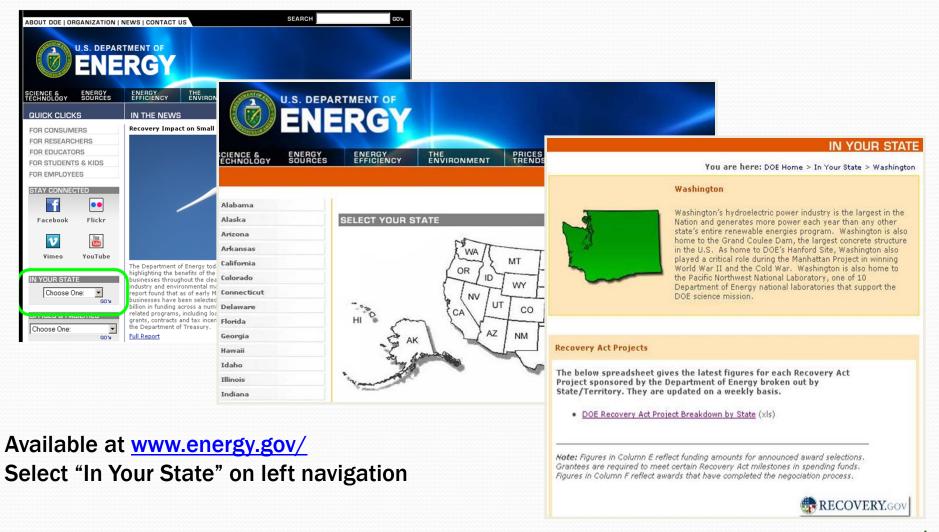


Our ARRA Home Page

OFFICE OF ELECTRICITY DELIVERY & ENERGY RELIABILITY You are here: DOE Home > OE Home > American Recovery & Reinvestment Act **OE Home** About Us Contributing to Our Our Organization Nation's Recovery **OE Recovery Act** Our Work Information Center AMERICAN RECOVERY & REINVESTMENT ACT News Room & Events Budget An Overview of the American Recovery and Reinvestment *OE RECOVERY ACT* Act of 2009 (Recovery Act) Contact Us PROJECTS The American Recovery and Reinvestment Act of 2009 (Recovery Funding Opportunities Act) - which President Obama signed into law on February 17th, Site Map 2009 - is an unprecedented action to stimulate the economy. It Frequently Asked includes measures to modernize our nation's energy and Questions Quick Reference communication infrastructure and enhance energy independence. As President Obama stated, "The investment we're making today will create a newer, smarter electric grid that will allow for Smart SMART GRID broader use of alternative energy." INVESTMENT GRANTS Grid Electricity Smart Grid Investment **Primers** 101 Grant Selectee VISIT WEBSITE VISIT WEBSITE V RECOVERY WHAT'S NEW Information Smart Grid Investment July 23, 2010 -- The Department of Energy (DOE) invites public Grant Award Situation Energy Assurance Daily comment on its request to the Office of Management and Budget Announcement Reports (OMB) to extend for three years the emergency Information VISIT WEBSITE > VISIT WEBSITE > Collection Request Title: OE Recovery Act Financial Assistance Grants, OMB Control No. 1910-5149 that DOE is submitting to SMART GRID DEMO OMB pursuant to the Paperwork Reduction Act of 1995. PROJECTS Comments due on or before August 23, 2010. More > Smart Grid Demonstration Projects Announcement May 28, 2010 -- Federal Register Notice on the DOE's invitation VISIT WEBSITE V for public comment on its intent to request the Office of WORKFORCE TRAINING Management and Budget (OMB) to extend for three years the FOR THE ELECTRIC emergency Information Collection Request Title: OE Recovery Act POWER SECTOR

Available at: http://www.oe.energy.gov/american recovery reinvestment act.htm

State ARRA Projects



Local ARRA Grant Awards



Implementation Strategy

ARRA State & Local Government Energy Assurance Implementation Strategy, Tasks & Activities

Task 1. Gaining understanding of State and Local needs to meet ARRA requirements.

Task 2. Education and Training on energy assurance and resiliency and priority issues, and on how to develop new, or refine existing plans.

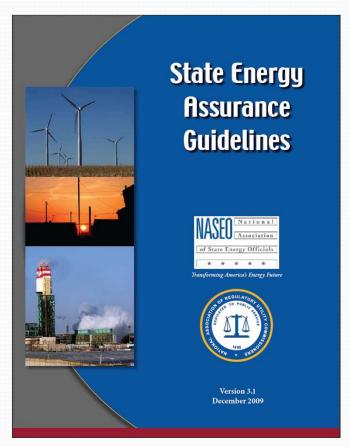
Task 3. Assistance in building collaborative partnerships to foster energy assurance.

Task 4. Provide tools, templates, and resource materials to help meet ARRA requirements.

Task 5. Document energy assurance lessons learned from exercises, incidents, and ARRA related activities, and promote/facilitate information sharing and coordination, exchanging energy assurance and resiliency best practices.

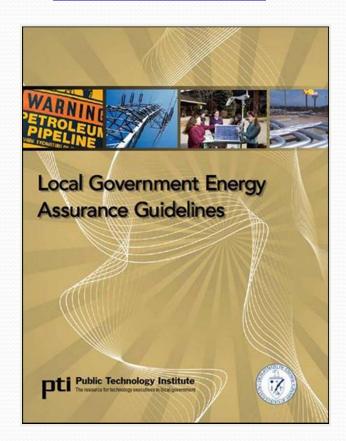
Task 6. Work with States and Localities to develop a uniform, comprehensive energy assurance and resilience approach.

Energy Assurance Planning Resources



naseo.org/energyassurance

energyassurance.us



Energy Assurance Planning Framework

- Executive Summary
- Introduction and purpose.
- State's Energy Used and Expenditures.
- Past state energy shortages, and the response and future risks
- State agencies roles and responsibilities
- Methods for assessing the consequences and severity of energy emergencies and tracking the rate of recovery.
- Emergency Communication Procedure
- Management Decision Process
- Legal authorities
- Public Information Program

http://naseo.org/eaguidelines/framework/



EA Planning Framework, Cont.

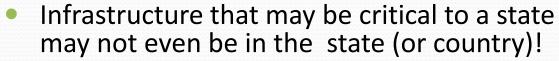
- Energy Emergency Response Plans
 - Natural Gas often governed by tariffs or rules approved by PUCs also gas safety and security.
 - <u>Electricity</u> and energy resource used to generate electricity or manage demand including: coal, natural gas, nuclear, energy efficiency, renewable resources and Smart Grid, etc.
 - <u>Petroleum</u> including: ethanol, biodiesel and other alternatives.
- What are the linkages to other state, local, and federal government and the private energy sector response plans and procedures.

The risk of a disruption due to a cyber attack should be addressed as part of the plans for each energy resource

State Plans for Critical Energy Infrastructure

- States plans for reducing risk and building resiliency.
- What are the state agencies roles and responsibilities?
- Describe and prioritize critical state energy infrastructures and key assets.
- Assess risk, vulnerabilities, criticality and the nature of the threat/hazards
- Identify risk reductions and resiliency measures, some examples are:
 - Diversification of energy sources and integration of renewable resources (wind, solar geothermal, other.
 - Increased efficiency of systems.
 - Development of Smart Grid.
 - Cyber Security
- Policies and Procedures for handling sensitive information
- Describe public private partnership as envisioned in the National Infrastructure Protection Plan and Energy Sector Specific plan?

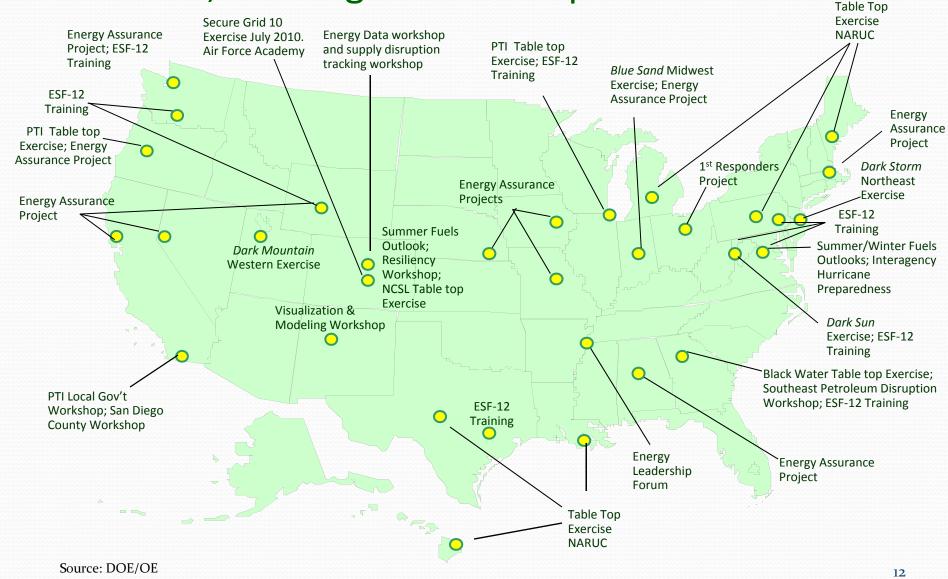
Multi-State Regional Coordination





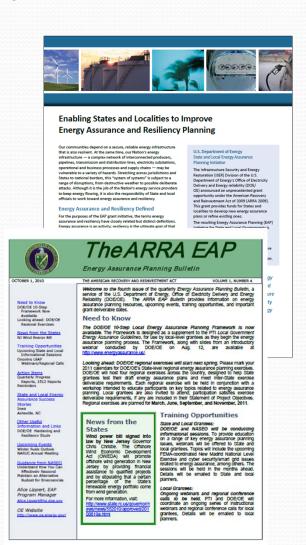
- Wholesale electricity market and the role of Independent System Operators has created new regional markets.
- Refined petroleum product distribution is also regional in nature and refineries supply multiple states.
- Natural gas is a North American market and reliant on Interstate pipelines.
- States need to know contacts for the energy sector and in other governments in their region.
- State response plans need to be coordinated, locally and regionally.
- The Energy Emergency Assurance Coordinators (EEAC) provides for regional coordination and crises communication.
- Regional Energy Emergency Exercises can improve coordination.





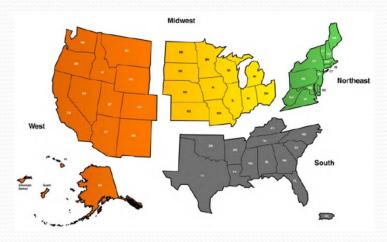
NASEO and DOE/OE Technical Supports to States

- Webinars
 - Energy Emergency Assurance Coordinators
 - Geographical Information Systems, iCAV, DHS Earth and iMapData
- Workshop on Data & Consequence Assessments.
 - Summer & Winter Fuels Outlook Conferences
- Regular state and local conference calls to promote coordination.
- DOE/OE Quarterly Energy Assurance Planning Bulletins and information Brochures
- Presentation at NARUC, NASEO, PTI and other partners meetings
- Web-based Energy Assurance Planning Resource
 - http://naseo.org/energyassurance
 - http://www.energyassurance.us



Upcoming Activities

 Four Multi State Regional Energy Emergency Exercises planned for 2011



- Additional Webinars are under development may include:
 - The New Madrid Seismic Zone National level Exercise,
 - Key Elements of Energy Assurance Plans,
 - Cyber Security and Smart Grid,
 - Risk and vulnerability assessments,
 - Petroleum contingency plans.
 - Methods for conducting table top intra-state exercises
- An increased efforts to coordinate federal, state and locals plans and private energy sector plans.

Smart Grid & Cyber Security

 NASEO and EPRI are developing a paper on "Smart Grid & Cyber Security for Energy Assurance"

Smart Grid

- Describe smart grid implementation in the state.
- Future planned smart grid Investments and projects.
- List regulatory actions, State policies and programs to support Smart Grid implementation.
- Other Smart Grid projects and funding, private or public.
- Evaluate Smart Grid benefits that contribute to a more resilient, secure and reliable power supply.

Cyber Security

- Building awareness and understanding of cyber security in states agencies and then in the energy sector.
- Identifying future standards and guidelines under development and how may they affect plans for smart grid deployment?
- Considering and address the human elements of cyber security



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