U.S. DEPARTMENT OF ENERGY
Office of Electricity Delivery and Energy Reliability

National Energy Preparedness

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National Association of State Energy Officials (NASEO) Annual Meeting

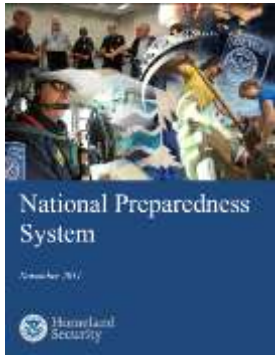
September 11, 2012

PPD-8: National Preparedness

September is National Preparedness Month

- HSPD-8 replaced by *Presidential Policy Directive 8 (PPD-8): National Preparedness*
- Signed by President Obama in March 30, 2011
- Focus on wide range of threats and hazards
- Five Mission Areas (Prevention, Protection, Mitigation, Response, and Recovery)
  - Five National Frameworks
  - Five Federal Interagency Plans

www.fema.gov/ppd8



Focus: Wide Range of Threats and Hazards

Pose a significant risk to the Nation

- **Natural hazards:** including hurricanes, earthquakes, tornados, wildfires, and floods
- **A virulent strain of pandemic influenza:** could kill hundreds of thousands and affect millions more, and result in significant economic loss
- **Technological and accidental hazards:** such as dam failures or oil spills; the likelihood of occurrence may increase due to aging infrastructure
- **Terrorism:** seeking to use WMD and conventional attacks
- **Cyber attacks:** can initiate other hazards such as power grid failures

Deliverables Mandated by PPD-8

- **Preparedness Goal:** Designed to prepare the Nation for the risks that will severely tax our collective capabilities and resources; it is the cornerstone of implementation of PPD-8
- **Preparedness System:** Describes and organizes an integrated set of guidance, programs, and processes to enable the Nation to meet the Goal
- **National Preparedness Report:** Provides a summary of the progress being made toward building, sustaining, and delivering the core capabilities described in the Goal
- **Five National Frameworks:** Addresses the roles and responsibilities across the whole of community to deliver the core capabilities
- **Five Federal Interagency Operational Plans:** Addresses the critical tasks, responsibilities, resourcing, personnel, and sourcing requirements for the core capabilities

DOE: Sector-Specific Agency for Energy

- Sector-Specific Agency for Energy (SSA Energy)
  - Federal departments and agencies identified in HSPD-7; those responsible for Critical Infrastructure/Key Resources (CI/KR) protection
- Emergency Support Function (ESF-12)
  - ESFs provide the structure for coordinating Federal interagency support for response to an incident; they are mechanisms for grouping functions most frequently used to provide Federal support to States and Federal-to-Federal support, both for declared disasters and emergencies under the Stafford Act and for non-Stafford Act incidents

Energy Preparedness

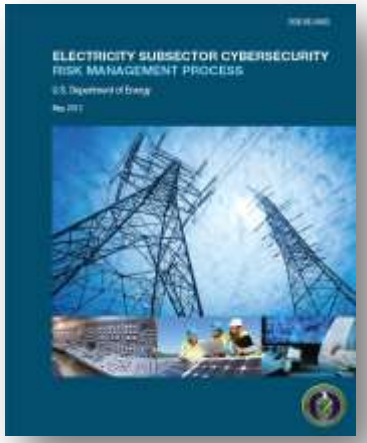
DOE prepares for energy events such as…

- **FEMA/Stafford Act Events (ESF-12):** hurricanes, earthquakes, ice storms, tsunamis...
- **Non-Stafford Act Events:** blackouts, droughts, oil spills...
- **Physical Infrastructure & Cyber Events:** refinery attacks, cyber attacks…
- **High-Impact and Low-Frequency Events:** pandemics, solar storms…
- **National Special Security Events:** Presidential Inauguration, Nuclear Summit, APEC Summit, G-8, Political Conventions...
- **International Events (limited):** Haiti, Guam, America Samoa, Japan…
- **Combinations of the above**

DOE/OE Cybersecurity Programs

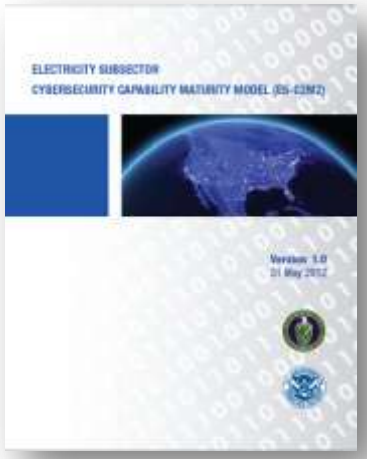
Electricity Subsector Cybersecurity Risk Management Process (RMP) Guideline

- Developed with public-private collaboration
- Helps electric subsector organizations better manage cybersecurity risks using a mission- and business process-focused approach
- Designed to improve communication of risk across the organization
- DOE will partner with private-sector organizations interested in voluntary pilot implementation of the RMP



Electricity Subsector Cybersecurity Capability Maturity Model (ES-C2M2)

- Developed with public-private collaboration
- Helps utilities consistently evaluate and prioritize cybersecurity capabilities, actions, and investments
- 17 pilot evaluations were used to refine the model
- DOE will partner with private-sector organizations interested in voluntary ES-C2M2 facilitated self-evaluations. Program participants will gain access to information-sharing portal with non-attributable benchmark data



DOE Activities to Enhance Preparedness

- Federal, State, and local exercises
- Workshops and exercises with utility owners and operators
- Energy sector task forces, panels, working groups
- White House led Interagency Policy Committees
- DOE's ESF-12 Regional Coordinators' interaction with regional, federal, and industry partners, and State/local government
- States and local outreach to develop energy assurance plans
- Monitoring, analytical, and reporting activities

Energy Preparedness and Response

DOE Authorities during an energy emergency

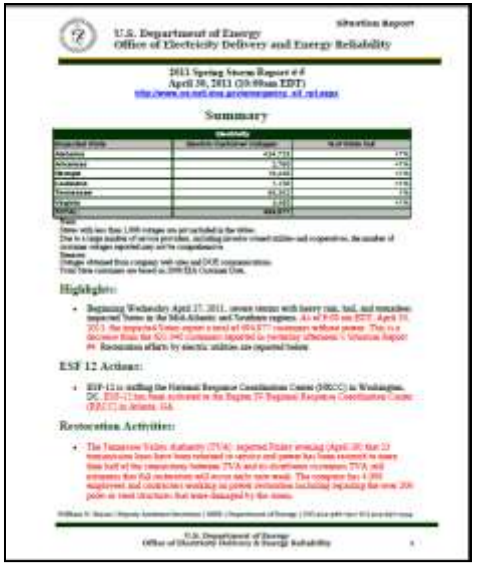
- Presidential Policy Directive 8 (PPD-8): National Preparedness
- Homeland Security Presidential Directive 7 (HSPD 7): Critical Infrastructure Identification, Prioritization, and Protection
- Department of Energy Organization Act
- Natural Gas Policy Act of 1978
- Energy Policy & Conservation Act (EPCA)
  - Strategic Petroleum Reserve (SPR) Release Authority
- Section 202(c) of the Federal Power Act
- Defense Production Act of 1950
- Executive Order 12656: Assignment of Emergency Preparedness Responsibilities

DOE Roles and Responsibilities During Disasters

- Serve as the Federal focal point for energy response and restoration issues and policy decisions related to energy infrastructure and systems
- Collect, assess, and provide information on energy supply, demand, and prices
- Facilitate energy restoration for events requiring a coordinated Federal response
- Serve as the Federal POC to private-sector energy partners during major disasters
- Leverage DOE expertise, capabilities, and resources
- Deploy ESF-12 Response Teams to affected areas to assist in response and restoration efforts

Communication and Situational Awareness

- Provide Situation Reports
  - http://www.oe.netl.doe.gov/emergency_sit_rpt.aspx
- Prepare Internal/External Briefings
  - Media Coordination
- Prepare Visualization Products
  - Internal real-time monitoring
  - Pre- and Post-Event Products
- Conduct energy infrastructure assessments and system analyses
- Review and conduct due diligence for waiver requests:
  - U.S. EPA: gasoline and diesel fuel
  - U.S. DOT: driver hours and weight limits
  - U.S. DHS: Jones Act - restrictions on tankers


U.S. Department of Energy
Office of Electricity Delivery and Energy Reliability

Summary

Highlights:

ESF 12 Actions:

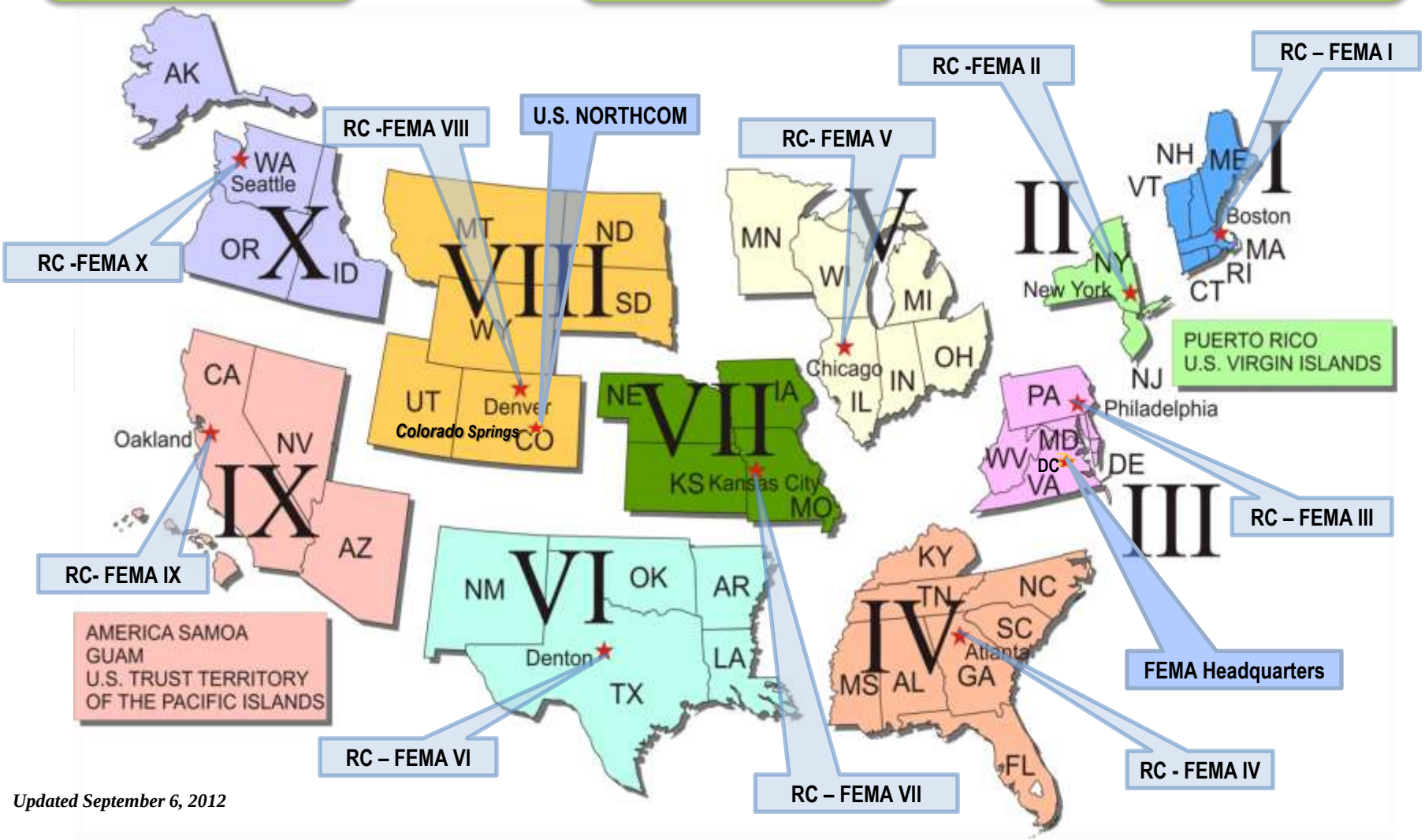
Restoration Activities:

DOE Regional Coordinators (RC)

Regional Program Manager
Western Region

Federal Program Manager

Regional Program Manager
Eastern Region



Updated September 6, 2012

Energy Stakeholders

Federal Agency Partners

- U.S. Army Corps of Engineers
- U.S. Department of Agriculture, Rural Utilities Service
- U.S. Department of Defense
- U.S. Department of Energy, Energy Information Administration
- U.S. Department of Energy, Office of Fossil Energy and Office of Policy and Intl Affairs
- U.S. Department of Health and Human Services
- U.S. Department of Homeland Security, Office of Infrastructure Protection
- U.S. Department of Homeland Security, Transportation Security Administration
- U.S. Department of Transportation, Committee on the Marine Transportation System
- U.S. Department of Transportation, Maritime Administration
- U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration
- U.S. Department of the Treasury
- U.S. Environmental Protection Agency
- Federal Energy Regulatory Commission
- U.S. Department of State, International Boundary and Water Commission
- U.S. Department of the Interior, Bureau of Safety and Environmental Enforcement

Energy Stakeholders and Partners

- **API** ***(American Petroleum Institute)***
- **AGA** ***(American Gas Association)***
- **AOPL** ***(Association of Oil Pipelines)***
- **NERC** ***(North American Electric Reliability Corporation)***
  - **NERC Regional Entities**
- **EEI** ***(Edison Electric Institute)***
- **SEE** ***(Southeastern Electric Exchange)***
- **APPA** ***(American Public Power Association)***
- **NRECA** ***(National Rural Electric Cooperative Association)***
- **NASEO** ***(National Association of State Energy Officials)***
- **NARUC** ***(National Association of Regulatory Utility Commissioners)***
- **NGA** ***(National Governors Association)***
- **NCSL** ***(National Conference of State Legislatures)***
- **PTI** ***(Public Technology Institute)***
- **NEMA** ***(National Emergency Management Association)***

- **State Governors' Offices**
- **State Legislators**
- **State Emergency Management Agencies**
- **State Energy Offices**
- **State Homeland Security Divisions**
- **State Public Utility Commissions**
- **Electric Cooperatives**
- **Public Municipal Utilities**
- **Investor-Owned Utilities**
- **Regional Transmission Operators**
- **Reliability Coordinators**
- **Regional Balancing Authorities**
- **Pipeline Companies**
- **Refiners**
- **Natural Gas Companies**

State and Local Energy Assurance Planning Initiative

State & Local Energy Assurance Initiative

- ARRA Grant Awards (issued in 2009 and 2010)
- 47 States, DC, 2 Territories, and 43 Cities
- Activities
  - Develop new or refine existing Energy Assurance Plans
  - Create State- and local-level expertise on Smart Grid systems, cyber security, interdependencies, and communications
  - Develop processes for tracking energy supply disruption events
  - Conduct energy emergency exercises
  - Revise appropriate State and local policies, procedures, and practices to reflect energy assurance plans
- Benefits for States and Cities
  - New/updated energy assurance plans
  - Improved coordination across State agencies, among States and regions
  - Improved recovery and restoration capabilities

http://energy.gov/oe/services/energy-assurance/incident-preparedness/state-and-local-energy-assurance-planning

EAP Implementation Strategy

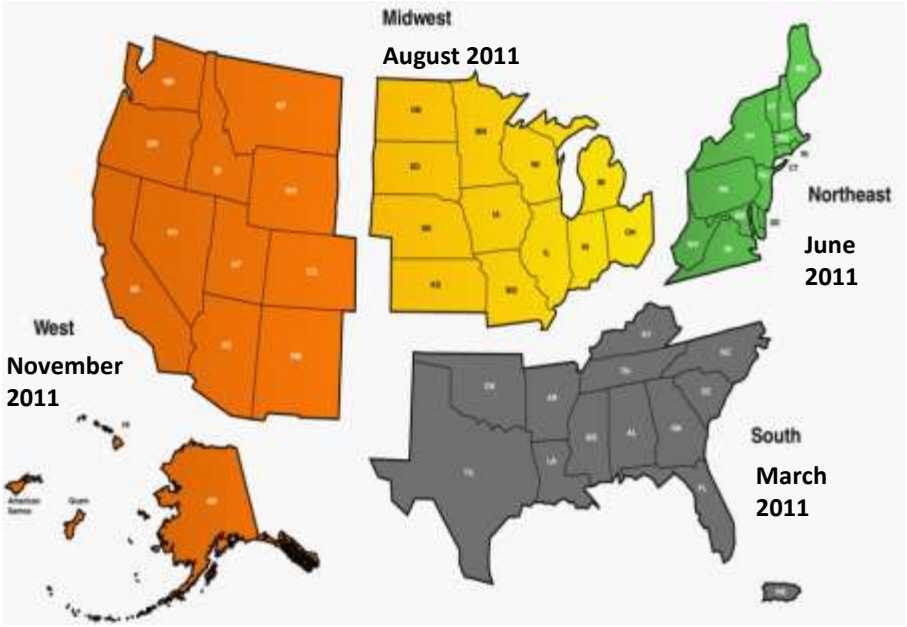
- Energy Assurance Strategy
  - Gain understanding of State and Local needs
  - Education and Training on energy assurance, resiliency, priority issues, and on how to develop new, or refine existing, plans
  - Assist building collaborative partnerships to foster energy assurance
  - Provide tools, templates, and resource materials
  - Document energy assurance lessons learned from exercises and incidents and promote/facilitate information sharing and coordination, exchanging energy assurance and resiliency best practices
  - Work with States and localities to develop a uniform, comprehensive energy assurance and resilience approach

Successes of SLEAP

- ARRA Awards to States and select Cities
- States and cities have Energy Assurance Plans
- States have Energy Disruption Mechanisms
- Four regional, one National as well as intra-State/local-level exercises and workshops
- Numerous conference calls and webinars hosted by DOE, NASEO, and PTI
- Improved State and regional coordination

Regional Multi-State Energy Assurance Exercises

- Four regional energy emergency tabletop exercises
- Opportunity to train appropriate personnel on energy infrastructure supply systems and test energy assurance plans
- Lessons Learned
  - Communications
  - Interdependencies
  - Roles and Responsibilities
  - Collaboration/Coordination
  - Resource Allocation



2012 National Energy Assurance Conference

- Highlighted lessons learned
- Showcased Plans and Procedures
- Conducted a National Table Top Exercise
- Discussed strategies to sustain State and local capabilities

June 28-29, 2012
Gaylord National Hotel
National Harbor, Maryland

EAP Conference Highlights

- Key Themes in Building and Maintaining A Strong Energy Assurance Program
  - Good communication protocols are the backbone of effective energy assurance plans and operations.
  - Established, trusted relationships are essential – they determine how effectively plans are implemented.
  - Managing turnover and learning from past events requires a “lather, rinse, repeat” approach to planning, drills, evaluation, and updating procedures.
  - Contracts and authorities in the EAP should be reviewed to ensure they work the as expected in an emergency.
  - Know backup assets and capabilities, which can inform restoration priorities and prevent surprises during an emergency.
  - Use cross-agency and cross-sector planning to reveal and plan for interdependencies.

State Lessons Learned

- State Approaches
  - State energy (assurance) offices are effective *connectors*
  - Coordinate Energy Assurance Plans with other States
  - Build templates and procedures to save time and paperwork in an emergency
  - Invite private sector participation
  - Gathering proprietary information on critical energy infrastructure requires established *trust* and *security*
  - Geo-based outage tracking services are effective and can boost situational awareness

Local Lessons Learned

- Local Approaches
  - Examine assets, capabilities, and risks in assessments of mission-critical facilities
  - Coordinate EAPs with State plans and other cities
  - Coordinate generator maintenance, testing, and fuel delivery across agencies
  - Coordination during an event is as critical as relationship-building before an event
  - Coordination during planning and exercises can reveal previously unknown capabilities of local partners and options to leverage them

SLEAP – Moving Forward

- Sustaining Preparedness
  - Educate the public on energy assurance measures using various media, including newsletters, blogs, and Facebook pages
  - Make energy assurance capabilities a required part of staff development and promote the capabilities to management; training should be required for new staff and periodic refresher training for existing staff
  - Predictive analysis can provide new insight into risk management and combat uncertainty
  - Leverage Threat and Hazard Identification for Risk Analysis (THIRA) program to assess risks and use identified gaps as a foundation for future funding
  - Convene a Lifelines Emergency Coordination Group to help develop energy emergency procedures that address multiple interdependencies

SLEAP – Moving Forward

- Turning Plans into Action
  - Leverage fusion centers and information sharing working groups to share information from the State/Federal Government and private sector to reduce risk
  - Maintain personal relationships to ensure better situational awareness and rapid recovery during an event
  - Update the State's energy profile to accurately reflect how energy is produced, transmitted, and distributed
  - Develop a common platform that displays this energy profile across the State and identifies interdependencies before and during an event
  - Direct outreach and education to emergency preparedness partners in other ESF support functions
  - Response to cyber disruptions follows the State's all-hazards approach, but cyber risk mitigation requires close coordination with security experts in the energy industry and Federal Government

Sustaining Energy Assurance Capabilities

- Energy Assurance Plans should be updated every one to two years
- The Governor's offices could issue an executive order or directive to maintain the plans and capabilities; Public Utility Commissions could also take corresponding actions
- Require annual updates to State, local, and energy industry contact lists
- Energy Assurance plans should be referenced in the State's Emergency Response Plans and as part of any ESF-12 Annex
- Energy Assurance responsibilities should be included in the position descriptions of staff with assigned EA duties
- Energy Assurance training should be required for new staff and periodic refresher training for existing staff
- Coordination should be continued with State and local governments and the private sector
- Conduct periodic intra-State and multi-State exercises

THANK YOU

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