



# The Smart Grid: A Regulator's Perspective

EEI Transmission, Distribution & Metering Conference  
Kansas City, MO  
Tuesday, October 13, 2009

Lena Mantle, P.E.  
Energy Department Manager  
Missouri Public Service Commission

# Disclaimer



Any opinions and positions in this presentation are my own and may or may not be that of the Missouri Public Service Commission or its Staff.

# Missouri Public Service Commission



- 5 Commissioners appointed by the Governor
- Staff of approximately 200
- Regulate investor-owned electric, natural gas, water, sewer, telephone, and manufactured housing
- Electric utilities are still vertically integrated in Missouri

# MoPSC Mission Statement



- ensure that Missourians receive safe and reliable utility services at just, reasonable and affordable rates;
- support economic development through either traditional rate of return regulation or competition, as required by law;
- establish standards so that competition will maintain or improve the quality of services provided to Missourians;
- provide the public the information they need to make educated utility choices;
- provide an efficient regulatory process that is responsive to all parties, and perform our duties ethically and professionally.

# Commission is a Quasi-Judicial Agency



- Ratemaking and safety authority
  - Rates are set on a “normalized” historical basis
  - Workload determined by utility filings
- Enacts legislation
  - Federal EAct of 2005, EISA of 2007 contained standards states must consider
  - State legislation

# DOE's Vision For Smart Grid

- Enable active participation by consumers
- Accommodate all generation and storage options
- Enable new products, services, and markets
- Optimize asset utilization and operate efficiently
- Provide power quality for the digital economy
- Operate resiliently against attack and natural disaster
- Anticipate & respond to system disturbances (self-heal)

<http://www.netl.doe.gov/moderngrid/resources.html#presentations>

## **MoPSC Mission Statement**

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## **Smart Grid Vision**

**Enable active participation by consumers**

**Accommodate all generation and storage options**

**Enable new products, services, and markets**

**Optimize asset utilization and operate efficiently**

**Provide power quality for the digital economy**

**Operate resiliently against attack and natural disaster**

**Anticipate & respond to system disturbances (self-heal)**

**So what's the problem?**

# Challenges - Financial

- Financial markets are driving utilities to minimize investments
- Resources at many utilities (both human and financial) are limited and stressed.

# Challenges - Regulatory

- Regulatory agency resources (both human and financial) are limited and stressed.
- The price of many new technologies is currently not competitive with traditional alternatives
- Incentives to stimulate modern grid investments that provide societal benefits are lacking.

# Challenges – Technical

- Incompatible equipment must be replaced if it cannot be retrofitted to be compatible with modern grid technologies.
- Industry technical staffs are reluctant to change planning and design traditions and standards.

# Challenges – Policy

- Legislators and regulators have not yet taken a strong leadership role in support of grid modernization.
  - The consequences of such actions as Renewable Portfolio Standards (RPS), carbon tax, cap and trade, and carbon capture and sequestration impact how the grid evolves and performs.

**Need flexibility and scalability because we don't have a straight-line future**

# Contact Information



Lena Mantle

Energy Department Manager

Missouri Public Service Commission

573-751-7520

[Lena.mantle@psc.mo.gov](mailto:Lena.mantle@psc.mo.gov)