

# THE FUTURE OF REGULATION



July 23, 2016

Commissioner Robert F. Powelson  
Pennsylvania Public Utility Commission

# A Story of Dynamic Regulation: A Pennsylvania Case Study

## Old Regulations

Historic Test Year



## New Regulations

Fully-Projected Future Test Year

Traditional Ratemaking



Riders, Trackers, Decoupling, CHP

Vertically Integrated Markets



Restructured Markets

## Innovative Laws & Regulations

Distribution System Improvement Charge (DSIC)

Marcellus Shale Gas Drilling Impact Fees

Experimental Authority Operating Certificates for Transportation Network  
Companies (TNCs)

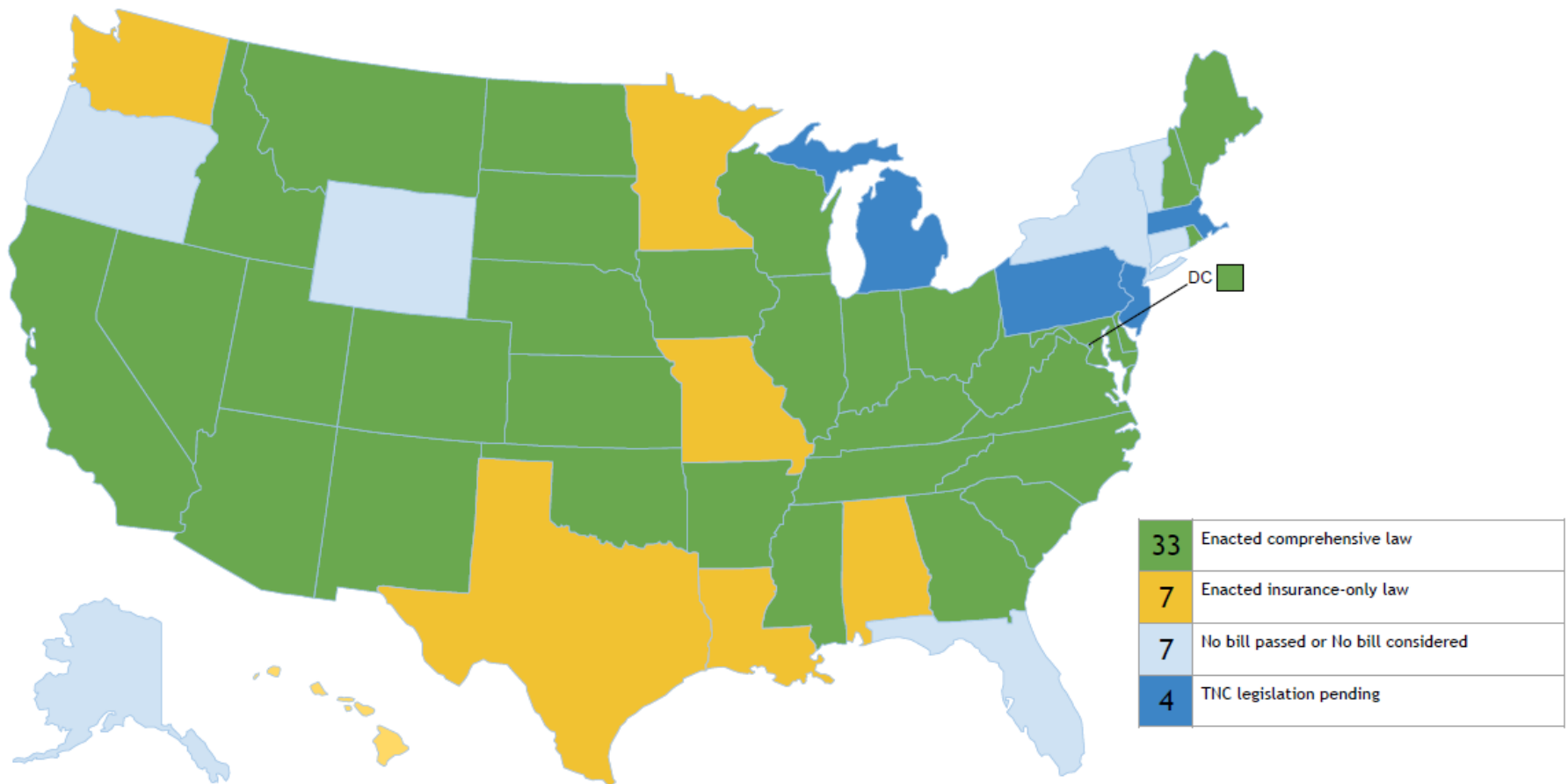
# Driving Forces of Innovation

<u>Driving Force</u>	<u>Innovation</u>
Motor Carrier Competition	Transportation Network Company (TNC) Regulation
Rail Incidents with Crude Oil Shipments	Enhanced Rail Transportation Safety
San Bruno and Allentown Pipeline Explosions	Accelerated Pipeline Replacement and Safety Initiatives
Hurricane Sandy, Polar Vortex, Derecho	Grid Upgrades and Modernization
Increased Customer Interest in Energy Usage Information	Smart Meter Technology

# Transportation 2.0

## TNC Laws - State by State

Last updated: June 30, 2016



\*TNC Legislation adopted in PA only applies to the City of Philadelphia

# Advancing Pipeline Replacement and Safety

## ▣ Lessons Learned

- San Bruno, Allentown, Texas Eastern Pipeline in Delmont

## ▣ Increased Emphasis on Pipeline Safety

- Maintain the protective adequacy of pipeline safety regulations
  - ✓ Reauthorization of the Pipeline Safety Act
  - ✓ East Coast PHMSA Safety Training Facility

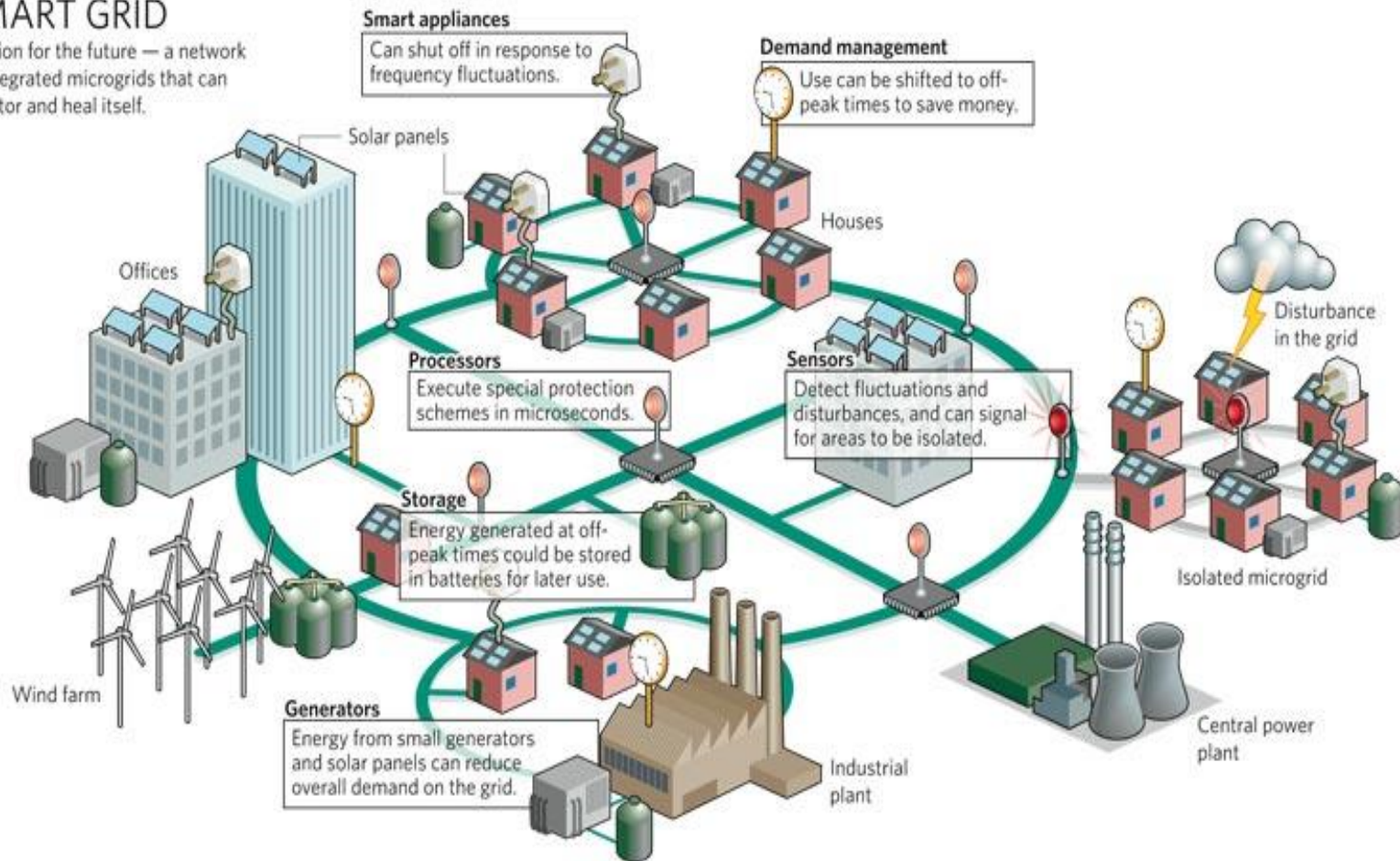
## ▣ Enhanced Infrastructure

- Ensure that necessary resources are available for permitting, planning, and inspection

# Smart Grids

## SMART GRID

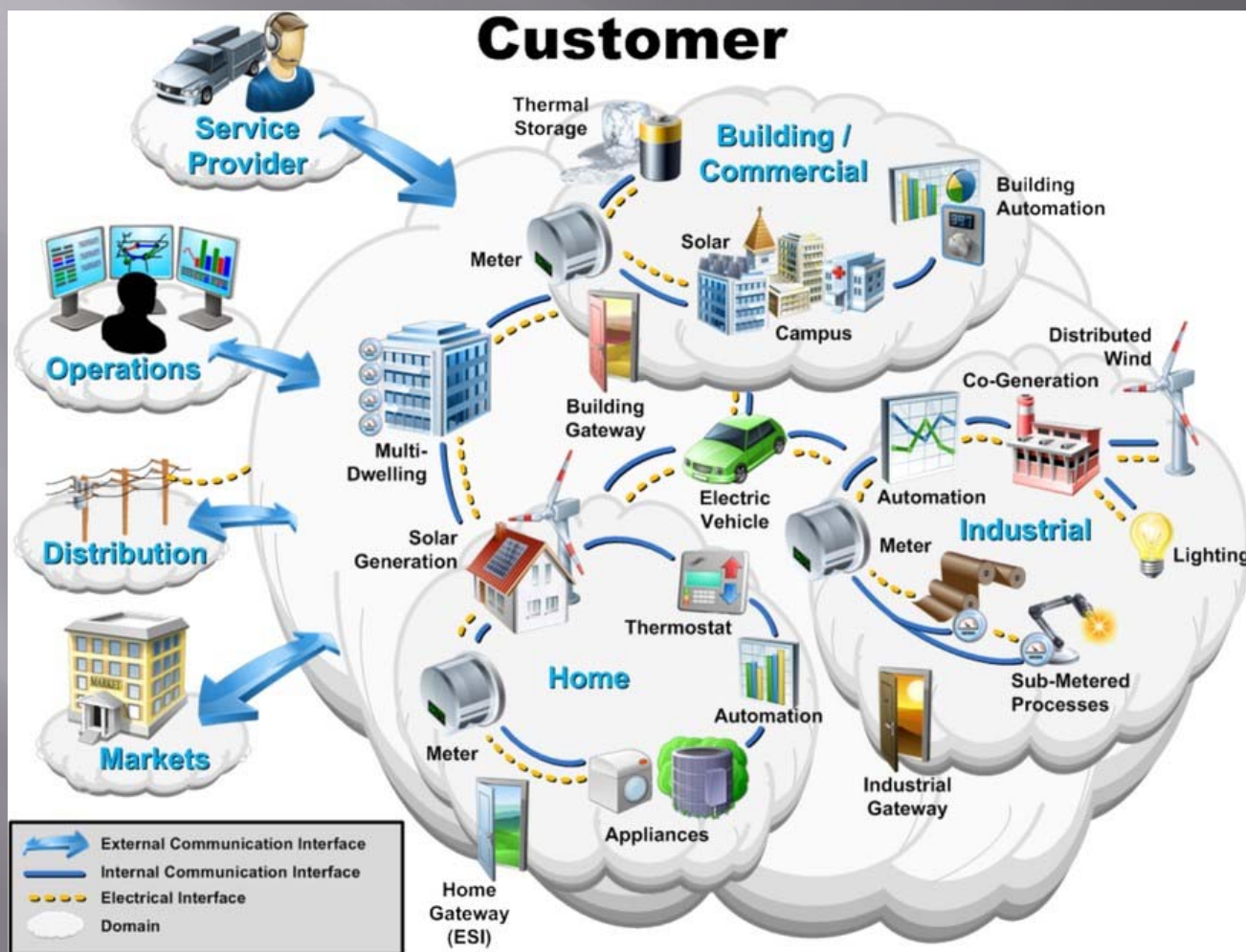
A vision for the future — a network of integrated microgrids that can monitor and heal itself.



# Looking to the Future: Disruptive Trends

- ▣ Energy Storage
  - Beacon Power Flywheel Energy Storage Facility in PA
  
- ▣ Microgrids
  - PECO Microgrid Pilot Project in PA
  
- ▣ Data Analytics/Internet of Energy
  - Opower, C3, Oracle, Aclara, Harris, Siemens/eMeter, Silver Spring Networks and others

# A Vision for the Future



Enhanced Technology:  
Electric Vehicles and  
Smart Meters

Increased Customer  
Engagement

Changing Markets  
due to Competition

Advanced Process:  
Electronic Filing and  
Transparency

THANK YOU