U.S. Department of Energy

State Electric Regulators Assistance Grant

DE-FOA-0000100
**DOE ERA Grant Details**

- American Recovery and Reinvestment Act (ARRA)
  - *State Electric Regulators Assistance Grant funded through DOE-NETL*

- Awarded November 1, 2009

- MPSC was notified November 24, 2009

- Grant duration - Three (3) years

- End date January 30, 2013
Objectives

- Enhance ability to effectively regulate, track, and provide incentives to facilitate investments in Smart Grid infrastructure by utilities
- Assist in modernizing Michigan’s electric system through Smart Grid infrastructure and improve capacity to expeditiously respond with necessary regulation and policy
- Enhance Michigan’s energy independence, security and reliability
MPSC Action Items

- Hire staff as outlined in grant management plan to implement grant activities and ensure deliverables are met
- Develop Smart Grid expertise within new and existing MPSC staff
- Review utilities’ plans for implementation of Smart Grid technologies
  - Rate Case U-15768 filed by DTE on January 26, 2009
  - Rate Case U-16191 filed by Consumers Energy on January 22, 2010
  - Rate Case U-16180 filed by AEP I&M on January 27, 2010
- Track progress and effectiveness of these technologies as they are implemented by utilities
MPSC Action Items (continued)

- Invite utilities, co-ops, and municipalities to the MPSC to present updates on Smart Grid initiatives
- Produce a data tracking system for Michigan based Smart Grid projects
- Expand on progress of the Smart Grid Collaborative between Michigan utilities, local governments, energy companies, and other stakeholders
- Enhance forecasting capabilities at MPSC
Past Deliverables to DOE

- Project Management Plan
  - Submitted January 24, 2010

- First Quarterly Progress Report
  - Submitted January 30, 2010

- Workforce Development Plan
  - Submitted February 23, 2010

- Second Quarterly Progress Report
  - Submitted April 30, 2010

- First Quarterly Case Monitoring Report
  - Submitted April 30, 2010
Future Deliverables to DOE

- Progress Reports
  - Due Quarterly

- Case Monitoring Reports
  - Due Quarterly - Submitted with Progress Reports

- Smart Grid Project Tracking Process
  - Due November 1, 2010

- Smart Grid Cataloguing System (template)
  - Due April 30, 2011

- Smart Grid and Forecasting Training Report
  - Due April 30, 2012

- Final Project Plan
  - Due November 24, 2012

- Final Report
  - Due January 30, 2013
Progress Reports to DOE

- Submitted quarterly starting January 30, 2010
- Report on the following milestones:
  - Development of Project Management Plan
  - Development of Workforce Management Plan
  - Progression of Smart Grid Cataloguing System
  - Progression of MPSC staff Smart Grid and forecasting training
Case MonitoringReports

- Submitted in conjunction with progress reports
- Summarize the progress of the various utilities’ Smart Grid initiatives including:
  - Investments *(pilot projects, etc.)*
  - Installation
  - Operation & Maintenance
  - Progress Updates
Smart Grid Project Tracking Process

- Reports on the MPSC’s Smart Grid Monitoring process

- Includes:
  - *Smart Grid project Progress Reports*
  - *Smart Grid Project Cataloguing System database*
Smart Grid Cataloguing System

Comprehensive database cataloguing Michigan Smart Grid initiatives including:

- Utility company Smart Grid contacts
- Plans and timelines for Smart Grid implementation
- DOE grants received
- Rate recovery for Smart Grid investments
- Core network
  - WAN
  - IP & standards-based interoperability
  - IT network
  - Data storage
  - Equipment/software upgrades
  - Communication/testing equipment
- Grid management (OMS/DMS)
  - Reclosers
  - Fault indicators
  - Capacitor banks
  - Regulators
  - Distribution transformers
  - Synchrophasors
Smart Grid Cataloguing System (continued)

- AMI
  - Meter replacement/retrofitting
  - HAN
- SCADA
- Security
  - Video Surveillance
  - Access Control
  - Sensors
- Field mobility
  - Mobile data access
  - Wi-Fi hot zones
  - Mobile asset management

- Associated O&M costs
- Pilot programs
- Consumer education costs
- Dynamic pricing/rate incentives
- Operational savings
Smart Grid and Forecasting Training Report

- Report on the progress of MPSC’s Smart Grid and Forecasting Training efforts
- Focus on emerging technologies and federal standards development
- Includes expenditures tracking and future training plans
Final Project Plan

- Final milestone of the DOE ERA grant prior to final report
- Comprehensive plan for monitoring Smart Grid initiatives including:
  - *Smart Grid Cataloguing System*
  - *Smart Grid Tracking Process*
- Includes MPSC plans for future Smart Grid investment monitoring and evaluation
- Maps out the continued efforts of the forecasting working group at MPSC after completion of the DOE ERA grant project
Final Report to DOE

- Comprehensive final report delivered to DOE including
  - Overall progress of Smart Grid projects
  - Up to date Smart Grid Cataloguing System and Smart Grid Tracking Process
  - Future plans for Smart Grid monitoring at MPSC

- Includes results of work performed under the DOE ERA grant as well as future work to be performed at the MPSC pertaining to Smart Grid

- Due January 30, 2013
The mission of the FWG is to improve forecasting and analysis capabilities within the commission by providing a means to assure proper and effective coordination and collaboration across division staff with forecasting responsibilities.

The FWG will provide forecasting and analysis training and assistance, enabling Sections to provide quantitatively robust analysis of factors influencing energy supply and demand with emphasis on electricity.
Forecasting Working Group (FWG) (continued)

- Enable in-house peer-to-peer forecasting training, discussion, and analysis
- Establish standardization practices across the MPSC for base underlying forecasting assumptions (i.e. inflation) enabling cross-divisional reporting consistency
- Encourage internal peer review of MPSC forecasts, enhancing quality
- Assist sections/divisions with forecasting requirements beyond their individual capacity
- Lay the foundation for more ambitious future forecasting endeavors such as long-term forecasts
Conclusion

Main points:
- MPSC staff Smart Grid and forecasting training
- Smart Grid Project Cataloguing Database
- Final Plan/Report to DOE

Questions?

We look forward to working with you in this capacity, and thank you for coming.
New MPSC Staff Contact Information

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