

Crossing the Other Chasm: Successful Transfer of Emerging Technologies Into Tomorrow's Programs

ACEEE National Market Transformation Symposium

Anne Kraft, Xcel Energy

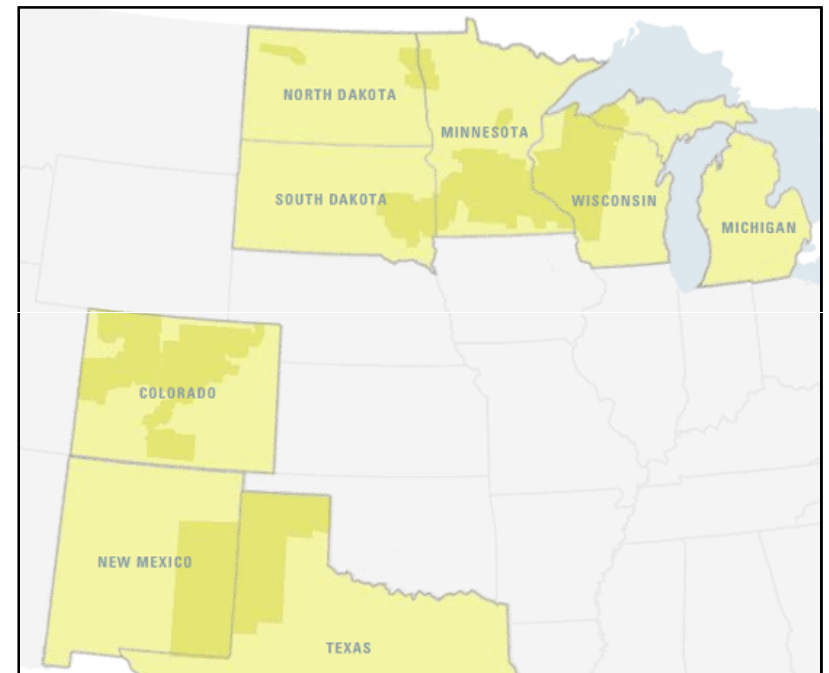
April 12, 2011

Presentation Overview

- Xcel Energy
- Emerging Technology Objectives
- Tracking & Reporting
- Information Sources
- Technology Migration
- Other Channels
- Emerging Technology Grant

Xcel Energy

- 3.4 Million Electric Customers
- 1.9 Million Natural Gas Customers
- #1 Wind provider in the nation
- #5 in solar power capacity in the nation
- Spend around \$235M on DSM annually



xcelenergy.com

Emerging Technology Objectives

- Track and report out to Marketing and Xcel Energy Executives the status of the development of emerging technologies relating to energy efficiency.
- Tracking and reporting will aid in long-term planning and help focus efforts to bring new products to our DSM programs.
- Tracking is ongoing with reporting occurring twice per year.

Tracking & Reporting

- **MS Access Database**
- **Request information from marketing staff**
- **Review of Custom Efficiency projects**
- **Leverage external information sources**
- **Summarize information for management twice per year**

Information Sources

- **ACEEE**
- **Consortium for Energy Efficiency (CEE)**
- **Custom Efficiency Program**
- **EPRI Energy Efficiency Initiative**
- **Emerging Technologies Coordinating Council (ETCC)**
- **ESource**
- **National Commission on Energy Policy**
- **Public Interest Energy Research (PIER)**
- **MN Technical Assistance Program (MN TAP)**

Technology Reporting

- **Energy Efficiency technologies**
- **Various definitions of emerging technologies**
 - ◆ **Development of technology itself**
 - ◆ **A proven technology available in limited supply**
 - ◆ **A technology that is underused (emerging in the marketplace)**
- **Various timeframes to consider for programs**
 - ◆ **Now**
 - ◆ **Within 5 years**
 - ◆ **5+ years out**

Technology Migration from Custom to Prescriptive

- **Commercial High-bay Lighting**
- **Commercial Parking Garage CFL Lighting**
- **Commercial LED Lighting**
 - ◆ **Interior Lamps & Fixtures**
 - ◆ **Refrigerator/Freezer Case Lighting**
 - ◆ **Outdoor Canopy and Soffit Lighting**

Other Channels

- **Pilot testing new concepts**
 - ◆ **Low exergy systems**
 - ◆ **Energy feedback**
- **Intervener/Stakeholder requests**
 - ◆ **Advanced evaporative cooling**
 - ◆ **Residential A/C tune-up**
 - ◆ **Refrigeration temperature sensing**
 - ◆ **A/C thermostat controls**
- **Emerging Technology Grant Program**

Emerging Technology Grant

- Objective is to accelerate the introduction and market adoption of innovative energy efficiency technologies, applications and analytical tools
- Started in 2010, two projects funded
- Budget of \$936k for 2011 covering MN and CO
- ETG Oversight Committee reviews proposals and selects recipients

xcelenergy.com/ETG

Contact Info

**Anne Kraft, Product Developer
Marketing & Customer Energy Programs**

Xcel Energy

anne.m.kraft@xcelenergy.com

612-330-7582