



Xcel Energy Colorado DSM Roundtable Discussion

August 22, 2012
1:00pm to 4:00pm
1800 Larimer, Room 03G01

Welcome and Introductions

Contact Info: Neil Cowan
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Agenda

- 1:00 – 1:05 **Welcome, Introductions**
- 1:05 – 1:15 **Regulatory Update**
- 1:15 – 2:00 **DSM Program Highlights**
- 2:00 – 2:15 **Break**
- 2:15 – 3:45 **Product Development**
- Settlement Related Development (Current RFP Status, EE Financing, Waste to Energy)
 - Pilot Updates
 - Ongoing Development (Upcoming 2012 60 Day Notices, New Ideas)
- 3:45 – 4:00 **Wrap-up/Open Discussion**

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Regulatory Update

Presented by:

Neil Cowan

Compliance information is available
at Xcel Energy's DSM Website:

http://www.xcelenergy.com/About_Us/Rates_&_Regulations/Regulatory_Filings/CO_DSM

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Timeline of Recent Filings

April 2, 2012
2011 Annual Status Report

July 30, 2012
Unopposed Motion to Extend to April 1, 2013 to
develop programs for non-solar eligible energy
resources site on customer premises
Docket No. 11A-631EG

April

May

June

July

August

September

April 25, 2012
Demand Response Extension of
Time
Docket No. 10A-554EG

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Future Filings

November 1, 2012

- Application or advice letter to implement changes to the Company's tariffs or to take other actions necessary to develop programs for non-solar eligible energy resources sited on customer premises
- Notice for Addressing 11 GWh shortfall in savings between 2012 Plan as modified and 2013 Plan.

2013

- April 2013 – Annual Status Report
- June 2013 – Strategic Issues Filing

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60-Day Notices

First Quarter 2012

- In Home Smart Device Pilot – March 1

Second Quarter 2012

- ENERGY STAR New Homes – June 27

Third Quarter 2012

- Low-Income Single Family Weatherization – August 16

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DSM Process & Impact Evaluations

2011 Evaluations (To be posted on xcelenergy.com)

- Residential Showerhead Program
- Low Income Single Family Weatherization
- Business Heating Efficiency
- Self-Direct

2012 Evaluations (Three programs under evaluation):

- Residential High Efficiency A/C
- Low Income Energy Savings Kits
- Business Process Efficiency
- *Evaluations kicked off in February, scheduled for completion by Q4, 2012*

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DSM Program Highlights

**Presented By:
Shawn White
David Hueser
Kate Berg**

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DSM Program Overview, Business Energy Efficiency Program Highlights

**Shawn White
David Hueser**

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Preliminary Second Quarter 2012 DSM Achievements, Total DSM Portfolio

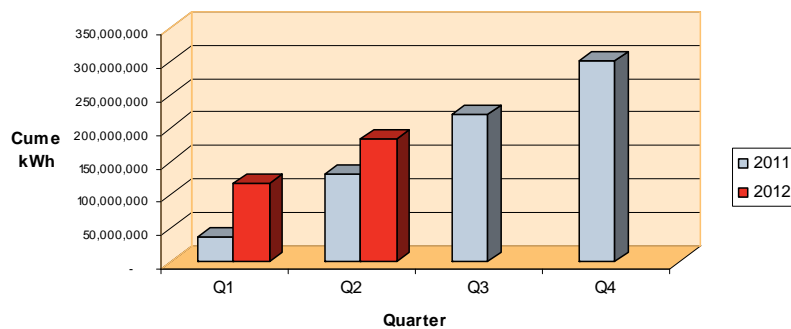
- 2012 Electric Targets: 79.3 MW; 329.3 GWh; \$78.1M
- Electric Achievements: 36.6 MW; 183.7 GWh; \$32.3M

- Gas Goals: 435,504 Dth; \$13.2M
- Gas Achievements: 185,044 Dth; \$5.2M

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Electric Energy Savings (kWh, Bus + Res) continues to outpace Q1 and Q2 2011

Colorado DSM Portfolio 2011/2012 Cumulative Electric Achievement, Quarterly Comparison



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Business Energy Efficiency Q2 2012 Trade Partner Activity

- **Custom Efficiency**
 - Custom Efficiency Workshop conducted in May at 1800 Larimer
 - Customers, trade, XE staff
- **Process Efficiency**
 - “Principles of Energy Management” workshop conducted in May
 - Large industrial customers
- **Data Center Efficiency**
 - DOE/ASHRAE Data Center Workshop conducted May 24
 - 80 customer and trade partners attended
- **Lighting Efficiency: 2012 Energy-Efficient Lighting Seminar**
 - “From Principles to Payback” conducted June 14 by Randy Johnson, President of US Lamp
 - 200+ lighting trade and industry partners attended
- **Trade Relations Manager presentations (Commercial, Industrial)**

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Motor & Drive Efficiency

- **7.8 Net Gen GWh through Q2, 37% of 2012 goal**
- **Majority of savings from variable frequency drives (VFDs)**
- **New measures added via 60-Day Notice effective September 2, 2011, expands prescriptive rebates**
 - Electronically Commutated Motors (ECMs) for refrigeration
 - Constant Speed Motor Controllers
- **Product promotion and outreach**
 - Media to increase awareness about motors and drives in HVAC systems
 - Trade outreach
- **Plan “A” Motors rebates (NEMA Premium, new capacity) discontinued**



Photo: TRANE

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Custom Efficiency

- Rebates for choosing energy-efficiency measures that aren't covered under prescriptive programs
- Pre-approval required
- Must be cost effective, paying back between one year and equipment life
- Rebates up to \$400/kW saved; \$4 per Dth
- JEEP/Joint Energy Efficiency Plan, Self-Directed Custom Efficiency

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Computer Efficiency (launched in CO 6/23/11)

- Program introduced June 23, 2011, to Business portfolio
- Two prescriptive rebate elements
 - High efficiency computer power supplies; \$5-20 per unit prescriptive incentive to participating manufacturers
 - Virtual Desktop Infrastructure (VDI) \$60 per unit prescriptive rebate per desktop PC removed; paid to customer
- Three prominent power supply manufacturers decided not to participate, or had difficulty following the filed M&V plan to determine installation rate. Customer privacy and precise zip code tracking were common obstacles
- Program modification in 2012 to propose remedy

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Residential and Low-Income Program Highlights

Kate Berg

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The Residential Classroom

- New Kid on the Block
- Comeback Kid
- Teacher's Pet
- Bookworm
- Rising Star
- Valedictorian



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And the award goes to...

- **New Kid on the Block- Refrigerator Recycling**
 - **Primary Units- 193**
 - **Freezers- 483**

- **Comeback Kid- Showerheads**
 - **May Campaign**
 - **225,000 offers distributed**
 - **Increase installation rates**

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And the award goes to...

- **Teacher's Pet - Home Performance w ENERGY STAR**
 - **Concierge launch June 18**
 - **Contractor Training**
 - **Outbound Marketing Campaign**

- **Bookworm- Single Family Weatherization**
 - **Additional Measures Added**
 - **Site Built vs. Mobile Home**
 - **Climate Zones**

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And the award goes to...

- **Rising Star- Insulation rebates**
 - Quality Assurance
 - Stakeholder buy-in
 - BPI training

- **Valedictorian- Home Lighting**
 - ENERGY STAR promotion ~4,000 entries
 - 23,000 LED units
 - 95% of goal achieved

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DSM Product Development Update

Presented by:

Kevin Schwain and Pat Goggin

DSM Website provides program idea submission forms at:

http://www.xcelenergy.com/About_Us/Rates_&_Regulations/Regulatory_Filings/CO_DSM_Plan

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Product Development Team

- **10 Resources able to flex across 3 Platforms**
 - Energy Efficiency
 - Renewable Energy
 - Demand Response
- Manager: Kevin Schwain, 612-330-5961
- Energy Efficiency Lead: Pat Goggin, 303-294-2370

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Settlement Development Update

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AC Tune Up RFP Update

- Continue to work with bidders on the 2 proposals
- 1 on 1 meetings
- 2 series of information requests
- Cost effectiveness is main issue
- Looking for ways to improve MTRC
- We hope to have resolution by 9/7/12 to meet 60 Day Notice deadline of 10/1/12

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Innovative Technology RFP Update

- Requested more detailed proposals for 12 ideas of the 54 submitted
- Received detailed responses
- Currently evaluating proposals
- Expect review to be complete by 9/7/12
- Expect to post 60 Day Notice by 10/1/12

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Energy Efficiency Financing

- Worked with stakeholders to define program
- Developing final application language
- Will share with stakeholders once we are satisfied with language
- Expect January launch

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Waste to Energy

- Application or Advice Letter to be filed by June 30th
- Company requested delay until July 30th
- PUC Staff initiated an investigation into combined heat and power (CHP) systems, likely to encompass Waste to Energy projects
- Company agreed to delay filing until April 30th 2013
- Staff findings will be used to inform Company's final filing

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Commercial RTU Early Retirement

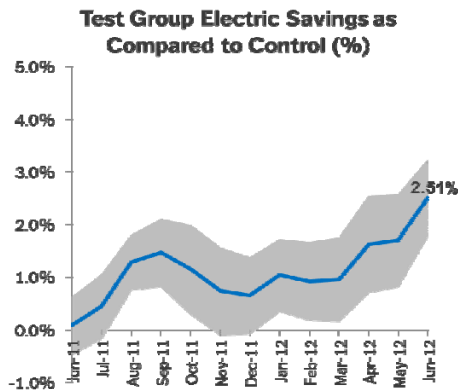
- Large amount of technical analysis completed and multiple variations of technical assumptions analyzed to determine proper:
 - Baseline efficiency
 - Measure life
 - Baseline cost
 - Incremental cost
- MTRC = 0.95 (for 2013)
- Incremental cost outweighs incremental savings

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Pilot & Study Update

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Energy Feedback Pilot



Results pick up over spring and summer to expected levels. Preliminary July results show about 2.55% savings.

Grey bars represent 95% confidence interval around results

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In-Home Smart Device (IHSD) Pilot

- Enrollment and Installation phase completed
 - 101 within SmartGridCity
 - 1001 (TBD) in greater metro Denver
- Pilot is now in Operations and Support mode
 - Control events have begun (11 to date)
 - Communications to increase participant engagement
 - Survey to measure perceived satisfaction and value
- Preliminary report on 2012 results to be filed with the 2012 DSM Report (April 2013).

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Building Code Support Pilot

- Pilot on track and expected to conclude with evaluation results June 2013
- Established collaborative partnerships with six metro area jurisdictions

City of Broomfield	City of Arvada
City and County of Denver	Adams County
Jefferson County	City of Thornton

- Training and evaluation plans have been designed to meet the unique needs of each individual jurisdictions
- Baseline evaluation and training has begun

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EV Demand Response Pilot kicking off

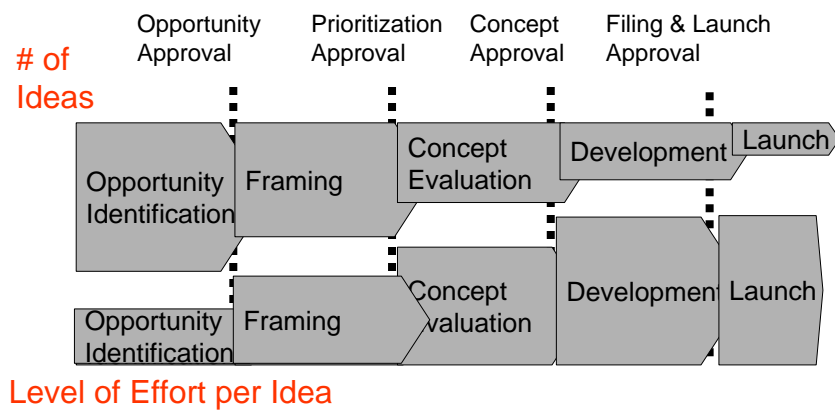
- Testing in-process
 - NREL testing two different installation configurations
 - Xcel Energy facility testing data gathering
- Anticipate soliciting customer participation late summer/early fall

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Ongoing Development Update

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Product Development Process



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New Products in Development for Potential 60-day Notice

Commercial	Status	Potential Notice/Filing
Bi-level Stairwell Fixtures	Approved for Filing	2012 60 Day
LED Wall Pack fixtures	Approved for Filing	2012 60 Day
High Efficiency Computer Monitors	Development	2012 60 Day
PC Power Management	Development	2012 60 Day
Process Efficiency – add Behavioral component	Concept Evaluation	2012 Application
RTU Early Retirement	Development	2012 60 Day

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New Products in Development for Potential 60-day Notice

Industrial	Status	Potential Notice/Filing
Turn Key Services	Development	2012 60 Day for 2013
Prescriptive Refrigerated Case Efficiency Anti-Sweat Heater Controls Zero Energy Glass Doors w/o Anti-Sweat Heaters	Development	2012 60 Day
Low loss filters (mist eliminators)	Development	2012 60 Day
Dew Point Demand Control – Desiccant Dryer	Development	2012 60 Day
Cycling Refrigerated Dryer	Development	2012 60 Day

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New Products in Development for Potential 60-day Notice

Residential	Status	Potential Notice/Filing
A/C Tune-Up Residential/Small Commercial	RFP Pending (Settlement)	2012 60 Day
EC motors for furnaces	Development	2012 60 Day
Residential Multi-family	Concept Evaluation	2012 60 Day
Primary Refrigerator Rebate	Approved for Filing	2012 Settlement Refile
Freezer Rebate	Approved for Filing	2012 Settlement Refile
CO OPower Expansion	2013 Implementation	2012 Settlement Refile
Prescriptive rebates for Condensing boilers & outdoor resets	Canceled – not cost effective	

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DSM Roundtable Ideation Submissions – 4th Quarter

- Received 3 new Product Ideas
 - **Dimming Ballasts**
 - Received: 11/29/2011
 - Status: Incomplete Submission after Multiple Requests
 - Move into Standard PD Process
 - **Reflective Insulation**
 - Received: 12/14/2011
 - Status: Incomplete Submission after Multiple Requests
 - Move into Standard PD Process
 - **Energy Scan**
 - Received: 01/20/2012
 - Status: Incomplete Submission after Multiple Requests
 - Move into Standard PD Process

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New Ideas?

- **CO Roundtable Ideas**

- Submit complete Roundtable Idea Form at least 90 days prior to a CO Roundtable Meeting in order for an analysis to be presented at that meeting.
- Incomplete Idea Forms will be returned to submitter for completion
- 90 Day window starts when form is complete

- **Roundtable Idea Form:**

<http://www.xcelenergy.com/staticfiles/xcel/Regulatory/Regulatory%20PDFs/RushCODSMPProductDevelopmentIdeationForm.pdf>

- **2012 Opportunity Identification meeting in January (internal meeting)**

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