

Colorado DSM Roundtable

November 5, 2014

1:00 - 3:30 pm

03G01, 1800 Larimer St. Denver, CO



Agenda

■ 1:00 – 1:05 p.m. Welcome and Introductions

■ 1:05 – 1:10 p.m. DSM Regulatory Updates

■ 1:10 – 2:00 p.m. DSM Programs: Q3-2014

Business

Residential and Low-Income

■ 2:00 – 2:15 p.m. -- Networking Break --

2:15 – 2:45 p.m. Pilot Updates: Q3-2014

■ 2:45 – 3:30 p.m. Product Development: Q3-2014

Stakeholder Idea Submissions

DSM Regulatory Updates Q3-2014

Sarah Ruen Blanchard DSM/RE Regulatory



DSM Regulatory UpdatesPlan Filing

- 2015/2016 DSM Plan Filed
 - ♦ 14A-1057EG
 - Next Steps:
 - Approval of Intervenors
 - Establish Procedural Schedule



DSM Regulatory Updates 60/90-Day Notices

- Single-Family Weatherization
 - ◆ Posted: Sept 12, 2014
 - ◆ Implemented: Oct 14, 2014
- School Education Kits and LI Energy Savings Kits
 - Posted: Sept 16, 2014
 - Implemented: Oct 16, 2014
- Pool Pumps (90-Day Notice)
 - Posted: Sept 22, 2014
 - Implemented: Oct 22, 2014



Regulatory Look-Ahead Upcoming DSM Filings / Meetings

February 11, 2015:

Q4-2014 DSM Roundtable Meeting



Bill Conrad Manager, Energy Efficiency Marketing



2015 Electric Overview

Electric Programs	Budget (\$M)	kW	GWh	MTRC
Business	\$47.1	40,424	261.0	1.55
Residential	\$25.6	38,285	136.1	2.18
Low-Income	\$3.0	799	7.1	1.17
Indirect	\$5.9	166	3.1	0.16
EE Total	\$81.6	79,674	407.3	1.65
DR Total	\$13.7	15,486	0.2	1.80
Portfolio Total	\$95.3	95,160	407.5	1.66



2016 Electric Overview

Electric Programs	Budget (\$M)	kW	GWh	MTRC
Business	\$44.2	37,743	260.6	1.61
Residential	\$25.0	36,544	136.7	2.24
Low-Income	\$3.0	803	7.1	1.21
Indirect	\$6.5	1,129	4.2	1.69
EE Total	\$78.7	76,218	408.6	1.69
DR Total	\$13.5	13,390	0.2	1.88
Portfolio Total	\$92.2	89,608	408.8	1.71



2015/2016 DSM Plan 2015 Natural Gas Overview

Gas Programs	Budget (\$M)	Dth	MTRC
Business	\$2.0	187,082	1.32
Residential	\$5.9	338,068	1.71
Low-Income	\$3.4	56,164	1.23
Indirect	\$1.8	14,646	0.39
EE Total	\$13.1	595,960	1.44



2015/2016 DSM Plan 2016 Natural Gas Overview

Gas Programs	Budget (\$M)	Dth	MTRC
Business	\$1.8	187,961	1.46
Residential	\$6.2	367,044	1.73
Low-Income	\$3.4	57,247	1.26
Indirect	\$2.2	16,644	0.47
EE Total	\$13.6	628,895	1.48



Products/Pilots

New Products

- Energy Feedback Business (2016)
- LED Street Lights
- Energy Feedback Residential
- Home Energy Squad

New Pilots

- Multifamily Building Pilot
- Smart Thermostat Pilot
- Small Business Smart Thermostat Pilot
- Building Energy Optimization DR Pilot

Retired Products

- Segment Efficiency
- Pool Pumps

Concluded Pilots

- Community Energy Efficiency Planning Pilot
- EV Charging Station Pilot
- In-Home Smart Device Pilot



Measures

New Measures

Measure / Approach	Product
Midstream Incentives	Cooling
VSD hp Reduction*	Compressed Air
EC Plug Fans*	Data Centers
EMIS	EMS
Direct Install	Lighting – Small Business
Mid-tier Offering	Process Efficiency

Measure / Approach	Product
17 SEER / 13 EER	HEAC
Area Lighting	Lighting Efficiency
Customer-owned LED Street Lights	
Integrated Sensors*	
Midstream Rebates	

*Utilized PD Express

■ Retired Measures

- ♦ HPS fixtures and pulse-start metal halide fixtures Lighting Efficiency
- ◆ 14.5 SEER new unit rebates HEAC
- 85% AFUE boilers Residential Heating



2015/2016 DSM PlanComprehensive Product Evaluations

- **2015**
 - Home Lighting & Recycling
 - Lighting Efficiency
- 2016
 - Computer Efficiency
 - Non-Profit

Q3-2014 DSM Achievements

Bill Conrad Manager, Energy Efficiency Marketing



Q3-2014 DSM Achievements Highlights

Electric Portfolio 247 Net Gen GWh (66% of Goal)

Business Programs

- Process Efficiency 114% of Target
- Data Center Eff. 125% of Target
- EMS 97% of Target

Residential Programs

- ENERGY STAR New Homes 97% of Target
- Home Lighting 107% of Target
- Residential A/C 104% of Target

Gas Portfolio 327,487 Net Dth (53% of Goal)

Business Programs

- EMS 210% of Target
- New Construction 112% of Target
- Custom Efficiency 55% of Target

Residential Programs

- Home Perf. w/ENERGY STAR 148% of Target
- Water Heater Rebate 136% of Target
- Heating System Rebate 88% of Target



Q3-2014 DSM Achievements Business and Residential Customer & Trade Events

Business Trade Events

- Lighting Workshop (230 Attendees)
- Graybar Customer Event (200+ Attendees)
- CO Real Estate Journal Event Office Summit (500+ Attendees)
- Data Center Eff. Engineering Firm Outreach Event.
- Annual AFEC Show
- Colorado Wyoming Petroleum Marketers Association
- BOMA Workshop
- Certifiably Green Denver Open House
- Refrigeration Efficiency Workshop
- Denver 2030
- Heating Advisory Board Meeting and Tour of Valmont station
- CEEP Event with City of Lafayette and recognition award.

Residential Trade Events

- NATE Gas Heating Certification update: 188 Res Heating Trade Partners certified.
- Evaporative Cooling 30% bonus rebate to achieve lift in unit sales and rebates concludes Nov. 30. Western Slope focus and trade partner meetings.
- Home Energy Audit, Home Performance with ENERGY STAR, Air Conditioning trade partner sessions and networking to drive more electric savings; program updates, business-building guest speaker.

Business Program Highlights

Kim Spickard
Team Lead, DSM Marketing



DSM Business Program Highlights

Recommissioning: Building Tune-Up

- Launched new Building Tune-Up path (under Recommissioning product) to target smaller businesses 5,000 sq. ft.—75,000 sq. ft.
- Xcel Energy sends energy advisor to conduct a Building Tune-Up audit; audit value about \$4,500
 - Three audits have been scheduled to date
 - Three additional potential audits in the pipeline
 - No savings have been identified at this time, pending audit completion
 - Forecasting 10 audits and 0.5 GWh of electricity savings in 2014



DSM Business Program Highlights

Lighting Mid-stream Rebates

- RFP completed for implementation of mid-stream approach (Ecova)
 - Targeted Jan 2015 launch
 - Included in the 2015/2016 DSM Plan
- Marketing efforts underway to announce new mid-stream process
 - Distributors can sign up via a partnership agreement
 - 25 Distributors have been contacted
 - No completed agreements at this time
 - Downstream applications with an invoice dated prior to mid-stream effective date will be honored

Residential Program Highlights

David Hueser Team Lead, DSM Marketing



DSM Residential Program Highlights

High Efficiency Air Conditioning



Strong Q3: Electric DSM demand and energy savings targets met for 2014

- Contractors report slow down in sales due to cooler summer
 - Product still processed record number of rebates in July
- Measurement & Verification
 - M&V inspections began during Q3, with final results expected in early Q4
- Western Cooling Control 60-Day Notice approved
 - Measure included in product as of August 29
 - \$35 rebate per device installed



Photo: Lennox



DSM Residential Program HighlightsSchool Education Kits and Energy Savings Kits (Low-Income)





Both programs will continue to enroll participants through year end to achieve savings targets

- 60-Day Notice posted September 16
 - Matches shared Home Lighting & Recycling product technical assumptions for bulbs
 - Incremental cost updates based on new vendor pricing for School Education Kits
- Both programs continued enrolling participants throughout Q3
 - School Education Kits was 79.5% enrolled at the end of Q3
 - First direct mail offer for Energy Savings Kits (Low-Income) had a 22% response rate (record response rate for the program)



CO School Education Kit



CO Low Income Energy Saving Kit



DSM Residential Program Highlights ENERGY STAR® New Homes





Through Q3, excellent participation level – 2,515 homes rebated 97% of kWh goal on 97% spend; 78% of Gas Dth on 128% spend

- Fully subscribed as of September 18
 - Participants notified enrollments suspended
 - All homes submitted should qualify for rebate
- Third-party implementer finalizing all submittals and entering data in Salesforce CRM tracking system
 - Expect to rebate approximately 3,250 homes
- Allocated additional funds to keep product open longer:
 - ♦ \$1.17 M in Gas DSM spend and
 - \$212K in Electric DSM spend in 2014
- 2015 Product enrollment opens Dec 11



Photo: Boulder Creek Builders, Stapleton



Plan: Lennar, Centennial, CO, Hayden model



DSM Residential Program Highlights Home Performance with ENERGY STAR





Gas DSM savings at 155% of filed goal in Q3 Electric DSM trending to meet 2014 energy savings goal - at 87% of

filed goal in Q3

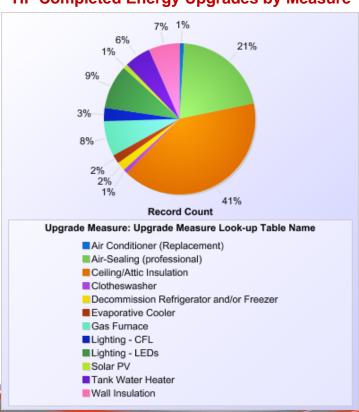
HVAC trade partner outreach and networking

- Over 30 HVAC partners and 30 HP partners
- Training: hosted a guest speaker and product specific updates
- Training: covered opportunities for HVAC to partner with HP → Discussed HVAC trade incentive for Q4

Energy Advising continues to climb

- 368 accounts, 36% conversion of those accounts moved forward with a project
- Collaboration with High Country and other community programs continues







- Networking Break -



Kerry Klemm Manager, Product Development

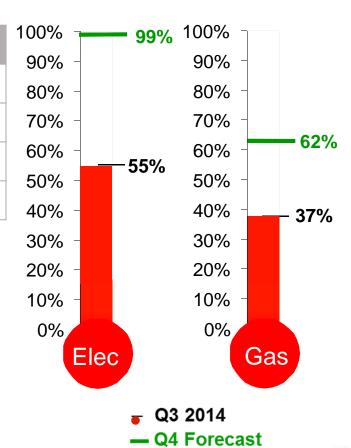




Energy Feedback Pilot – Residential

	GWh	Dth
YTD Q3-2014	16 GWh	52,687 Dth
Filed YE Targets	28.9 GWh	141,333 Dth
YE Forecast	28.8 GWh	87,761 Dth
Forecast % of Target	99%	62%

- Refining savings calculation methodology
- 60-Day Notice by early December to add 400,000 participants in January





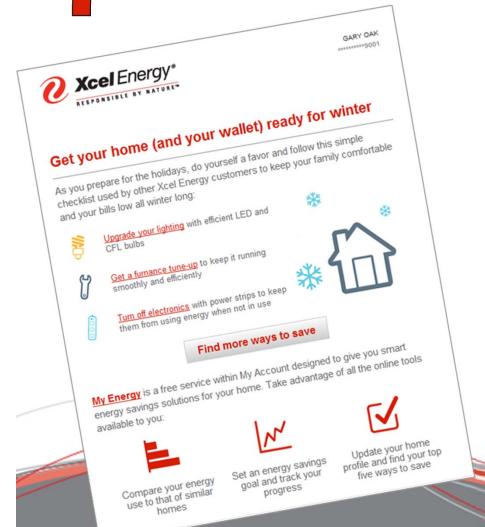
Expanded Communication to Boost Gas Savings







Online Energy Feedback Measure



- Email every 6 weeks to ~300,000 customers
- > Email open rates solid (20.8%)
- September bill Onsert
- First savings measurement not until Q4

Measure Savings Forecast

1.8 GWh, 7,662 Dth

~50% of filed goal due to mid-year start



Energy Feedback Pilot – Business

- 10,000 small business customers
- Three reports delivered; one more by year-end
- Will continue as a pilot through 2015 and transition to product in 2016 if cost-effective

Forecast: 2.24 GWh, 11,704 Dth

~50% of filed goal due to mid-year start

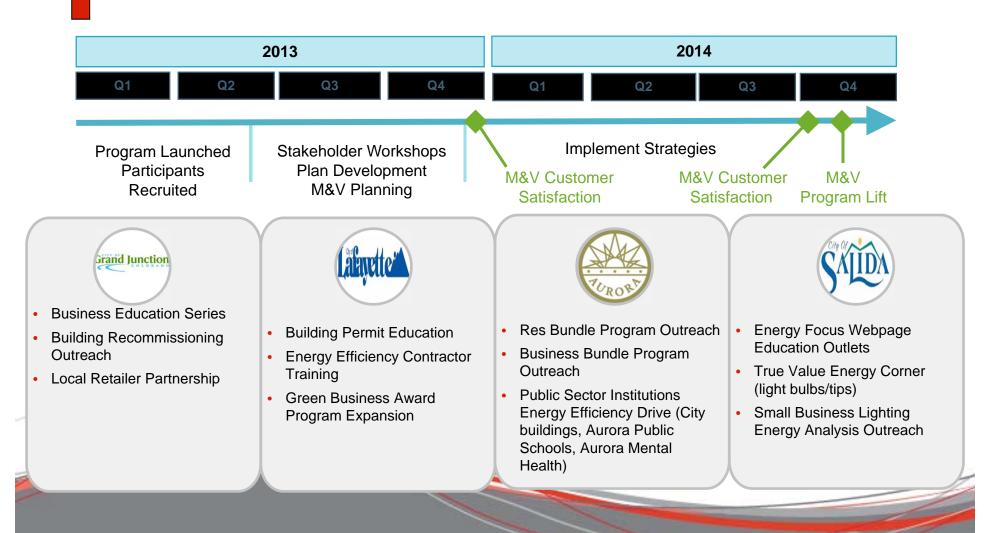
That's what these energy reports do, [they get me] thinking, 'how come it is so much?'"

"These guys (Xcel) are kind of on it. They are looking to help you."





Community Energy Efficiency Planning Pilot





EV Charging Station Pilot

-chargepoin+

✓ Completed 2014 load control events

✓ Increased control period to 6 hours

✓ Load data for 2013 & 2014 being analyzed

PHASE II



- ✓ Completed 2014 load control events
- ✓ Increased control period to 6 hours
- ✓ Load data for 2013 & 2014 being analyzed

PHASE III



- ✓ Partnering with GM EnSar
- ✓ Waiting for signature of Agreement from OnStar.



New Pilots

Multifamily Building Pilot

- 60-Day Notice for Pilot approval posted Aug. 1
- RFP release and implementer selected by the end of Q4-2014
- Market launch expected Q1-2015

Smart Thermostat Pilot

- 60-Day Notice for Pilot approval posted Aug. 1
- Contracting underway with potential manufacturer partners and service providers
- RFP for demand response released by the end of Q4-2014
- Market launch expected Q1-2015









■ Presented by Pat Goggin



Program ideas can be submitted on Xcel Energy's DSM website at:

http://www.xcelenergy.com/About Us/Rates & Regulations/Regulatory Filings/CO DSM



Product Development Update Q3 PD Summary

- Focus on finalizing products / measures for 2015/16 DSM Plan
 - 15 products / measures added through the PD and PD Express processes
 - 2 concepts were evaluated and found to be noncost-effective



Product Development Express

- Streamlined approach for adding new measures to existing programs
- New measures follow existing program structure
- Don't require significant new engineering analysis
- Examples include:
 - Integrated Lighting Sensors
 - VSD hp Reduction
 - ♦ EC Plug Fans



Products/Measures Completed in 2014

Completed Products/Measures	Regulatory Path
LED Troffers	2014 60-Day Notice
Western Cooling Control Device	2014 60-Day Notice
Smart Thermostat Pilot	2014 60-Day Notice
Multifamily Pilot	2014 60-Day Notice
Energy Management Information Systems	2015/16 DSM Plan
Energy Feedback - Business Pilot	2015/16 DSM Plan
Direct Install for Small Business Lighting	2015/16 DSM Plan
Expansion of PE for SMB	2015/16 DSM Plan
Midstream Lighting Efficiency (Business)	2015/16 DSM Plan
CO Home Energy Squad	2015/16 DSM Plan
Energy Feedback Expansion	2015/16 DSM Plan
Company owned LED Street Lighting	2015/16 DSM Plan
Customer owned LED Street and Area Lighting	2015/16 DSM Plan



Products Evaluated / Non-Cost-Effective

- Residential Custom Efficiency Provide a cost-effective path for evaluating emerging technologies similar to the approach used in the Custom Efficiency (Business) product.
- **Ground Source Heat Pumps (GSHP)** Evaluate whether adding a high efficiency residential GSHP option that uses a standard efficiency GSHP baseline is a cost-effective measure.



Stakeholder DSM Idea Submissions

Presented by Pat Goggin

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



Stakeholder DSM Idea Submissions

None submitted in time to be reviewed for this meeting.

Q&A

