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
Plan 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

- School Education Kits and LI Energy Savings Kits
  - *Posted*: Sept 16, 2014

- Pool Pumps (90-Day Notice)
  - *Posted*: Sept 22, 2014
Regulatory Look-Ahead
Upcoming DSM Filings / Meetings

- **February 11, 2015:**
  Q4-2014 DSM Roundtable Meeting
2015/2016 DSM Plan

Bill Conrad
Manager, Energy Efficiency Marketing
## 2015/2016 DSM Plan
### 2015 Electric Overview

<table>
<thead>
<tr>
<th>Electric Programs</th>
<th>Budget ($M)</th>
<th>kW</th>
<th>GWh</th>
<th>MTRC</th>
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<tbody>
<tr>
<td>Business</td>
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<td>40,424</td>
<td>261.0</td>
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<tr>
<td>Residential</td>
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<td>Low-Income</td>
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<tr>
<td>Indirect</td>
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<td><strong>EE Total</strong></td>
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<td><strong>DR Total</strong></td>
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<td>15,486</td>
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<td><strong>Portfolio Total</strong></td>
<td><strong>$95.3</strong></td>
<td>95,160</td>
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## 2015/2016 DSM Plan
### 2016 Electric Overview

<table>
<thead>
<tr>
<th>Electric Programs</th>
<th>Budget ($M)</th>
<th>kW</th>
<th>GWh</th>
<th>MTRC</th>
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<tr>
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<td><strong>1.71</strong></td>
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## 2015/2016 DSM Plan

### 2015 Natural Gas Overview

<table>
<thead>
<tr>
<th>Gas Programs</th>
<th>Budget ($M)</th>
<th>Dth</th>
<th>MTRC</th>
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<tbody>
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<td>Residential</td>
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<td>Low-Income</td>
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## 2015/2016 DSM Plan

### 2016 Natural Gas Overview

<table>
<thead>
<tr>
<th>Gas Programs</th>
<th>Budget ($M)</th>
<th>Dth</th>
<th>MTRC</th>
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<tbody>
<tr>
<td>Business</td>
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<td>Residential</td>
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<td>Low-Income</td>
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<td><strong>1.48</strong></td>
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2015/2016 DSM Plan
Products/Pilots

- **New Products**
  - LED Street Lights
  - Energy Feedback Residential
  - Home Energy Squad

- **Retired Products**
  - Segment Efficiency
  - Pool Pumps

- **New Pilots**
  - Multifamily Building Pilot
  - Smart Thermostat Pilot
  - Small Business Smart Thermostat Pilot
  - Building Energy Optimization DR Pilot

- **Concluded Pilots**
  - Community Energy Efficiency Planning Pilot
  - EV Charging Station Pilot
  - In-Home Smart Device Pilot
2015/2016 DSM Plan

New Measures

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

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 Plan
Comprehensive 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
- 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
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)
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

![HP Completed Energy Upgrades by Measure]
DSM Pilot Updates
Energy Feedback Pilot – Residential

<table>
<thead>
<tr>
<th></th>
<th>GWh</th>
<th>Dth</th>
</tr>
</thead>
<tbody>
<tr>
<td>YTD Q3-2014</td>
<td>16 GWh</td>
<td>52,687 Dth</td>
</tr>
<tr>
<td>Filed YE Targets</td>
<td>28.9 GWh</td>
<td>141,333 Dth</td>
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<tr>
<td>YE Forecast</td>
<td>28.8 GWh</td>
<td>87,761 Dth</td>
</tr>
<tr>
<td>Forecast % of Target</td>
<td>99%</td>
<td>62%</td>
</tr>
</tbody>
</table>

- Refining savings calculation methodology
- 60-Day Notice by early December to add 400,000 participants in January
DSM Pilot Updates
Expanded Communication to Boost Gas Savings

THE HEAT IS ON

68° WHEN YOU STAY
58° WHEN YOU'RE AWAY

You can save up to 5% on winter heating costs for each degree you lower your thermostat.

Most people don’t feel the difference... except in their energy bills.

Adjust a little, save a lot.
DSM Pilot Updates

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
DSM Pilot Updates
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.”
DSM Pilot Updates
Community Energy Efficiency Planning Pilot

2013

Q1

Program Launched

Q2
Participants Recruited

Q3

Stakeholder Workshops

Q4
Plan Development

M&V Planning

2014

Q1

Implement Strategies

Q2

M&V Customer Satisfaction

Q3

M&V Customer Satisfaction

Q4

M&V Program Lift

- Business Education Series
- Building Recommissioning Outreach
- Local Retailer Partnership
- Building Permit Education
- Energy Efficiency Contractor Training
- Green Business Award Program Expansion
- Res Bundle Program Outreach
- Business Bundle Program Outreach
- Public Sector Institutions Energy Efficiency Drive (City buildings, Aurora Public Schools, Aurora Mental Health)
- Energy Focus Webpage Education Outlets
- True Value Energy Corner (light bulbs/tips)
- Small Business Lighting Energy Analysis Outreach
DSM Pilot Updates
EV Charging Station Pilot

PHASE I
- 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 OnStar
- Waiting for signature of Agreement from OnStar

CANCELLED
DSM Pilot Updates

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
Product Development Update

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 non-cost-effective
Product Development Update

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
## Product Development Update

### Products/Measures Completed in 2014

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

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

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.