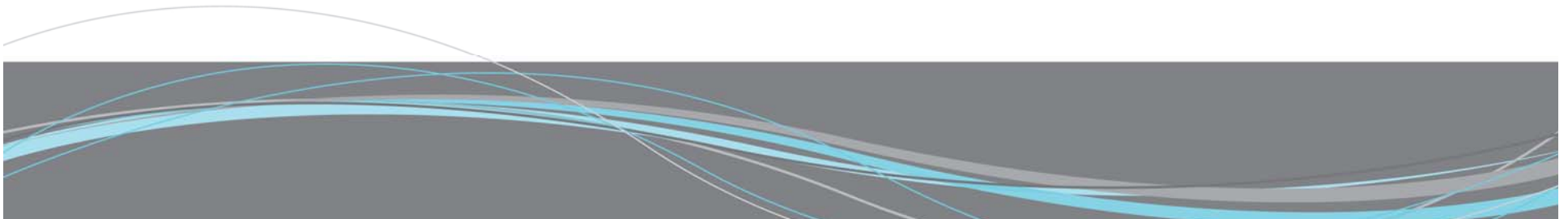




Xcel Energy

Colorado DSM Roundtable Discussion

November 14, 2012
9:00am to 11:00am
1800 Larimer, Room 03G01



Welcome and Introductions

Contact Info: Neil Cowan

Senior Analyst, DSM Regulatory Strategy & Planning

Office Phone: 303-294-2115

E-mail: neil.cowan@xcelenergy.com

Agenda

9:00 – 9:05 **Welcome, Introductions**

9:05 – 9:15 **Regulatory Update**

9:15 – 10:00 **DSM Program Highlights**

10:00 – 10:15 **Break**

10:15 – 10:45 **Product Development**

- Settlement Related Development (Current RFP Status, EE Financing, Waste to Energy)
- Pilot Updates
- Ongoing Development (Upcoming 2012 60 Day Notices, New Ideas)

10:45 – 11:00 **Wrap-up/Open Discussion**

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

Timeline of Recent Filings

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

November 1, 2012

Notice of Specific Plan for Meeting the 11.2 GWh Shortfall in its Electric DSM Portfolio for 2013

Docket No. 11A-631EG

July

August

September

October

November

December

October 10, 2012

Energy Efficiency Financing Product

Docket No. 12A-1083EG

Future Filings

2013

- April 2013 – Annual Status Report
- June 2013 – Strategic Issues Filing
- July 2013 – 2014 Plan

60-Day Notices

First Quarter 2012

- In Home Smart Device Pilot – March 1

Second Quarter 2012

- ENERGY STAR New Homes – June 27

60-Day Notices (cont...)

Third Quarter 2012

- **Low-Income Single Family Weatherization – August 16**
- **Low Income Single Family Weatherization Program Evaluation – August 22**
- **Business Heating Efficiency Program Evaluation – August 22**
- **Showerhead Program Evaluation – August 24**
- **Self Direct Program Evaluation – August 24**
- **2012 RFP for AC Tune-Up Program – October 1**
- **Process Efficiency – October 4**
- **Lighting Efficiency – October 22**
- **Computer Efficiency – October 31**

DSM Program Highlights

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

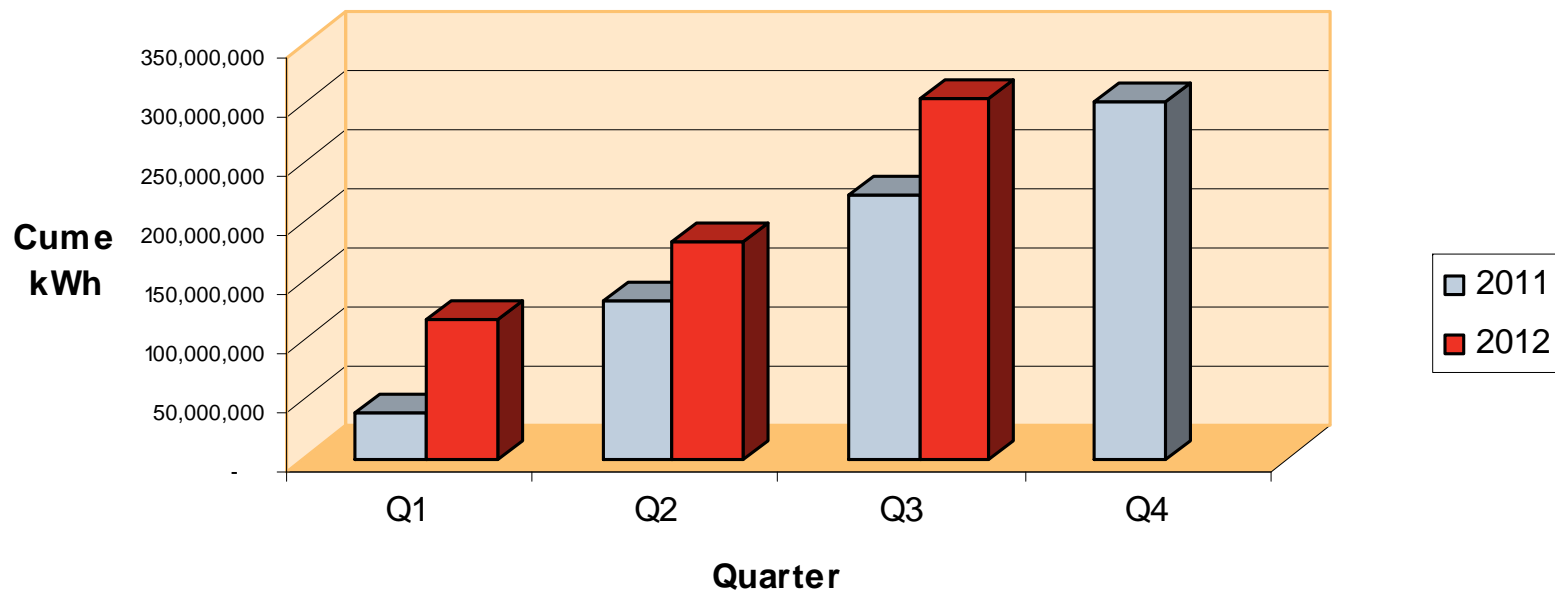
Preliminary Third Quarter 2012 DSM Achievements, Total DSM Portfolio

- 2012 Electric Targets: 79.3 MW; 329.3 GWh; \$78.1M
- Electric Achievements: 76.7 MW; 303.9 GWh; \$55.7M

- Gas Goals: 435,504 Dth; \$13.2M
- Gas Achievements: 270,235 Dth; \$8.5M

Electric Energy Savings (kWh) continues to outpace Q3 2011

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



DSM Program Overview, Business Energy Efficiency Program Highlights

David Hueser

Product Updates

Heating Efficiency

- **60-Day Notice with Program Evaluation recommendations, filed August 22, implemented September 23, 2012**
- **Technical Assumptions fine tuned**
 - **Efficient equipment efficiencies**
 - **Equipment effective useful life**
 - **Net To Gross**
- **Investigate enhanced boiler tune-up option**
- **Beyond simple ROI tool, evaluate enhanced energy savings calculator tool for HVAC contractors**



Photo: Knight, Lochinvar

Product Updates

Lighting Efficiency, Small Business Lighting

- Phasing out fluorescent T12-removal rebates
- 30% bonus rebate ends December 31, 2012
- Application turn-in deadline May 1, 2013

60-Day Notice October 22, 2012

- Three new prescriptive measure categories
- Reduced rebates due to market pricing

Available Fluorescent Lighting Systems



T5 – In

T8 – In (most common)

T12 – Out (virtually all)

Photo: Sylvania

Proportion of commercial lighting efficiency savings attributed to Fluorescent T12-system removal (retrofits, optimization/delamping)

Program Milestones

- T12 phase-out (cont.) →
- T12-removal bonuses →
- L.E. Rebates increased →
- SBL Launched (6/09) →

	PSCo Lighting Efficiency		PSCo Small Business Lighting	
Year	Savings (GWh)	% of Total	Savings (GWh)	% of Total
2012 (to Oct)	25.5	31%	10.7	37%
2011	21.9	38%	8.1	54%
2010	20.7	42%	2.2	44%
2009	17.6	33%	.2	75%

Product Updates

Self-Direct

- **60-Day Notice with Program Evaluation recommendations, filed August 24, implemented September 25, 2012**
- **Continue increased incentive for large industrial and commercial customers able to self-fund, implement, measure and verify energy-saving initiatives**
- **Retained customer eligibility requirements**
- **Expand outreach to Energy Service Companies (ESCOs), performance contractors and engineering consultants**



Photo: Ball Corp.

Residential and Low-Income Program Highlights

Kate Berg

Insulation Program Enhancements

- **Increased Quality Assurance measure**
 - **BPI Certification**
 - **Pre and Post blower door testing**
 - **Air sealing (unless .45 NACH is met)**
 - **CAZ test check box**
 - **Onsite M&V for 2013 applications**

- **Technical changes**
 - **Updated incremental costs, air sealing requirement and participation**

- **2012 Contractor Training**
 - **Mini grants for BPI certification continuing through year end**
 - **Over 50 contractors participated**
 - **40 contractors (without BPI) enrolled in certification course currently**

Single Family Weatherization Program Enhancements

- **Additional measures**
 - **Water Heaters**
 - **Storm Windows**
 - **Crawl Space insulation**
 - **Attic insulation (in manufactured homes)**

- **Evaluation Changes**
 - **# of bulbs per home**
 - **Improvements per home**
 - **Home type**
 - **Climate zones**

Electric Heat Pump Water Heaters

- Increase in participation
- Enhanced Promotions
 - Combo letter- City of Denver
 - Direct Email Campaign
 - Newsletter
- Retailer Support

High Efficiency Air Conditioning

- Increase in participation
- Improved M&V findings
- Enhanced Promotions
 - Combo letter- City of Denver
 - Bonus rebate
- Preliminary evaluation results

DSM Product Development Update

Presented by:

Kevin Schwain, Andre Gouin and Pat Goggin

DSM Website provides program idea submission forms at:

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

Product Development Team

- **10 Resources able to flex across 3 Platforms**
 - Energy Efficiency
 - Renewable Energy
 - Demand Response
- Manager: Kevin Schwain, 612-330-5961
- Colorado Team Lead: Pat Goggin, 303-294-2370
- Pilot Lead: Andre Gouin, 303-294-2975

Settlement Development Update

AC Tune Up RFP Update

- **Unable to find a cost effective solution**
 - **Multiple Iterations with the bidders**
 - **Fundamental challenges in CO**
- **Filed 60 Day Notice on October 1st**
- **Received comments from the EEBC**
- **We will maintain an open dialogue**

Innovative Technology RFP Update

- Received 12 detailed proposals
- Selected 4 to pursue further
 - Fill the gap at expected cost
 - Finalizing Technical Assumptions
 - Negotiating Contracts
- 60 Day Notices to follow

Energy Efficiency Financing

- **Worked with stakeholders to define program**
- **Filed Application and Received Order Granting Application from PUC Pending 20 Day Reconsideration Period**
- **Proceeding with Implementation Plans**
 - **Begin with Marketing Existing Energy Efficiency Loan Products where they exist**
 - **Facilitate Creation of Energy Efficiency Loan Products in areas where don't exist**
 - **Expect January launch**

Waste to Energy Projects

Purpose:

- **To implement a program applicable to Eligible Energy Resources installed on customer premises.**

Status:

- **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**
- **Workshop scheduled for December 4th, 2012**
- **Findings will be used to inform Company's final filing**

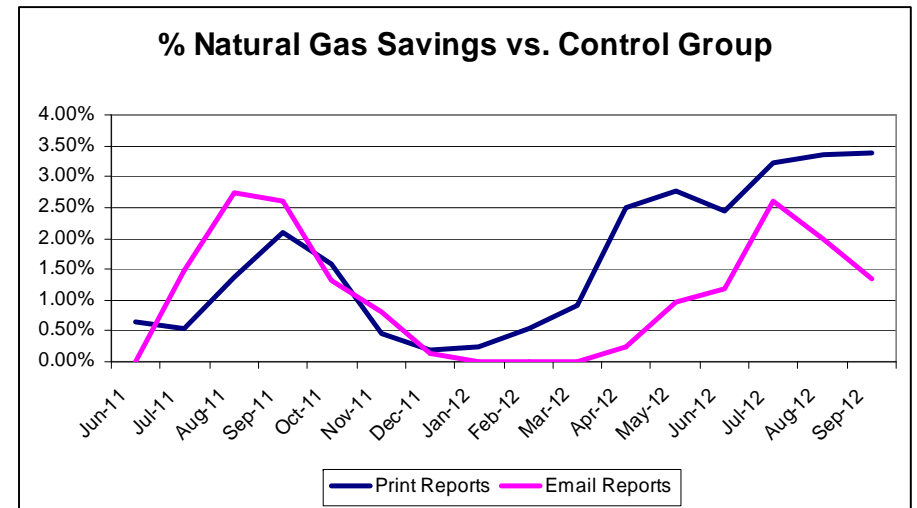
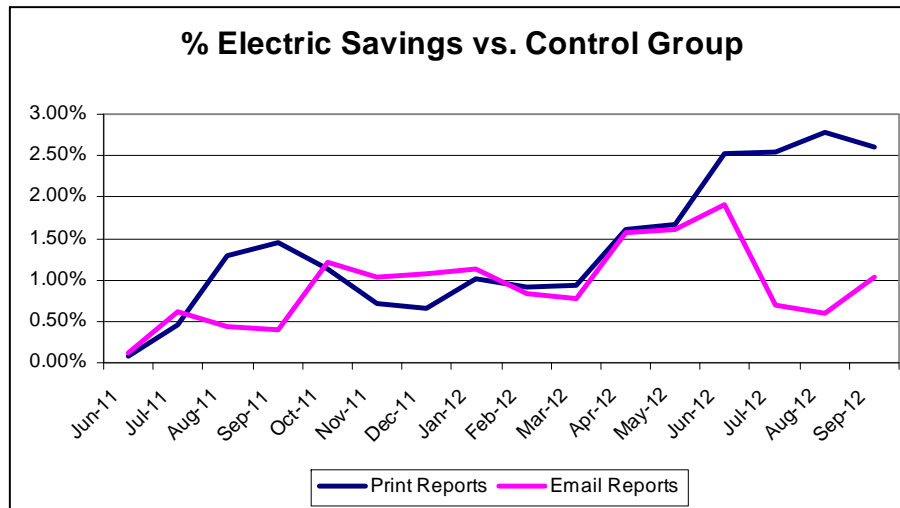
Commercial RTU Early Retirement

- Revised Technical Assumptions – Your Feedback
- Looks marginally cost effective
- Final review stage
 - Degradation = loss of performance
 - Doesn't necessarily = increased energy
 - Difficult to model

Pilot & Study Update

Energy Feedback Pilot

- ❑ 50,000 Colorado participants; 40k print reports, 10k e-mail reports
- ❑ Savings in line with original projections (2% electric, 1% gas)
- ❑ Program will expand to an additional 50,000 participants in January 2013



12.2 GWh cumulative savings

56,000 DTh cumulative savings

Xcel In-Home Smart Device Pilot

Preliminary Learning's

- Low adoption, take rate ~ 1.4%
- Working on customer side of meter poses unique challenges
- 50% of devices not controllable or customer disabled
- Rapid technology change = device obsolescence

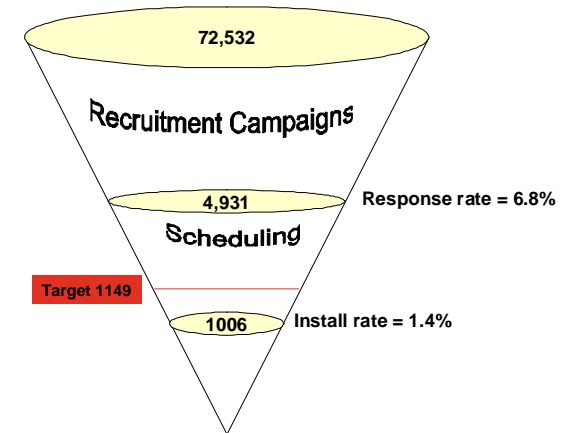
Pilot Status

- Ongoing Operations & Customer Support
 - 13 control events to date
 - Few warranty/installation issues ~ 5%
- Focus on customer outreach
 - Monthly communication providing tips and information
 - Participant survey to determine likes, most beneficial features

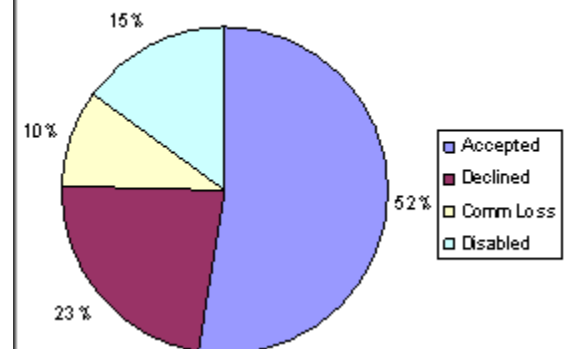
Next Steps

- Prepare the preliminary evaluation report with 2012 data
- Review survey results and adjust outreach plan as needed

Customer Adoption

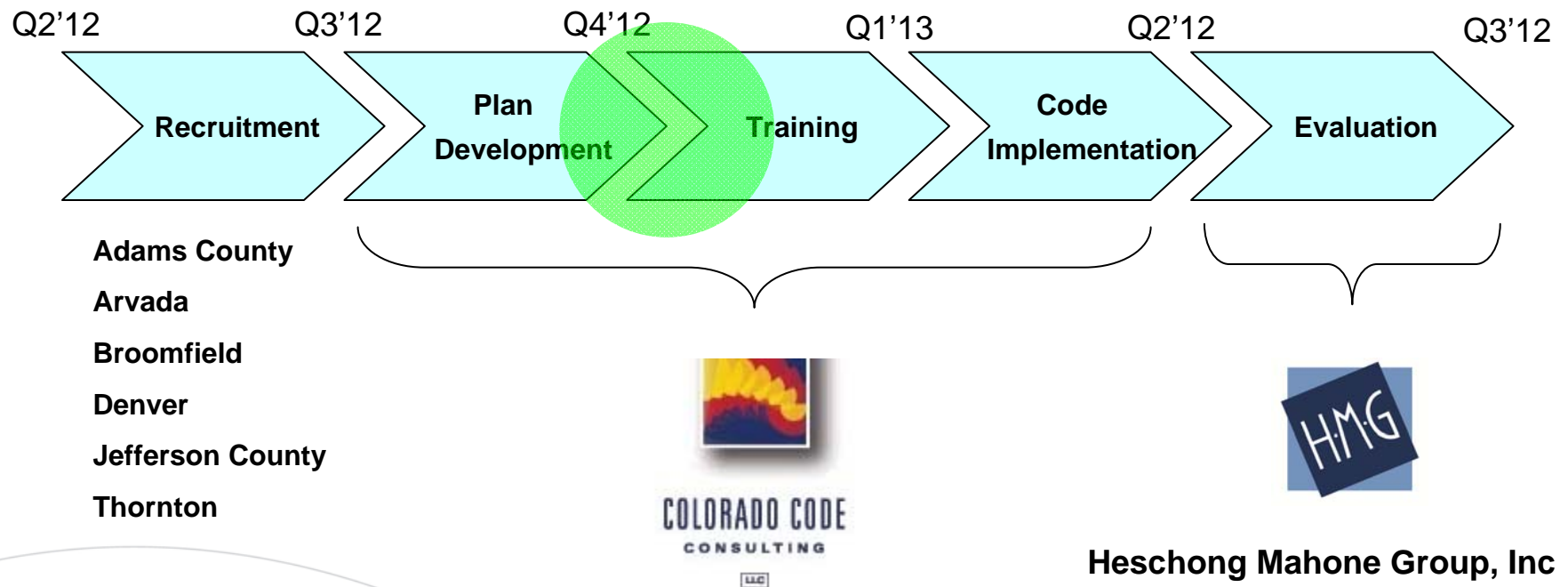


Control Event Performance



Building Code Support Pilot

Pilot remains on track, expected to conclude with evaluation results June 2013



EV Demand Response Pilot

Purpose

- **Determine demand response opportunity available through control of electric vehicle charging stations and better understand:**
 - Customer's willingness to allow interruption of charging
 - Available load coincidence with peak demand



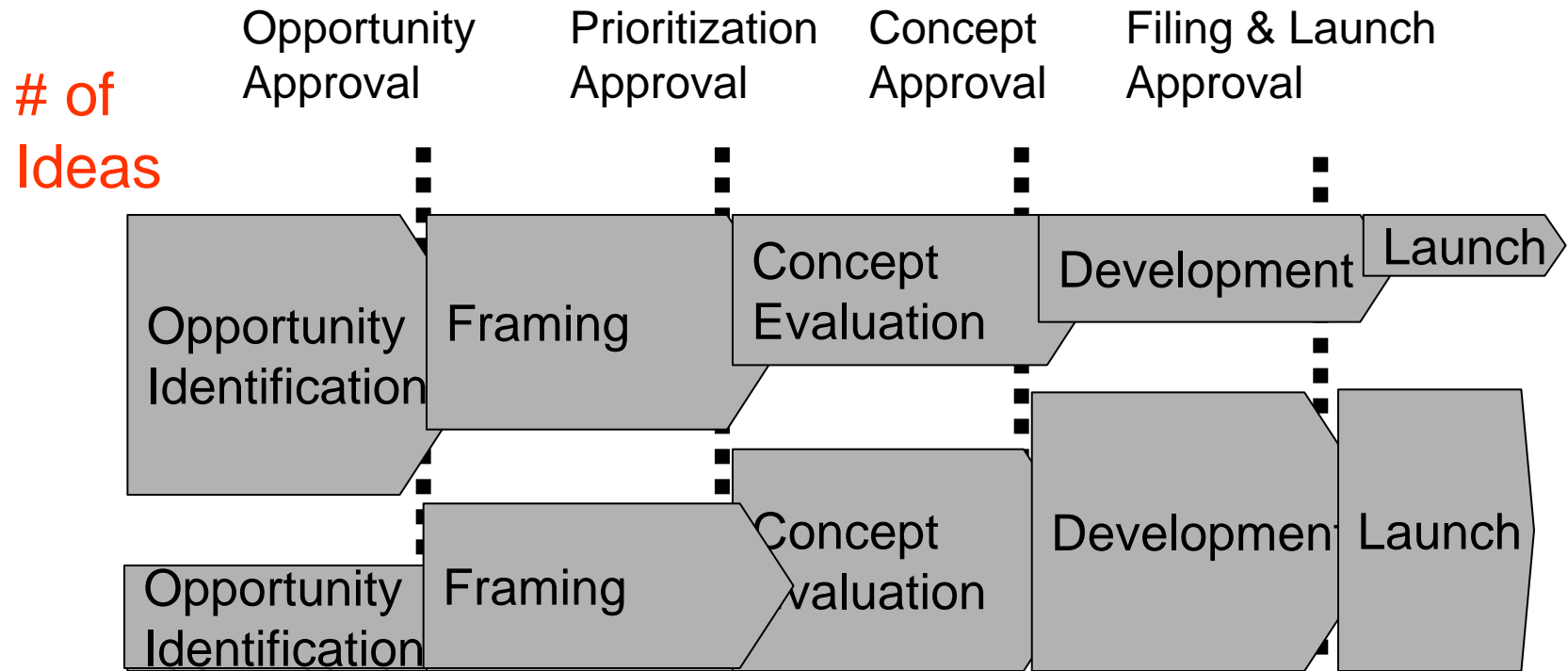
Status

- **Deployed control devices for testing and evaluation**
 - Xcel Energy distribution center, residential customer
- **Re-evaluating control devices to:**
 - Maintain costs
 - Provide better customer experience
- **Developing list of potential participants from:**
 - Repowering transportation inquiries
 - EVIX list of vehicles purchased within PSCo territory



Ongoing Development Update

Product Development Process



Level of Effort per Idea

Product Pipeline

- **Most promising products identified**
- **Vetting internally**
- **Next steps**
 - **Approval to proceed**
 - **Allocate resources**
- **Target inclusion in 2014 DSM Plan**

DSM Roundtable Ideation Submissions – 3rd Quarter

- Received no new Product Ideas
- New Opportunity Identification Form

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/xcelenergy/Regulatory/Regulatory%20PDFs/RushCODSMPProductDevelopmentIdeationForm.pdf>

