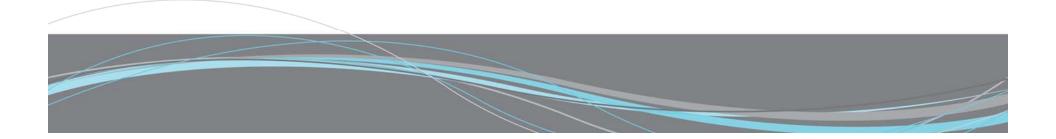




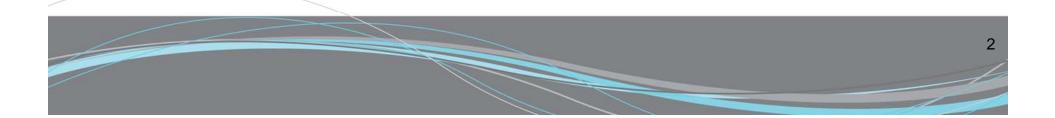
# Xcel Energy Colorado DSM Roundtable Discussion

February 16, 2012 1:00pm to 4:00pm 1800 Larimer, Room 03G01



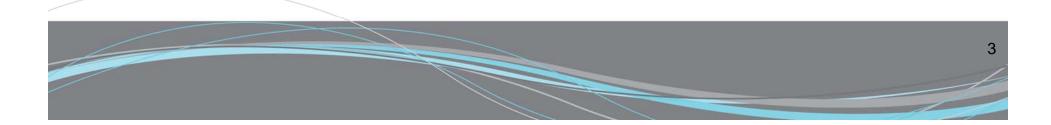
# **Welcome and Introductions**

Contact Info: Suzanne Doyle Manager, DSM Regulatory Strategy & Planning Office Phone: 612-330-5518 Cell Phone: 612-599-5785 E-mail: suzanne.galster@xcelenergy.com



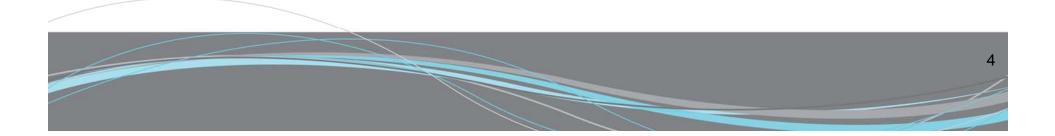
# Agenda

- 1:00 1:05 Welcome, Introductions (Doyle)
- 1:05 1:15 Program Evaluations Updates (White)
- 1:15 1:45 Regulatory Updates (Cowan)
- 1:45 2:15 DSM Program Highlights (Warman, Hueser)
- 2:15 2:30 **Break**
- 2:30 3:30 Product Development (Schwain, Goggin)
- 3:30 3:45 Wrap-up/Open Discussion



# **Program Evaluations Update**

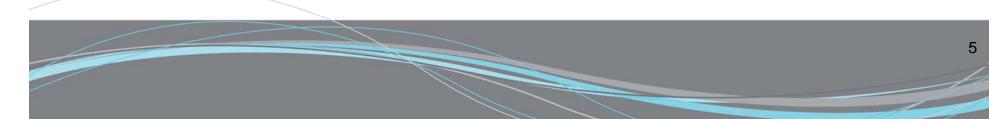
Presented By: Shawn White



## **DSM Process & Impact Evaluations 2011**

### **Residential Showerhead Program**

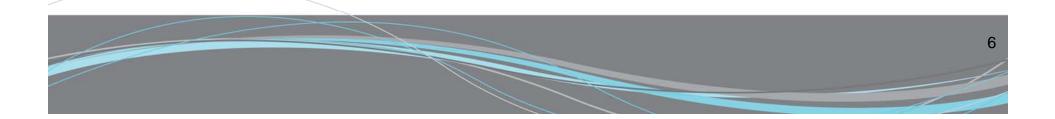
- Update NTG from 1.0 to .99
- Did not evaluate technical assumptions as task was removed when Program eliminated from original 2012-2013 Plan. Will include assumptions in Portfolio wide review now that Program is re-instituted.
- Low Income Single Family Weatherization
- Did not evaluate NTG; kept at 1.0 due to nature of Program
- Consider Home Type as a component of savings achieved through gas measures; Adjust assumptions to include Mobile Homes
- Consider climate as a component of savings achieved for insulation & high-efficiency measures



## **DSM Process & Impact Evaluations 2011**

### **Business Heating Efficiency**

- Update NTG from .97 to .86
- Change effective useful life to be consistent with other programs
  - Stack dampers from 20 to 12 years
  - Pipe insulation from 7 to 15 years

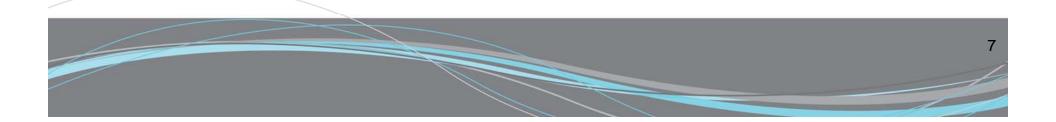


## **DSM Process & Impact Evaluations 2012**

### 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



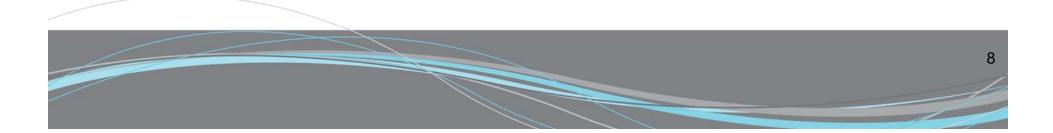
# **Regulatory Update**

**Presented by:** 

## **Neil Cowan**

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

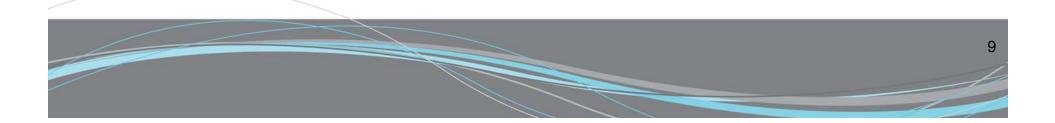
http://www.xcelenergy.com/About\_Us/Rates\_&\_Regulations/Regulatory\_Filings/CO\_DSM



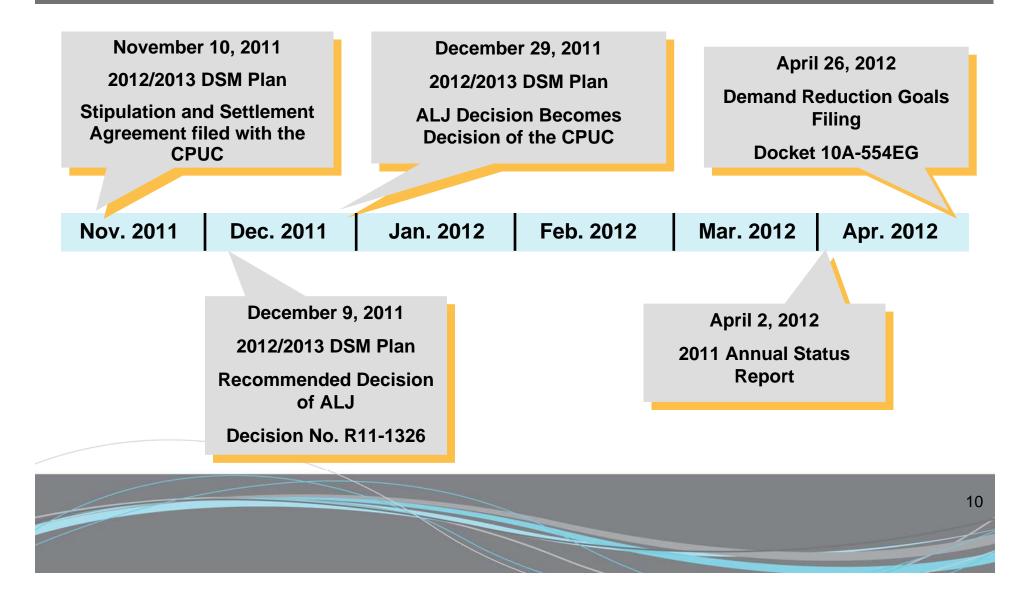
# Preliminary Overall 2011 DSM Achievements

Electric Targets: 70.8 MW; 255.9 GWh; \$68.8M
 Electric Achievements: 74.4 MW; 301.5 GWh; \$63.8M

Gas Goals: 368,228 Dth; \$15.8M
 Gas Achievements: 478,133 Dth; \$17.1M

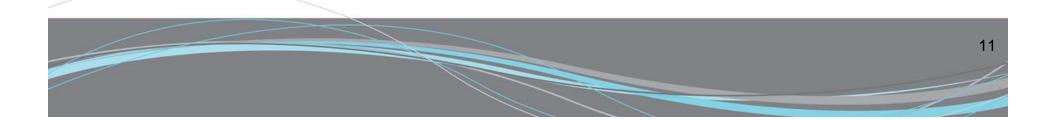


# **Timeline of Recent/Future Filings**



#### Insulation Rebate Program

- Evaluate and Develop Quality Assurance Program
- Stakeholder Meeting Held:
  - January 31, 2012
    - 2<sup>nd</sup> Meeting being scheduled the end of February 2012
- Electric Vehicles
  - The Electric Vehicle Demand Response charging pilot is on track for implementation in 2012

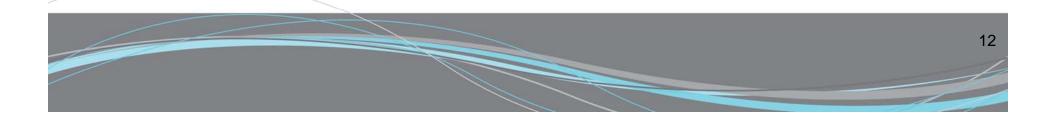


### Energy Efficiency Financing

- February Develop list of workable ideas
- March Discuss Ideas and gather input from external Stakeholders

#### Waste to Energy Projects

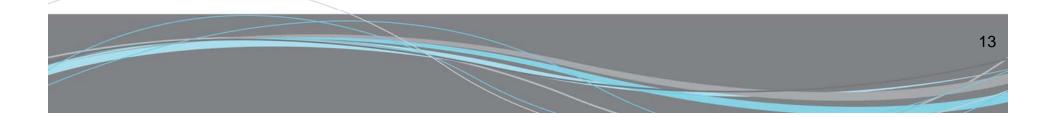
Currently evaluating modifications to a proposed Eligible Energy Resource tariff which will accommodate these types of projects.



#### Plan Modifications to Address Shortfall 2013

### Refrigerator Recycling –

- RFP Issued for a 3<sup>rd</sup> Party Program Implementer
- Appliance Recycling Centers of America (ARCA) was chosen as the 3<sup>rd</sup> Party Implementer for Colorado, Minnesota and New Mexico.
- Analyzing cost effectiveness of adding primary refrigerators and freezers.

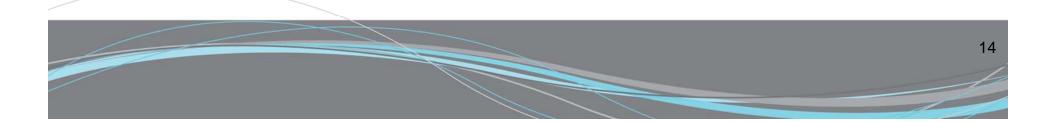


### RFP for Innovative Technology –

Internal Meetings being held weekly to draft the RFP

A webpage is being developed within <u>www.responsiblebynature.com</u> to provide specific information on registering with our Sourcing Department

Anticipate the initial Request for Information will be sent next week.



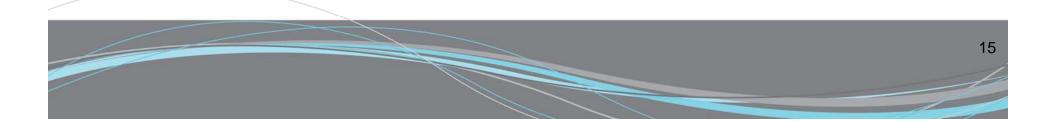
#### Plan Modifications to Address Shortfall 2013 (continued)

#### Low Income Single Family Weatherization –

High Efficiency Water Heaters, Storm Windows, Crawl Space Insulation and Attic Insulation in manufactured homes currently under evaluation

#### Air Conditioner Tune-Up RFP –

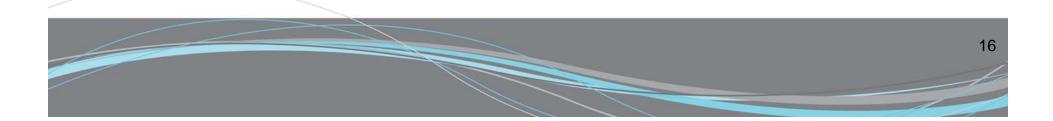
- Request for AC Tune Up Program for Residential and Small Commercial Customers
- RFP being written to be issued by March 31, 2012



### Building Code Support Pilot 60 Day Notice

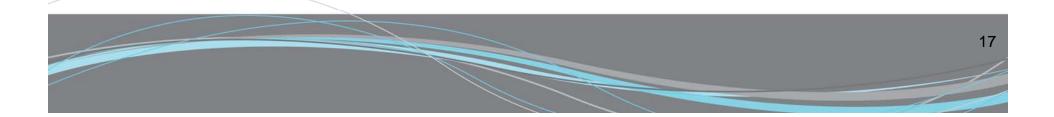
#### 60 Day Notice Posted – December 23, 2011

- Comments Received from CPUC Staff and SWEEP
- Consideration of jurisdictions that are considering adopting the 2012 IECC
- Extension of Core Evaluation Period by one Month
- Participation in Northeast Energy Efficiency Partnership EM&V Forum for Energy Codes



### Building Code Support Pilot 60 Day Notice

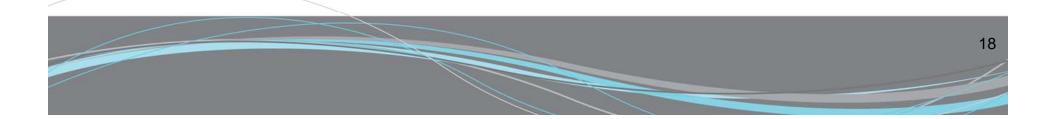
- Reply Comments from Public Service sent to DSM Roundtable Members 2-16-2012
- Pilot Implemented 2-23-2012
- Highlights of Pilot:
  - Company working with local building community and jurisdictions in adopting and/or improving compliance to IECC 2009
  - Consideration will be given to jurisdictions that are considering moving to IECC 2012



### Building Code Support Pilot 60 Day Notice

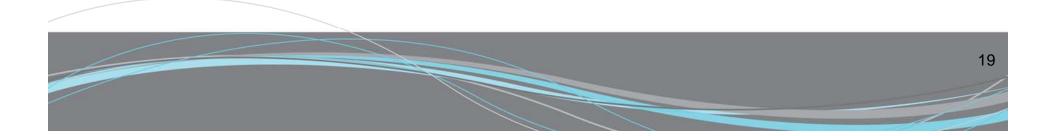
Includes:

- New Codes Training
- Technical Training for the Codes
- Code and Technical Support
- Field Training
- Evaluation, Measurement & Verification:
  - DOE Building Energy Codes Program Framework and Protocol utilized for verification and evaluation procedures



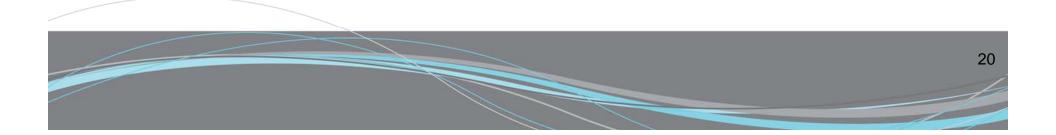
# **DSM Program Highlights**

Presented By: David Hueser Kate Warman



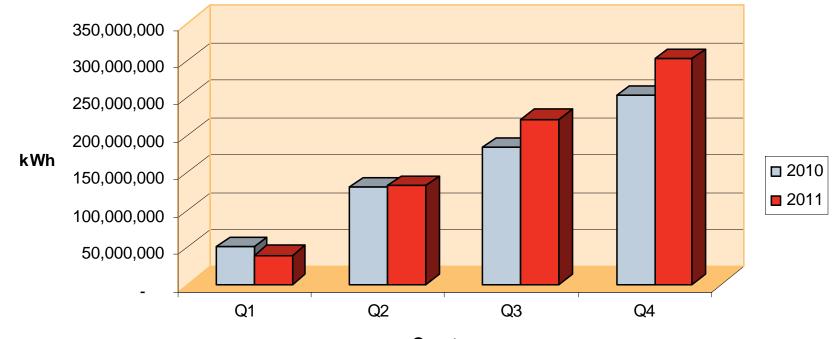
# DSM Program Overview, Business Energy Efficiency Program Highlights

**David Hueser** 

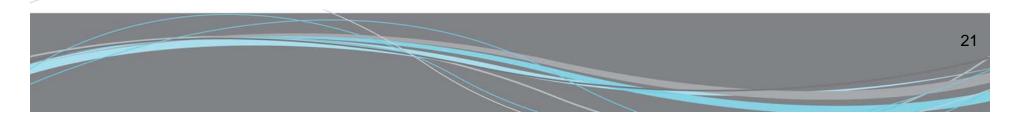


# Energy Savings (kWh) picked up in Q3 and Q4 2011

Colorado DSM 2010/2011 Quarterly Comparison



Quarter



## **Portfolio Overview (Business + Residential)**

## Electric

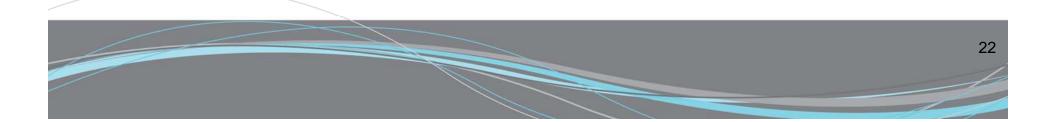
■ 301.47 GWh YTD (118% of Y/E Target)

\$63.8 M (92.8% of Budget)

### Gas

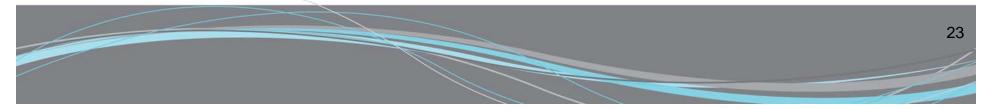
■ 478,133 Dth (130% of Y/E Target)

■ \$17.1 M (108% of Budget)



# **Key Business Trends**

- For business prescriptive products
  - Overall kWh energy savings achievement was higher
  - Overall opportunity size was generally lower
  - Customer participation was higher for most DSM products
  - Opportunity to expand existing and add new rebates measures
- 2012 opportunity pipeline more robust than 2011
- 2012 system enhancements, e.g. CRM
- Retail, Grocery/Supermarket segments making a comeback
- Required Net To Gross ratios impact achievement
- Federal efficiency standards & local energy codes will have a continued effect on DSM programs

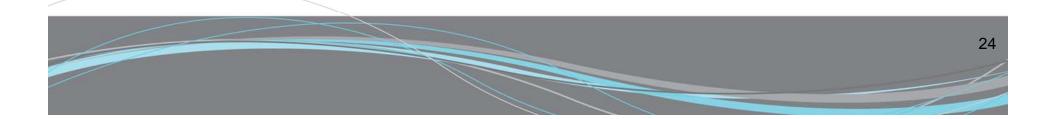


### **Business DSM Products that Exceeded 2011 Goal**

- C&I Lighting Efficiency, Small Business Lighting
- Self-Directed Custom Efficiency
- Motor and Drive Efficiency
- Energy Management Systems
- Recommissioning

#### Under 2011 kWh goal, but trending up since 2010

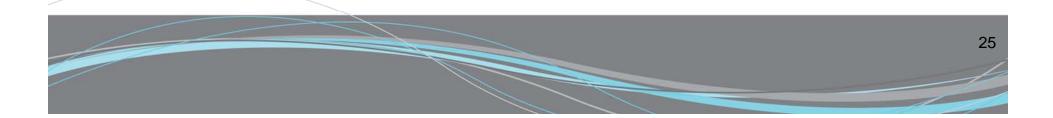
- New Construction (86% goal, + 37% vs. 2010)
- Process Efficiency (85% goal, + 149% vs. 2010)
- Standard Offer (60% goal, + 92% vs. 2010)



### **Business DSM Products Under 2011 Goal**

#### Business DSM Product (kWh to 2011 goal, trending)

- Custom Efficiency (80% goal, -6% vs. 2010)
- Heating Efficiency (80% goal, -20% vs. 2010)
- Compressed Air Efficiency (67% goal, -1% vs. 2010)
- Cooling Efficiency (32% goal, -50% vs. 2010)
- Commercial Real Estate (17% goal, -5% vs. 2010)
- Data Center Efficiency (no participation)
- Computer Efficiency (no participation, new in June)

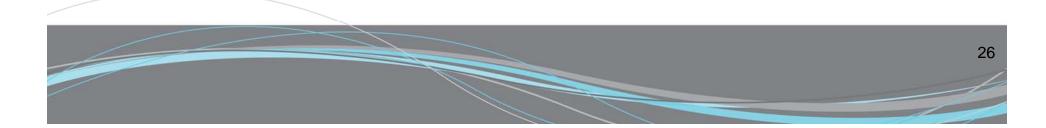


# Product Updates, "year in review"

# Quarterly Business DSM product updates and status changes are available on the CO DSM Regulatory Web page

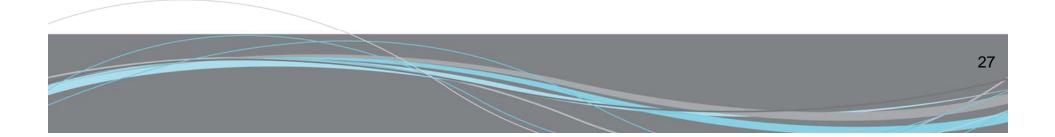
http://www.xcelenergy.com/About\_Us/Rates\_&\_Regulations/Regulatory\_Filings/CO\_DSM

- Q3, 2011: Cooling Efficiency & Motors measure additions, Recommissioning, Energy Management Systems (EMS) updates
- Q2, 2011: Computer Efficiency (New Product), Business New Construction & Small Business Lighting updates
- Q1, 2011: EE Exposition, Compressed Air measure additions and bonus rebates, Custom Efficiency, C&I Lighting Efficiency and Cooling Efficiency updates
- Q4, 2010: 2010 wrap-up, Key Findings, Data Center, Standard Offer, Process Efficiency, Segment Efficiency updates



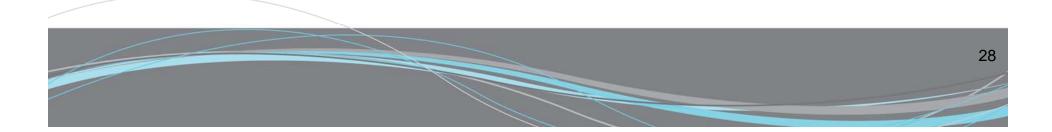
# Residential and Low-Income Program Highlights

# **Kate Warman**



# **Residential Snapshot**

- Most Growth- High Efficiency Air Conditioning
- Most Popular- Insulation Rebates
- Highest Potential- Evaporative Cooling
- Biggest Challenge- Home Performance w/ ES
- Biggest Unknown- Low Income Energy Savings Kits



# **High Efficiency Air Conditioning**

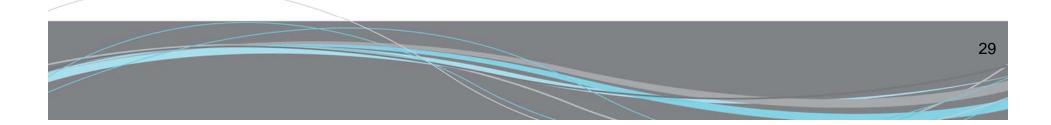
#### Most Growth

🔳 855 vs. 1661

673,790 kWh vs. 1,767,145 kWh

#### Quality Installation Improvements

- Training
- M&V Results
- Engaged Trade



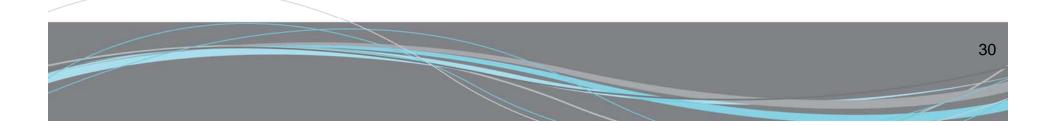
# **Insulation Rebates**

#### Most Popular

2,935 vs. 6,975

24,063 Dth vs. 98,970 Dth

Increased awareness
Community & State
Trade Involvement



# **Evaporative Cooling**



 $\blacksquare 3,000 \rightarrow 4,298 \rightarrow 4,630$ 

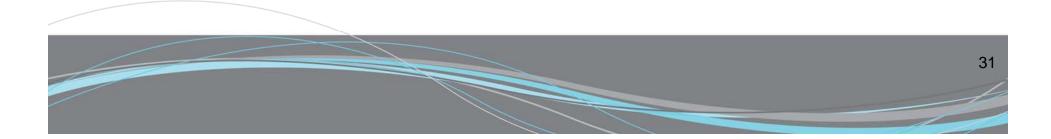
### Incentives

Tiered Rebates

Retailer & Contractor

Whole House





## Home Performance w/ ENERGY STAR

#### Biggest Challenge

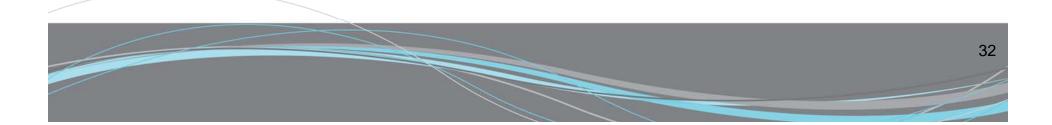
■ 59% of kWh goal vs. 108% of goal?

#### Messaging/Contact

- Limited direction
- Multi-step messaging

#### Qualifications

- Air Sealing, Insulation, and CFL's
- 5 measures required
- Pre-existing measures



# **Low Income Energy Savings Kits**

#### Biggest Unknown

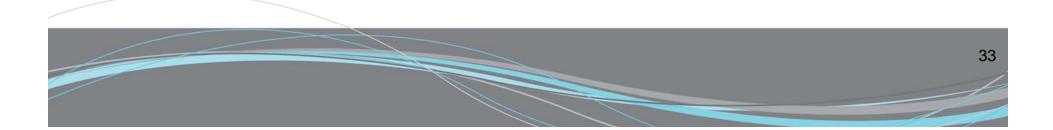
Evaluation in 2012

#### Eligibility

80k customers on EA in 2009

- 25k kits in '09,'10', '11
- Seeing repeat customers
- Participation: every 5 years

#### Decreasing Installation Rates



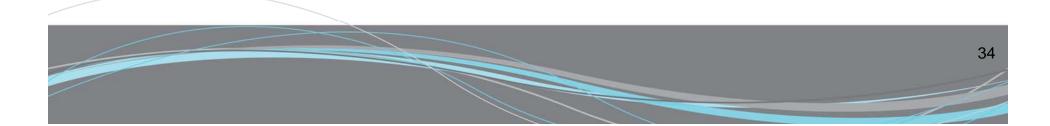
# **DSM Product Development Update**

**Presented by:** 

### Kevin Schwain and Pat Goggin

DSM Website provides program idea submission forms at:

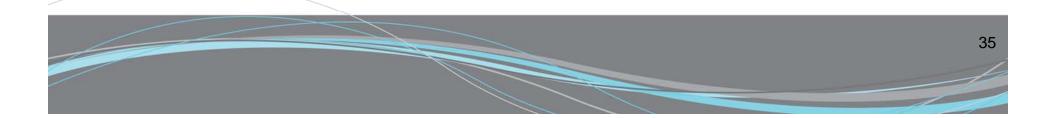
http://www.xcelenergy.com/About\_Us/Rates\_&\_Regulations/Regulatory\_Filings/CO\_DSM\_Plan



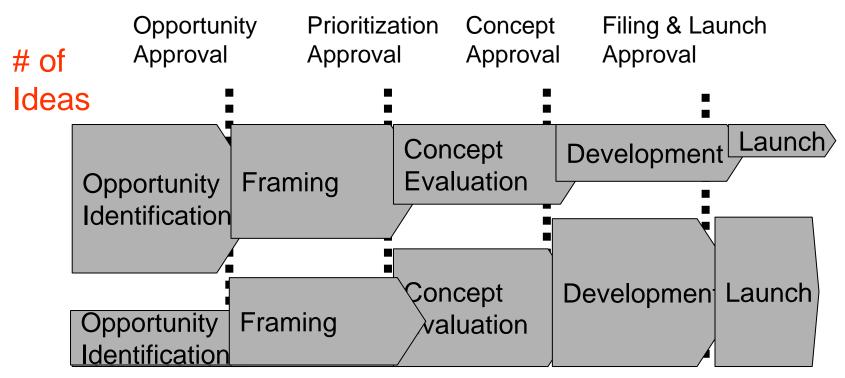
# **Product Development Team**

#### 10 Resources able to flex across 4 Platforms

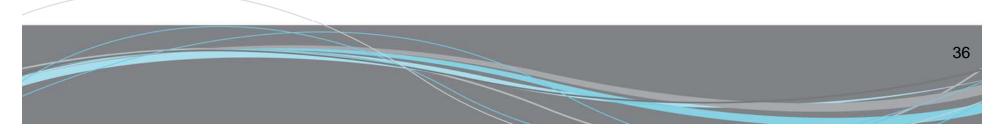
- Energy Efficiency
- Renewable Energy
- Load Management
- Customer Choice
- Manager: Kevin Schwain, 612-330-5961
  - Energy Efficiency Lead: Pat Goggin, 303-294-2370



# **Product Development Process**



Level of Effort per Idea



# DSM Roundtable Ideation Submissions – 4<sup>th</sup> Quarter

#### Received 3 new Product Ideas

### Dimming Ballasts

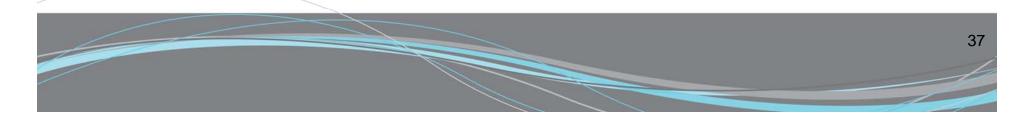
- Received: 11/29/2012
- Status: Incomplete Submission

#### Reflective Insulation

- Received: 12/14/2012
- Status: Incomplete Submission

#### Energy Scan

- Received: 01/20/2012
- Status: Incomplete Submission



## **DSM Roundtable Ideation** Submissions

#### A complete submission has two parts

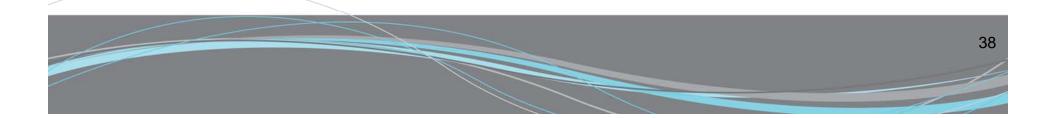
Answers to a series of questions

Numbers with which to estimate cost effectiveness

#### A **complete** submission answers these questions:

If new program idea:

- Please describe the program.
- What problem does the new program solve?
- Why should Xcel offer the new program?
- How does the new program help the customer?



## **DSM Roundtable Ideation Submissions**

If new program idea: (continued)

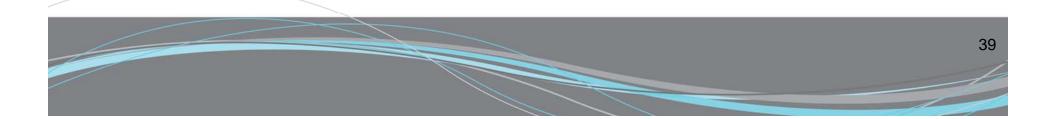
Which customer group(s) will directly benefit from the program?

What is the history and outlook for the technology used in the program?

What other utilities/groups offer a similar program?

Who could help bring this program to market?

What changes have happened or are expected to happen in the market that would affect this program?



## **DSM Roundtable Ideation Submissions**

A complete submission answers these questions:

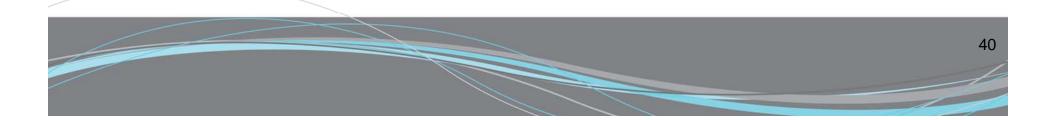
If existing program:

Which existing program does this modification relate to?

Describe the proposed modification.

How does the proposed modification help the customer?

Which customer group(s) will directly benefit from the proposed modification?



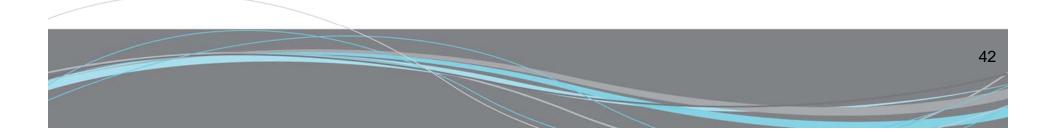
# **DSM Roundtable Ideation** Submissions

A complete submission has numbers for the highlighted information

	Equipment to be Replaced OR	New Equipment OR
	Lower Efficiency Option	Higher Efficiency Option
Equipment Description		
Equipment type		
Manufacturer of equipment		
Model number		
Age of equipment		
Efficiency		
Nameplate data: (kW, MMBtu, tons,		
Watts, HP, etc.)		
Non-energy savings or cost differences		
between low and high efficiency options		
COST BREAKOUT		
Equipment		
Installation		
Other (explain)		
TOTAL		

# New Products in Development for potential 60-day Notice

Commercial	Status	Potential Filing
LED Wall Pack fixtures	Product Development	2012 60 Day
Food Service Equipment	Product Development	2012 60 Day
Networked PC Power Management	Concept Evaluation	2012 60 Day
Commercial Efficiency Pilot	Concept Evaluation	2012 60 Day
Integrated Lighting Sensors	Concept Evaluation	2012 60 Day
Lighting Fixture Reduction	Concept Evaluation	2012 60 Day
RTU Early Retirement	Concept Evaluation (Settlement)	2012 60 Day
Building Tune-up	Framing	2012 60 Day



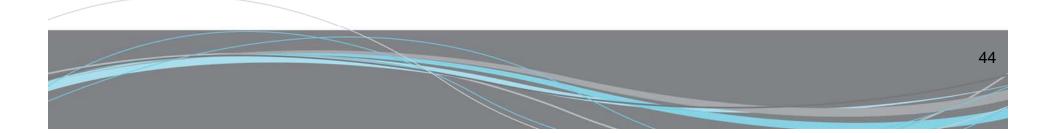
# New Products in Development for potential 60-day Notice or 2012/2013 Filing

Industrial	Status	Potential Filing
Plan A VSD Air Compressors	Launched	
VSDs on Chillers	Launched	
Efficient Small Motors - ECMs	Launched	2012/2013 Biennial
Turn Key Services	Development	2012 60 Day
Prescriptive Refrigerated Case Efficiency Anti-Sweat Heater Controls Zero Energy Glass Doors w/o Anti- Sweat Heaters	Concept Evaluation	2012 60 Day
Low loss filters (mist eliminators)	Concept Evaluation	2012 60 Day
Dew Point Demand Control – Desiccant Dryer	Concept Evaluation	2012 60 Day
Cycling Refrigerated Dryer	Concept Evaluation	2012 60 Day

43

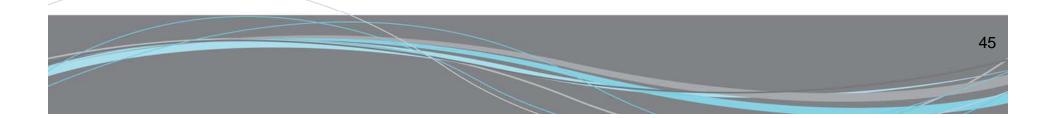
## New Products in Development for potential 60-day Notice or 2012/2013 Settlement

Residential	Status	Potential Filing
A/C Tune-Up Residential/Small Commercial	RFP Pending (Settlement)	2012 60 Day
EC motors for furnaces	Concept Evaluation	2012 60 Day
Residential Multi-family	Concept Evaluation	2012 60 Day
Prescriptive rebates for Condensing boilers & outdoor resets	Concept Evaluation	2012 60 Day
Primary Refrigerator Rebate	Concept Evaluation (Settlement)	2012 Settlement
Freezer Rebate	Concept Evaluation (Settlement)	2012 Settlement



## **Energy Feedback Pilot**

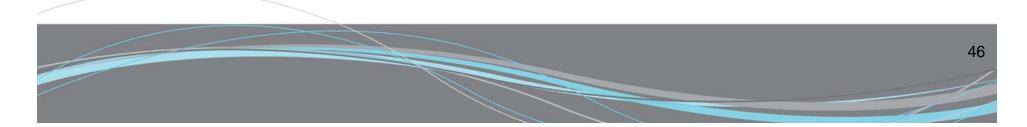
- Delivered first reports during first few weeks of June
- Data issues with data warehouse delayed mailings August through October
- 50,000 CO Gas Electric Combo customers in Pilot
- 40,000 print reports and 10,000 electronic reports
- Reports resumed in November with re-introductory insert
- Getting some but lower results from e-delivery



## **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/xe/Regulatory/Regulatory %20PDFs/RushCODSMProductDevelopmentIdeationForm.pdf
- 2012 Opportunity Identification meeting in January (internal meeting)



# Wrap-up / Open Discussion

**Upcoming Roundtable Schedule:** 

May 23, 2012

August 16, 2012

November 14, 2012

