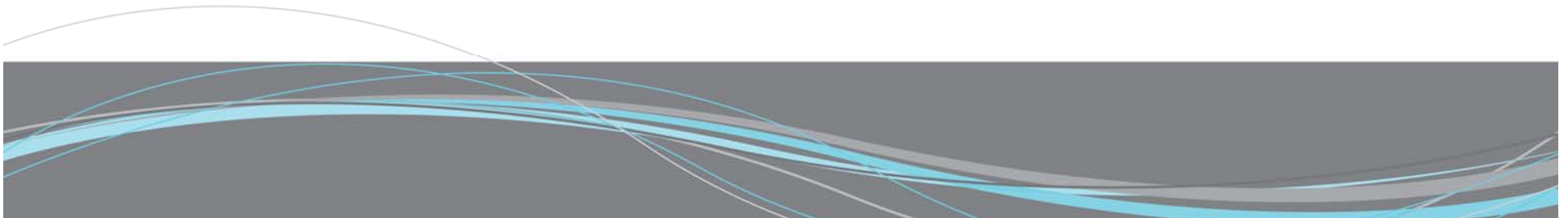




# **Xcel Energy**

## **Colorado DSM Roundtable Discussion**

**August 18, 2011  
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](mailto:suzanne.galster@xcelenergy.com)**

# Agenda

- 1:00 – 1:05 Welcome, Introductions (Doyle)
- 1:05 – 1:20 Program Evaluations Updates (Hemphill)
- 1:20 – 2:00 Regulatory Updates (Cowan)
- 2:00 – 2:15 Break
- 2:15 – 3:00 DSM Program Highlights (White, Warman, Hueser)
- 3:00 – 3:45 Product Development Update (Schwain)
- 3:45 – 4:00 Wrap-up/Open Discussion

# **Program Evaluations Update**

**Presented By:  
Heather Hemphill**

# DSM Process and Impact Evaluations 2011

- **Residential – Conducted by The Cadmus Group**
  - **Showerhead Program – Scheduled Completion Date 10/15/11**
  - This program is not included in the 2012-13 Plan.
  - The process analysis and recommendations will follow the normal process. Analysis currently underway.
  - **Low Income Single Family Weatherization Program – Scheduled Completion 10/31/2011**
    - All surveying is complete.
    - Analysis underway.
- **Business - Conducted by Tetra Tech MA, Inc.**
  - **Heating Efficiency – Scheduled Completion 11/16/2011**
  - Process and impact study.
  - All surveying is complete, analysis underway.
  - **Self Direct Custom Efficiency - Scheduled Completion 11/16/2011**
  - Process only study.
  - All surveying is complete, analysis underway.

# DSM Evaluations

## 2012-2013 filing

### 2012

- Residential - Home Performance with ENERGY STAR
- Business - Process Efficiency Product

### 2013

- Residential – Low Income Energy Savings Kits
- Business – Compressed Air, Segment Efficiency

### **Portfolio Technical Assumptions Evaluation**

- Replaces the technical assumptions portion of the comprehensive product evaluations.
- To be conducted over the course of the 2012-13 Plan.
- **Benefits**
  - Provides a more consistent view as one evaluator is involved
  - Anticipated cost effectiveness when compared to current product-specific evaluations
  - Limits redundancies
  - Minimal impact on internal resources

# Regulatory Update

Presented by:

**Neil Cowan**

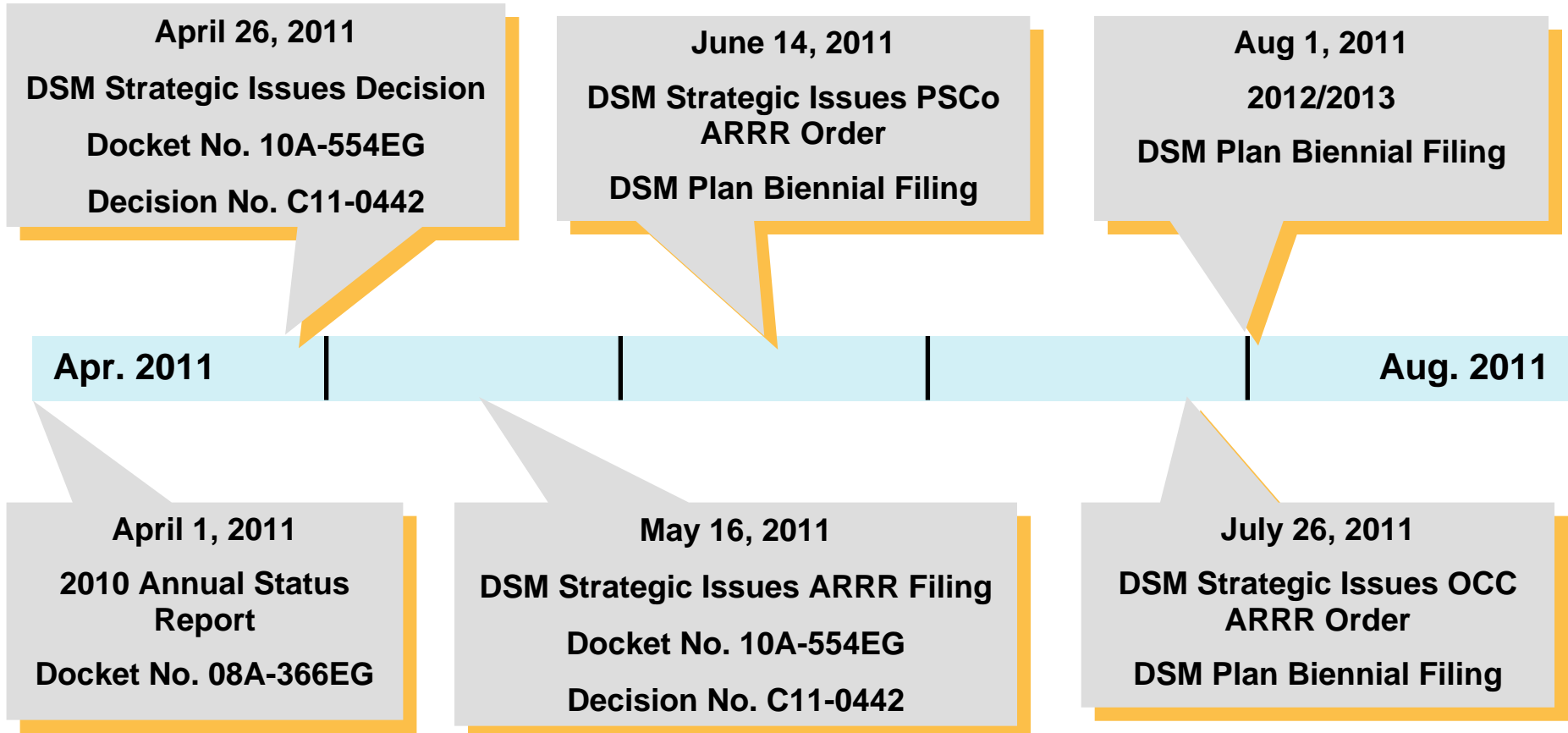
Compliance information is available  
at Xcel Energy's DSM Website:

[http://www.xcelenergy.com/About\\_Us/Rates\\_&\\_Regulations/Regulatory\\_Filings/CO\\_DSM](http://www.xcelenergy.com/About_Us/Rates_&_Regulations/Regulatory_Filings/CO_DSM)

# 2011 60/90-Day Notices

Notification Date	Product	Type of Notice
Feb. 4, 2011	ENERGY STAR Retailer Incentive Pilot	Product Changes
Feb. 8, 2011	Energy Management Systems	Product Changes
Mar. 30, 2011	ENERGY STAR New Homes	Informational
Mar. 31, 2011	Insulation Rebates	Informational
Apr. 22, 2011	Compressed Air	Added Measures
May 3, 2011	Cooling Efficiency	Added Measures
May 25, 2011	Computer Efficiency	New Product
Jun. 15, 2011	Lighting Efficiency	Product Changes
Jul. 6, 2011	Home Performance with ENERGY STAR	Informational
Jul. 27, 2011	Cooling Efficiency	Added Measures
Aug. 1, 2011	Recommissioning	Informational
	Motor & Drive Efficiency	Informational
	Central A/C Tune-Up	90-Day Notice - Product Termination
Aug. 2, 2011	Evaporative Cooling	Informational

# Timeline of Recent Filings



# 2012/2013 DSM Plan – filed 8/1/2011

## Docket No. 11A-631EG

Proposed Products	Expenditures (\$)	Energy Savings (Gen kWh or Dth)	Incremental Demand Savings (Gen kW)
<b>2012</b>			
Electric Efficiency	55,947,038	321,290,721	59,255
Saver's Switch	13,326,964	697,183	20,865
ISOC Marketing and Admin.	31,495	0	12,700
Third-Party Demand Response	0	0	3,500
Electric Indirect and Pilots	6,702,097	8,560,821	684
<b>Total 2012 Electric DSM</b>	<b>\$76,007,594</b>	<b>330,548,725</b>	<b>97,004</b>
Gas Conservation	10,672,926	389,713	---
Gas Indirect and Pilots	1,949,157	23,758	---
<b>Total 2012 Gas DSM</b>	<b>\$12,622,083</b>	<b>413,471</b>	<b>---</b>
<b>2012 Total</b>	<b>\$88,629,677</b>	<b>330,548,725 kWh 413,471 Dth</b>	<b>97,004 kW</b>

# 2012/2013 DSM Plan – filed 8/1/2011

## Docket No. 11A-631EG

Proposed Products	Expenditures (\$)	Energy Savings (Gen kWh or Dth)	Incremental Demand Savings (Gen kW)
<b>2013</b>			
Electric Conservation	60,393,808	326,745,824	61,411
Saver's Switch	14,075,362	697,183	20,865
ISOC Marketing and Admin.	32,581	0	1,300
Third-Party Demand Response	0	0	0
Electric Indirect and Pilots	11,502,160	28,556,993	5,621
<b>Total 2013 Electric DSM</b>	<b>\$86,003,911</b>	<b>356,000,000</b>	<b>89,197</b>
Gas Conservation	10,718,800	382,969	---
Gas Indirect and Pilots	1,986,561	23,758	---
<b>Total 2013 Gas DSM</b>	<b>\$12,705,361</b>	<b>406,727</b>	<b>---</b>
<b>2013 Total</b>	<b>\$98,709,272</b>	<b>356,000,000 kWh 406,727 Dth</b>	<b>89,197 kW</b>

# **2012/2013 DSM Plan – filed 8/1/2011**

## **Docket No. 11A-631EG**

### **■ Procedural Schedule:**

- August 19 – Intervention Deadline**
- August 29 – Staff Intervention Deadline**
- October 14 – Answer Testimony**
- November 4 – Rebuttal Testimony**
- Week of November 14 – Hearing**

### **■ Settlement Meetings:**

- August 25 (1 – 4 PM)**
- August 31 (10 – 1 PM)**

**Break**

# **DSM Program Highlights**

**Presented By:**

**Shawn White**

**Kate Warman**

**David Hueser**

# **DSM Program Overview**

## **Shawn White**

# Portfolio Overview

## ■ Electric

- 132.2 GWh YTD (51.7% of Y/E Target)
- \$22.9 M (43.6% of Budget)

## ■ Gas

- 195,947 Dth (53.2% of Y/E Target)
- \$7.8 M (49.4% of Budget)

# **Residential and Low-Income Program Highlights Kate Warman**

# Home Lighting & Recycling

- 2011 Savings Goal 55 GWh, YTD achieved 37 GWh
- 2011 Spending Goal \$3.7 M, YTD spend \$1.5 M
- The program is performing very well. Expected to achieve goal in Q3.
- Impactful improvements for 2011:
  - Increased retail channel to include: K-Mart, Dollar Tree, Family Dollar, Dollar General, True Value, Batteries Plus and Do it Best
  - Improved field support: dedicated field rep making progress in building relationships with retailers
  - New advertising materials: TV, radio, online
- Testing residential LEDs in Q4.

# ENERGY STAR NEW Homes

- **Current YTD through 6/30/2011**
  - **Net Gen kW: 122 kW**
  - **Net Gen kWh: 670,350 kWh**
  - **Net Dth: 34,196 Dth**

- **Current Year End Targets**
  - **Net Gen kW: 203 KW**
  - **Net Gen kWh: 1,580,651 kWh**
  - **Net Gen Dth: 77,700 Dth**

- **Successful**

**The program is currently at 167% of the filed kWh goal and at 86% of filed Dth goal.**

**For the filed 2011 goals, the Company anticipated adopting the more stringent EPA v3 standards and resulting in lower participation. V3 did not pass cost/bens and was not adopted, thus we are seeing participation levels similar to those seen in 2010.**

# Colorado Insulation Program

- **Current YTD through 6/30/2011**

- **Net Gen kW: 1,498 kW**
- **Net Gen kWh: 756,803 kWh**
- **Net Dth: 55,158 Dth**

- **Filed Goals**

- **Net Gen kW: 161 KW**
- **Net Gen kWh: 193,812 kWh**
- **Net Gen Dth: 24,063 Dth**

- **Successful**

**Insulation program is currently over 390% of kWh goal, and over 230% of Dth goal**

**Can attribute success from word of mouth of contractors, rebates coupled with financing and/or community/city stimulus funds, and popularity of program to homeowners making improvements**

# Low Income Single Family Weatherization

- As of June 30, 2011 the program is
  - 83% to goal on gas achievement- 27,650 Dth
  - 64% to goal on electric achievement- 2.7 GWh
- The program success is largely contributed to the following efforts
  - ARRA funding & weatherization agencies staffing up to increase production
  - Marketing and outreach through phone bank, advertising, & websites

# **Business Energy Efficiency Program Highlights David Hueser**

# Product Updates

- **Computer Efficiency – New Product**
  - **Third Party Administrator Ecos PLS targets high efficiency computer power supplies, pays \$5-20 per unit prescriptive incentive upstream to manufacturers**
  - **PSCo targets business customers who use desktop computer virtualization, pays \$60 prescriptive rebate per desktop PC removed.**
  - **Both measures use Energy Star 3.0 as a baseline**
  - **Product introduced via 60-Day Notice effective June 23, 2011; filed in 2012-13 biennial.**
  - **Similar, successful track record in Minnesota**

# Product Updates

- **Business New Construction**
  - Continued slowness in commercial new construction; pipeline shifting to multiple family units
  - Energy Efficiency Buildings participation higher in 2011
  - Trade shifting to existing building retrofits
- **Small Business Lighting**
  - kWh goal exceeded for 2011, significantly increased for 2012/13 DSM plan.
  - Product modification – via 60-Day Notice effective July 15 – expands lighting retrofits eligible for prescriptive rebate
    - Fluorescent T8 and high-bay fixtures, de-lamping
    - LED exterior fixtures
  - DOE efficiency standards changes will significantly impact business lighting products during biennial.

# DSM Product Development Update

Presented by:

**Kevin Schwain**

DSM Website provides program idea submission forms at:

[http://www.xcelenergy.com/About\\_Us/Rates\\_&\\_Regulations/Regulatory\\_Filings/CO\\_DSM\\_Plan](http://www.xcelenergy.com/About_Us/Rates_&_Regulations/Regulatory_Filings/CO_DSM_Plan)

# Product Development Team

- Kevin Schwain – Manager – 612-330-5961
- Anne Kraft – Commercial Segment – 612-330-7582
- Pat Goggin – Industrial Segment – 303-294-2370
- Nathan Huso – Residential Segment – 612-330-2812

# 60-Day Notice for Modified Products

- **CO 2011 DSM Stipulation Agreement**
  - **ENERGY STAR Retailer Incentive Pilot: Filed February 4**
    - Added Computer Monitors
    - 2<sup>nd</sup> Tier Dishwashers, Not Cost Effective
  - **Crawlspace and Duct insulation: Filed April 1, Not Cost Effective**
  - **Duct Testing and Sealing: Filed July 1, Not Cost Effective**

# 60-Day Notice for Modified Products

- **Compressed Air Efficiency: Filed April 22**
  - Add prescriptive rebates for VSD Compressors used for new capacity or to restore diminished capacity
- **Computer Efficiency: Filed May 25**
  - Upstream incentives to manufacturers
  - Desktop PC Virtualization
- **Cooling Efficiency: Filed July 27**
  - Added VSD retrofits for existing Chillers
  - Added Plate & Frame Heat Exchangers

# DSM Roundtable Ideation Submissions

- Received request April 27, 2011 - Energy Metering and Monitoring Systems
  - Comfort Monitor, a wireless remote thermostat system in master metered multi-family buildings.
  - G.A.S. Heat Allocation Meters to meter forced air heating systems in multi-family buildings.

\* All commercial and industrial products can utilize the Custom Program process.

# Comfort Monitor

- Idea received from Energy Metering and Monitoring Systems, Inc
- Web based, wireless remote environmental controls system
- Target market: multi-family master-metered buildings
- Provides thermostat set point control to landlord
- Assumptions: 20%\* energy savings on average heating and cooling and an incremental cost of \$300 (with Installation)
- MTRC Electric = 2.96 MTRC Gas = 4.40.
- Savings are behavioral and about the same as a programmable thermostat
  - There are some regulatory questions
  - \*Independent testing needed to validate savings
  - Equipment warranties? Batteries?

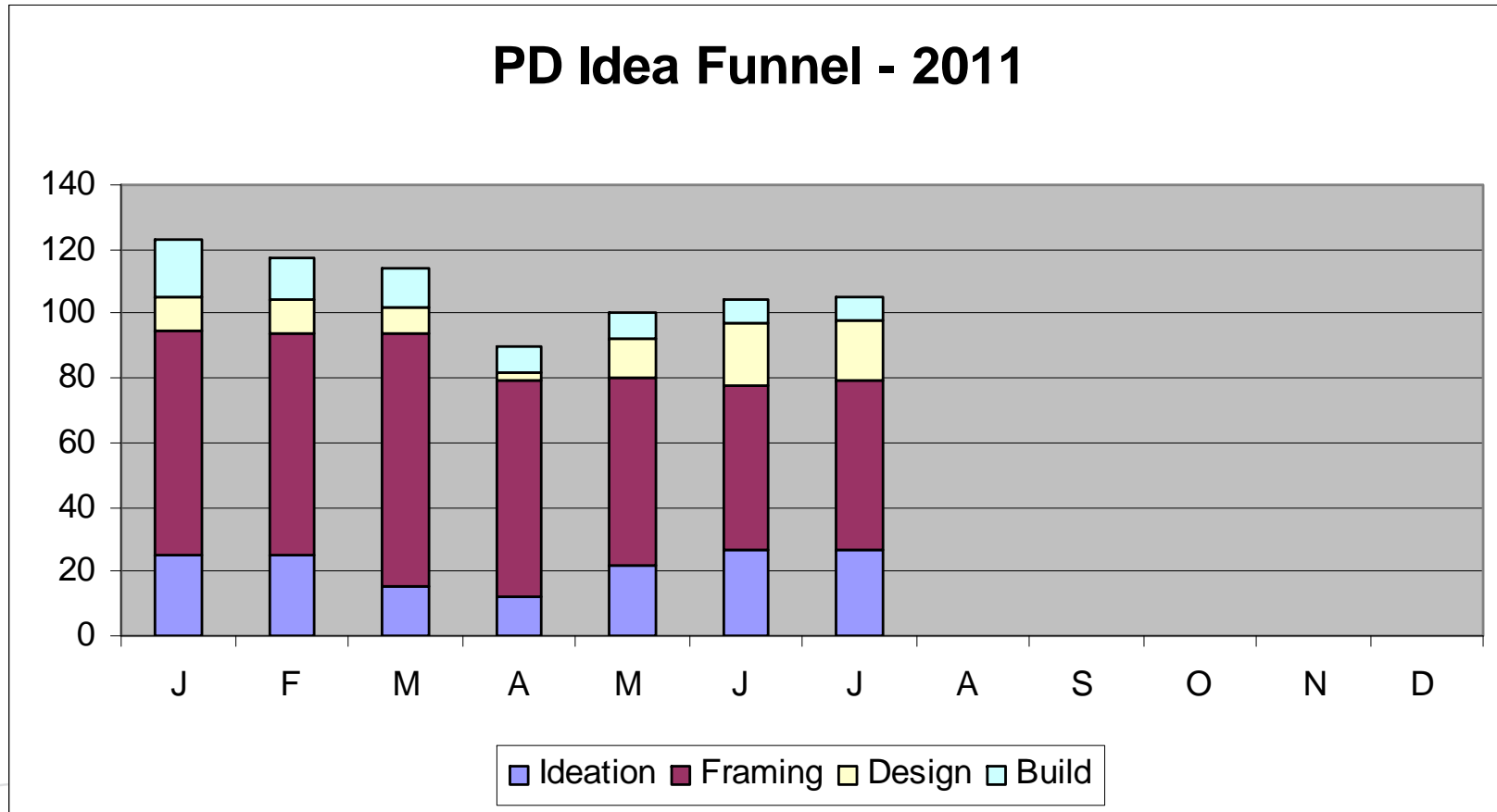
# G.A.S Heat Allocation Meters

- Idea received from Energy Metering and Monitoring Systems, Inc
- Wireless remote metering module for 24VAC gas valves
- Target market: multi-family master-metered buildings
- Each unit can be billed for heating costs – behavior change
- Assumptions: 15%\* energy savings on heating and an incremental cost of \$275 (with Installation)
- MTRC Gas = 3.00.
- Savings are behavioral and about the same as a programmable thermostat
  - \*Independent testing needed to validate savings
  - Equipment warranties? Batteries?

# Product Development Process

- Traditional “Stage-Gate” process that includes team or management review at key decision points:
  - Ideation
  - Framing
  - Design
  - Build
  - Test
  - Launch

# Idea Funnel – All Jurisdictions



# 2011 Cycle 1 Product Development

- Ideation     January 1, 2011 – February 15
- Framing     January 15 – February 28
- **Design**     **March 1 through Q3 2012**
- Build        April 1 through Q4 2012
- Test         May 1 through Q2 2013
- Launch      Jan 1, 2012 through 2013

# 2011 Cycle 1 New Products

## ■ Products in Design

### Commercial

Commercial Efficiency Pilot  
Commercial Food Service Equipment  
Early replacement (Plan B) of  
Commercial RTUs  
High efficiency computer monitors  
LED Parking Garage Lighting  
LED Wall Packs

### Industrial

Low loss filters (mist eliminators)  
Turn-key  
Prescriptive Refrigerated Case Efficiency  
Anti-sweat Heater Controls  
Low Energy Glass Doors  
Zero Energy Glass Doors w/o Anti-  
sweat Heaters

### Residential

Retrofit EC motors for existing furnaces  
Residential Multi-family  
Prescriptive rebates for Condensing boilers  
Outdoor resets for boilers  
Freezer Rebate

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

<b>Commercial</b>	<b>Status</b>	<b>Potential Filing</b>
<b>Computer Efficiency</b>	<b>Launched</b>	
<b>Plate &amp; Frame Heat Exchangers</b>	<b>Build</b>	<b>2011 60 Day: Filed 7/27/11</b>
<b>Lighting Fixture Reduction</b>	<b>Design</b>	<b>2012 60 Day</b>
<b>Commercial Efficiency Pilot</b>	<b>Design</b>	<b>2012 60 Day</b>
<b>Building Tune-up</b>	<b>Design</b>	<b>2012 60 Day</b>
<b>LED Wall Pack fixtures</b>	<b>Design</b>	<b>2012 60 Day</b>
<b>LED Parking Garage fixtures</b>	<b>Design</b>	<b>2012 60 Day</b>
<b>Commercial Food Service Equipment</b>	<b>Design</b>	<b>2012 60 Day</b>

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

<b>Industrial</b>	<b>Status</b>	<b>Potential Filing</b>
<b>Plan A VSD Air Compressors</b>	<b>Launched</b>	
<b>Efficient Small Motors - ECMs</b>	<b>Build</b>	<b>2012/2013 filing</b>
<b>VSDs on Chillers</b>	<b>Build</b>	<b>2011 60 Day: Filed 7/27/11</b>
<b>Low loss filters (mist eliminators)</b>	<b>Design</b>	<b>2012 60 Day</b>
<b>Prescriptive Refrigerated Case Efficiency Anti-Sweat Heater Controls Low Energy Glass Doors Zero Energy Glass Doors w/o Anti-Sweat Heaters</b>	<b>Design</b>	<b>2012 60 Day</b>
<b>Turn Key Services</b>	<b>Build</b>	<b>2012 60 Day</b>

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

<b>Residential</b>	<b>Status</b>	<b>Potential Filing</b>
<b>LED Lighting</b>	<b>Build</b>	<b>2012/2013 filing</b>
<b>A/C Tune-Up</b>	<b>Pilot Completed</b>	<b>2012 60 Day</b>
<b>Automated Energy Audits</b>	<b>Pilot Ongoing</b>	<b>2012 60 Day</b>
<b>Retrofit EC motors for existing furnaces</b>	<b>Design</b>	<b>2012 60 Day</b>
<b>Residential Multi-family</b>	<b>Design</b>	<b>2012 60 Day</b>
<b>Prescriptive rebates for Condensing boilers</b>	<b>Design</b>	<b>2012 60 Day</b>
<b>Outdoor resets for boilers</b>	<b>Design</b>	<b>2012 60 Day</b>
<b>Freezer Rebate</b>	<b>Design</b>	<b>2012 60 Day</b>

# Energy Feedback Pilot

- Delivered first reports during first few weeks of June
- Data issues with data warehouse delayed mailings in June and July
- 50,000 CO Gas - Electric Combo customers in Pilot
- 40,000 print reports and 10,000 electronic reports

# 2011 Cycle 2 Product Development

- Ideation July 1 – August 15 2011
- **Framing July 15 – September 28, 2011**
- Design September 1, 2011 through Q1 2012
- Build October 1, 2011 through Q2 2012
- Test Nov 1, 2011 through 2013
- Launch March 1, 2013 through 2014

# New Ideas?

- **CO Roundtable Ideas need to be submitted at least 90 days prior to a CO Roundtable Meeting in order for an analysis to be presented at that meeting.**
- **Roundtable Idea Form:**  
[http://www.xcelenergy.com/staticfiles/xcel/Regulatory/Regulatory%20PDFs/RushC\\_ODSMProductDevelopmentIdeationForm.pdf](http://www.xcelenergy.com/staticfiles/xcel/Regulatory/Regulatory%20PDFs/RushC_ODSMProductDevelopmentIdeationForm.pdf)
- **Other ideas can be submitted anytime to any of the Product Developers**
- **2012 Cycle 1 Ideation meeting in January**

# Wrap-up / Open Discussion

## Upcoming Roundtable Schedule:

**Q3: November 17, 2011**

**Q4: February 16, 2012**

