



**Q2-2015 COLORADO
DSM ROUNDTABLE**

August 19, 2015

AGENDA



- 2:00 – 2:05 p.m. Welcome and DSM Regulatory Updates
- 2:05 – 3:05 p.m. DSM Programs: Q2-2015
 - » Business Program
 - » Residential and Low-Income Programs
- 3:05 – 3:25 p.m. -- *Networking Break* --
- 3:25 – 3:40 p.m. Product Development: Q2-2015
 - » Stakeholder Idea Submissions
- 3:40 – 4:00 p.m. Pilot Updates: Q2-2015



**DSM REGULATORY UPDATES
Q2-2015**

- 2015/16 DSM Plan
 - Commission Decision on Exceptions Issued July 21
 - New DSMCA rates effective August 1
 - “Redlined” Plan w/Settlement and Decision impacts to be filed August 20
 - Plan implementation by Sept 1

Prorated Electric Goal

2014 Goal (A)	2015 Goal (B)	Duration (Months) of 2014 Plan-year (C)	Duration (Months) of 2015 Plan-year (D)	Prorated 2015 Electric Goal
384	400	7/12 = 58.33%	5/12 = 41.67%	$(A * C) + (B * D) = 390.7$

Prorated Natural Gas Goal

2014 Goal (A)	2015 Goal (B)	Duration (Months) of 2014 Plan-year (C)	Duration (Months) of 2015 Plan-year (D)	Prorated 2015 Natural Gas Goal
623,543	586,825	7/12 = 58.33%	5/12 = 41.67%	$(A * C) + (B * D) = 608,244$

- No 60/90-Day Notices during Q2
- Q3-2015 DSM Roundtable Meeting on November 4, 2015





DSM ACHIEVEMENTS Q2-2015

BILL CONRAD
Manager, Energy Efficiency Marketing

Electric Portfolio

- 165 Net Gen GWh (40% of Target)
- 26 MW (27% of Target)
- \$31M Spend (33% of filed budget)

Business Programs

- Data Center Eff. – 87% of Target
- Custom Eff. – 88% of Target
- Recommissioning – 77% of Target
- Motors and Drives – 67% of Target

Residential Programs

- Insulation & Air Sealing – 78% of Target
- Residential Heating – 68% of Target

Gas Portfolio

- 205,159 Net Dth (34% of Target)
- \$3.8M Spend (29% of filed budget)

Business Programs

- EMS – 110% of Target
- Recommissioning– 37% of Target

Residential Programs

- Insulation & Air Sealing - 62% of Target
- Residential Heating – 41% of Target
- Single Family Weatherization - 46%

Business Trade Events

- Heating Advisory Board Meeting
- Annual Xcel Energy Expo / Partner Awards
- Energy Smart Contractor Expo
- Long Building Technologies Open House
- Denver City Energy Project Benchmarking Workshops
- CO Association Hospital and Engineers Show
- Refrigeration Trade Partner Event
- Ferguson Hydronics Trade Show
- Cloudburst DEPACC Workshop
- Energy Resource Center Open House

Residential Trade Events

- CD Jones' Open House
- CAMPC Showcase trade event
- HMCC trade meeting presentation
- Cooper Heating training
- Carrier West training
- Sears Home Improvement training

TRADE PARTNER AWARDS Q2 FOR 2014 [SAVINGS ACHIEVEMENTS]



AMERICAN MECHANICAL SERVICES
BLACKHAWK EQUIPMENT CORP
CARRIER COMMERCIAL SERVICES
CFM COMPANY
CHILLER SYSTEMS SERVICE INC
CLOUDBURST MISTING SYSTEMS
COLORADO LIGHTING INC
CONSERVE A WATT
DENVER ELECTRICAL CONTRACTORS
ECOSYSTEMS
ENERGY MANAGEMENT CORP
ENERGY SERVICES OF COLORADO ESCO
ETC GROUP, LLC
FACILITY SOLUTIONS GROUP
HAYNES MECHANICAL SYSTEMS
INGERSOLL RAND
JOHNSON CONTROLS
MTECH MECHANICAL TECHNOLOGIES GROUP
MURPHY COMPANY
ONE SOURCE LIGHTING
POWER DOWN, LLC
RK MECHANICAL
RYAN LIGHTING
TRANE



DSM BUSINESS PROGRAM Q2-2015 HIGHLIGHTS

JENNIFER ELLING
Team Lead, DSM Marketing

- **Cloudburst DEPACC Workshop**

- June 17th
- Presented EEP Award
- 1st Year Award
- Top Performing Trade Partner for 2014 for DEPACC



Midstream Cooling Participating Distributors to Date

Distributor	Manufacturers Represented
Lennox Industries Inc.	Lennox
Rocky Mountain Trane	Trane, Ameristar, Samsung, Multistack, Napps
Long Building Technologies	Daikin, Lennox, United Cool Air, Valent, FHP
Lohmiller & Co. DBA Carrier West	Carrier, Bryant
Western Mechanical Solutions	Aaon, Annex Air, Motivair
General Electric Appliances	General Electric (GE)
Comfort Air Distribution	Rheem Climate Master
Charles D Jones Company AKA CD Jones	York & Guardian
Johnson Controls	York, Johnson Controls

Midstream Cooling Program

The Xcel Energy Midstream Cooling Program encourages distributors to stock and upsell eligible high efficiency equipment. Equipment sold after May 11, 2015 is eligible!

Program conditions

1. **Qualified Products:** Eligible equipment includes DX AC Units, PTACs, Water-Source Heat Pumps, and Air-cooled Chiller that meet the program minimum qualifying efficiencies. Please contact the [mailto:ESI@energy-solution.com ESI Implementation Team] for more information.
2. **Qualified Customers:** Only sales made to Xcel Energy's Colorado non-residential, electric customers qualify.

CONTRACTOR SIGN-IN

User Name

Password

Forgot your password?

If you have trouble logging in or navigating the website, please contact **ESI Program Implementation**.

Contact Information

For general program information and to sign up for the program please contact:

ESI Implementation Team
562-200-7020 x 652
<mailto:ESI@energy-solution.com>

The Midstream Cooling Program is administered by Xcel Energy and implemented by Energy Solutions.

DSM BUSINESS PROGRAM HIGHLIGHTS



Xcel Energy's Midstream Cooling Program System

PROCESSOR INTERFACE

Welcome Kim Spickard, Xcel
[My Account](#) [Sign Out](#)

- Customers
- Invoices
- Applications
- Equipment**
- Reports
- Recv Inv

Commercial Midstream Cooling: [Search](#) [List](#) [Add New](#)

Commercial Midstream Cooling Search View

Use this view to search for Commercial Midstream Cooling matching specific search criteria.

Ranges are inclusive. If only one limit is entered the other end is unlimited. Example: set only the minimum BTUh and all Midstream Cooling at or above that value will be found.

ELIGIBLE

All Eligible Not Eligible

ARCHIVED

All No Yes

MANUFACTURER

All Manufacturers

SYSTEM TYPE

All Split Package Condensing

Unit Air-cooled Chiller PTAC Water-source Heat Pumps

CONDENSER MODEL NUMBER

EVAPORATOR MODEL NUMBER

COOLING SOURCE

All Air-Cooled Water-Cooled

UNIT TYPE

All Air Conditioner Heat Pump

Chiller with Condenser

	MINIMUM	MAXIMUM
BTUh CAPACITY	<input type="text"/>	<input type="text"/>
SEER	<input type="text"/>	<input type="text"/>
EER	<input type="text"/>	<input type="text"/>
IPLV	<input type="text"/>	<input type="text"/>

DSM BUSINESS PROGRAM HIGHLIGHTS



Energy Analysis

- The \$100 onsite Energy Analysis (EA) campaign resulted in **85** new EA applications so far in 2015.
- Will extend the campaign to small business customers not targeted during the “Ring in the New Year with Savings” campaign earlier in year.

Recommissioning

- YTD, product is at 85% of filed kWh goal, already surpassing 2014 total year-end kWh achievement.
- 2015 successes attributed to additional ECO tracking in Salesforce, increased customer follow-up messaging, and enhanced trade partner relationship-building efforts (via calls with the trade on project updates).

Lighting Updates:

- 20% bonus rebate, May 15 – Sept 15, 2015
- Bonus rebate applies to total rebate amount for the following products:
 - Retrofit – Lighting Efficiency & Small Business Lighting
 - New Construction
 - Custom
 - Lighting Redesign
- Up to 75% of the project cost is eligible for the rebate and bonus

New Prescriptive Rebates Upon Plan Approval:

- Exterior Area Lighting
- Customer-owned Street Lighting
- Luminaire Level Lighting Controls

Measures under development:

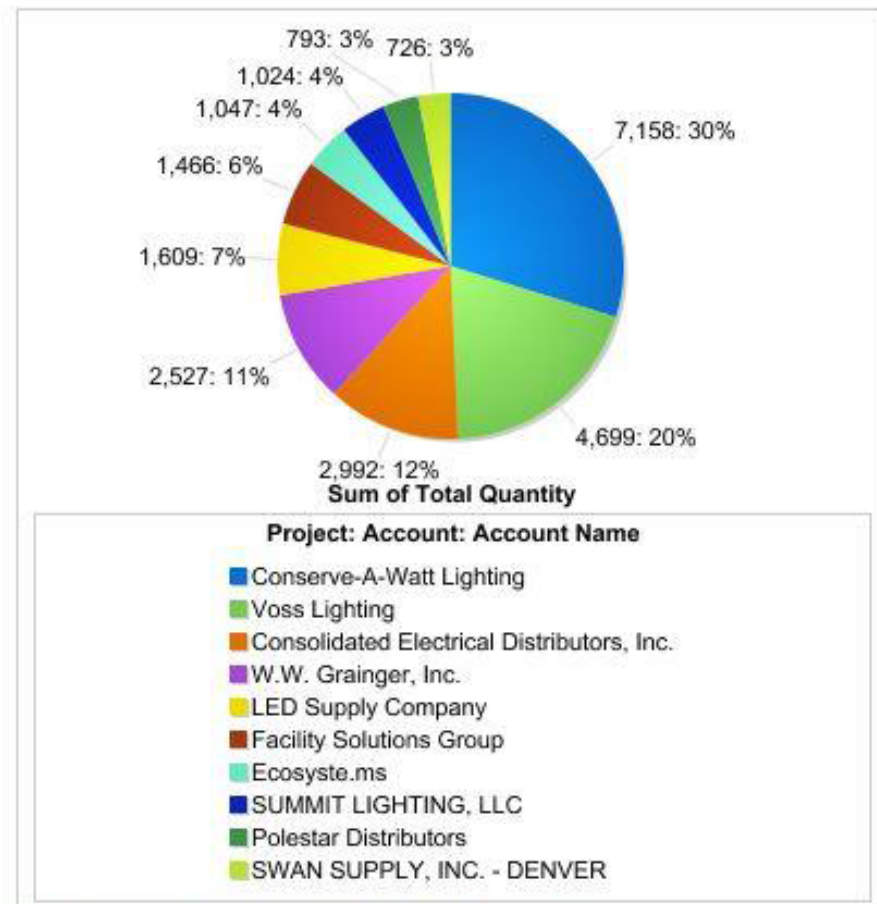
- Bay Lighting – High, Low, & Isle Fixtures
- LED Tubes
- Linear Ambient Fixtures

LED INSTANT REBATE INITIATIVE



- **LED Instant Rebate Initiative**
 - Launched Jan 15, 2015
 - Forecasting 84% of target
 - Distributor spiff in June & July to increase participation
 - 15% of distributors participating out of 132 registered distributors
 - Minimum customer contribution lowered from \$5 to \$3

YTD Bulb Sales by Distributor - CO

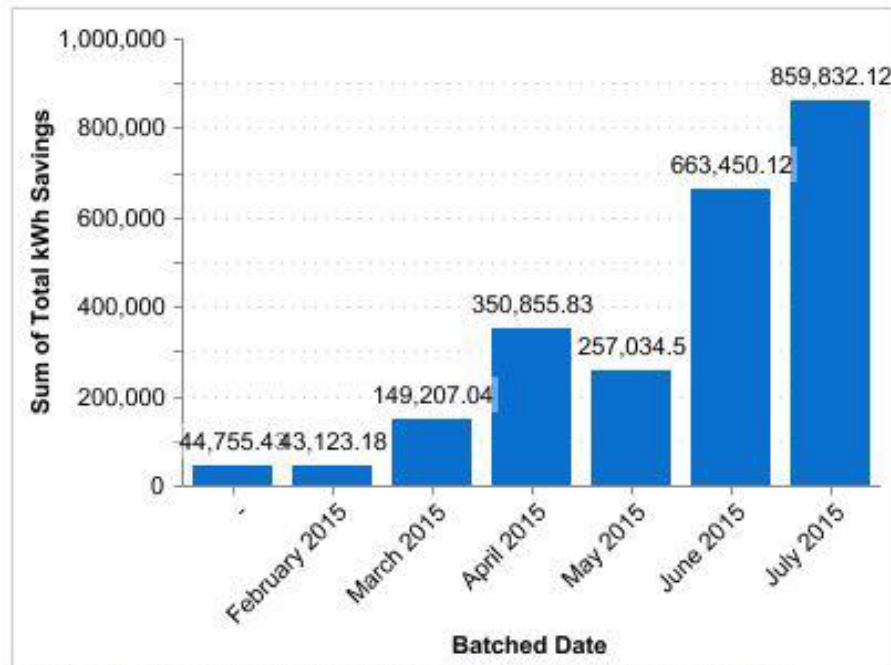


Total quantity from all batched and paid projects

LED INSTANT REBATE INITIATIVE

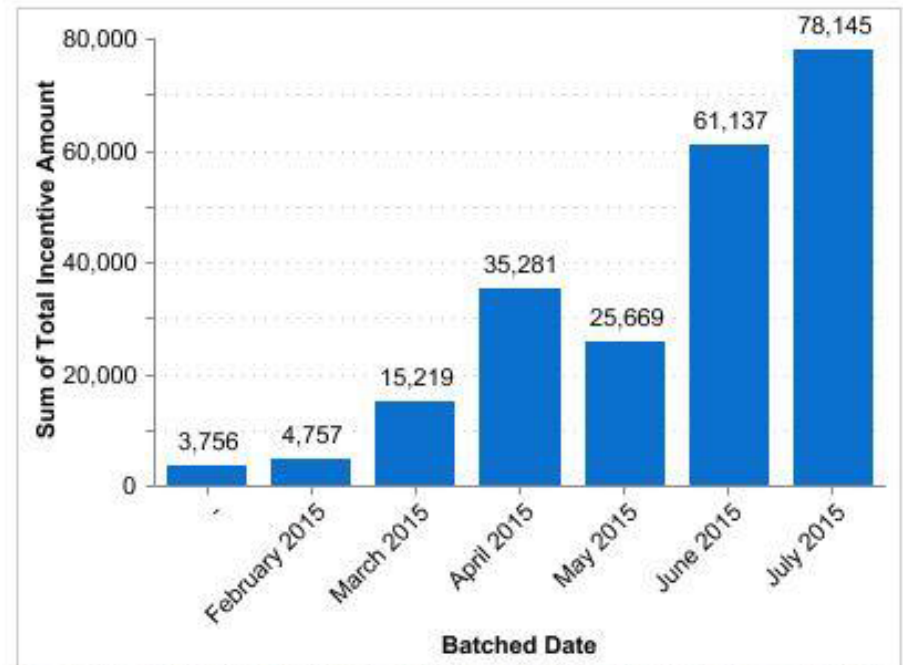


Monthly kWh Savings - CO



kWh savings from projects in batched and paid states as well as in completed, approved or ready for payment states

Monthly Incentive Spending - CO



Incentives for projects in batched and paid states as well as in completed, approved or ready for payment states

2015/16 DSM Plan Highlights for Business Customers:

- Lighting
 - Integrated sensors (occupancy sensors + photo cells)
 - Customer-owned area lighting
 - Customer-owned LED street lights
- Data Centers
 - EC Plug Fans
- EMS
 - Energy Information Systems (EIS)
- Process Efficiency
 - Mid-tier Customer Offering
- Compressed Air Efficiency
 - Prescriptive HP reduction rebate



DSM RESIDENTIAL & LOW-INCOME PROGRAM Q2-2015 HIGHLIGHTS

DAVID HUESER
Team Lead, DSM Marketing

RESIDENTIAL AND LOW INCOME UPDATES TO 2015/16 BIENNIAL PLAN; MODIFICATIONS



Summary of 2015/16 DSM Plan changes, Settlement Agreement

Residential/Low Income Product	Product changes or Measures added	Measures eliminated	Next Steps
Energy Feedback	Transition from Pilot to Residential Product, increase participation		
Home Energy Squad	Product introduction in Colorado		Increase 2016 LED lamp goal, striving to match retail price points; 60 Day Notice for technical assumption corrections; explore low income segment
High Efficiency Air Conditioning	17 SEER rebate tier, up to \$1,150	14.5 SEER new unit rebate (\$500 trade-in still available)	WCCD training
Residential Heating		85% Annual Fuel Utilization Efficiency (AFUE) boilers	
ENERGY STAR New Homes, Home Performance	Implement 12/1/14 ESNH Product modifications		Exercise Gas DSM spending discretion as needed; update Stakeholders quarterly
Low-Income Single Family Weatherization	Increase gas furnace rebate from \$720 to \$750		Add LED lamps in 2016 via 60-Day Notice, if cost-effective
Low-Income Energy Savings Kit			Add LED lamps in 2016 via 60-Day Notice, if cost-effective

RESIDENTIAL ENERGY STAR NEW HOMES

Provides homebuilders with incentives to exceed their local building energy code requirements by at least 10%. Homes that are ENERGY STAR certified can earn an additional incentive

- **Company is forecasting to have adequate budget dollars available to fund the program for the full year**
- **Looking at ways to increase participation before year-end**
 - Targeting non-participating builders whose homes fall just under the program participation requirements
 - Working with energy rating companies to identify and implement additional low-cost improvements to help homes qualify
- **Offering professional sales training classes at no cost to participating builders and energy raters**
 - Targets real estate and builder sales professionals
 - Demonstrate how to effectively market energy-efficiency to homebuyers
 - Targeting to complete 20 plus classes this year




Photo: Ryland Homes Patio Villas
Westminster, CO



Photo: Ryland Homes blower door test
Home Energy Efficiency with HouseWorks®

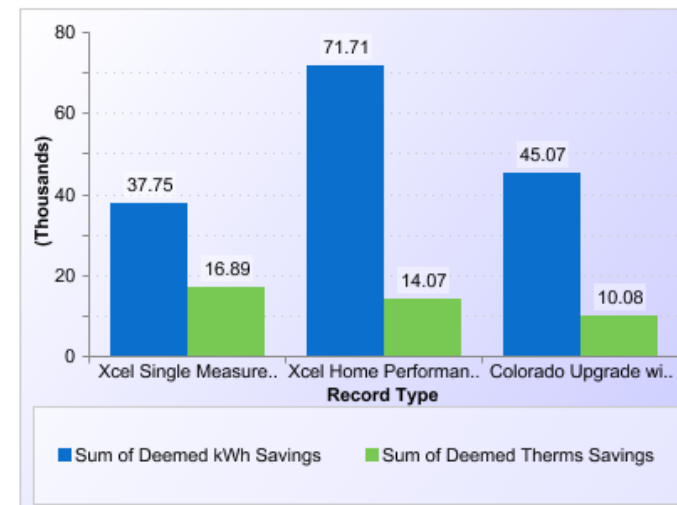
RESIDENTIAL HOME PERFORMANCE WITH ENERGY STAR



- Q2 Electric achievements: 153,750 net kWh
- Q2 Natural Gas Achievements: 4,158 net Dekatherms
- Increased customer rebates with the launch of 2015/16 DSM Plan, increased customer and contractor incentives expected to boost participation
 - Air Conditioning rebates up to \$1,250
 - Insulation rebate cap increased
- Contractor Training September 1
 - Review 2015/16 changes
 - HVAC Trade incentive begins (\$100)
 - Increased Insulation and Air Sealing measures
- Advising Highlights 
 - Q1/Q2 influenced savings to HP and Standalone products
 - Since advising commenced April 1, 2014, over 109,000 kWh, 3,095 Dth influenced in Home Performance, standalone products



Deemed Energy Savings



EVAPORATIVE COOLING (ELECTRIC)



Customer rebates increased – effective June 1 – to improve product’s participation and savings after a delayed cooling season start, lower YTD achievement vs. prior years

- In Q2 ramped up seasonal customer marketing. Promotional schedule will be extended into September/October
- Q2 2015 participation down from past years
- Trade partners and retailers eligible for per-unit incentives.

Residential Evaporative Cooling Rebates, Trade Incentives

Evaporative Cooling System	Installation type	Rebate levels 2012 – 2014	Rebates effective June 1, 2015	Trade Incentive
Standard	New	\$250	\$300	\$50
Standard	Replacement	\$100	\$200	\$50
Premium	New	\$600	\$700	\$75
Premium	Replacement	\$600	\$700	\$75
Whole House	New or Replacement	\$1,000	\$1,200	\$100



Photo: Breezair



PMI SWH3000
Slim, Wall Hugger
Photo: PMI

RESIDENTIAL HOME ENERGY SQUAD (ELEC. & GAS) NEW PRODUCT IN 2015



CLEAResult will implement the Colorado introduction of this Residential product, effective September 1

- Participation goals
 - 2015: 1,200, pro-rated for September 1 launch
 - 2016: 1,600
- Program components
 - Walk through audit to identify potential savings
 - Direct installation of nominal value measures
 - Ala carte measures available for purchase
- Common measures
 - Electric: CFLs
 - Gas: Showerheads, faucet aerators
 - Combo: Thermostat, weather-stripping
- Collaboration opportunities



Photos: Neighborhood Energy Connection, St. Paul, MN

LOW INCOME SINGLE-FAMILY WEATHERIZATION (ELEC. & GAS)



\$3.7M of total \$6.4M budget in 2015 is dedicated to treating single family homes of income-qualified customers with energy-saving upgrades

- Collaboration with organizations outside of the Front Range serving low-income clients who may not qualify for the traditional Weatherization programs

- CLEER / Clean Energy Economy for the Region
- CORE
- High Country Conservation
- Walking Mountain Science Center
- Cloud City Conservation

- Energy Outreach Colorado partnered with CLEER

- Program development
- Identify income-qualified customers
- Technical assistance

- Single-Family Weatherization 2015 Goals, Budgets

- 2.38 GWh on \$1.36M Electric DSM budget
- 34,670 Dth on \$2.26M Gas DSM budget

Program Implementers



Collaborating with mountain communities



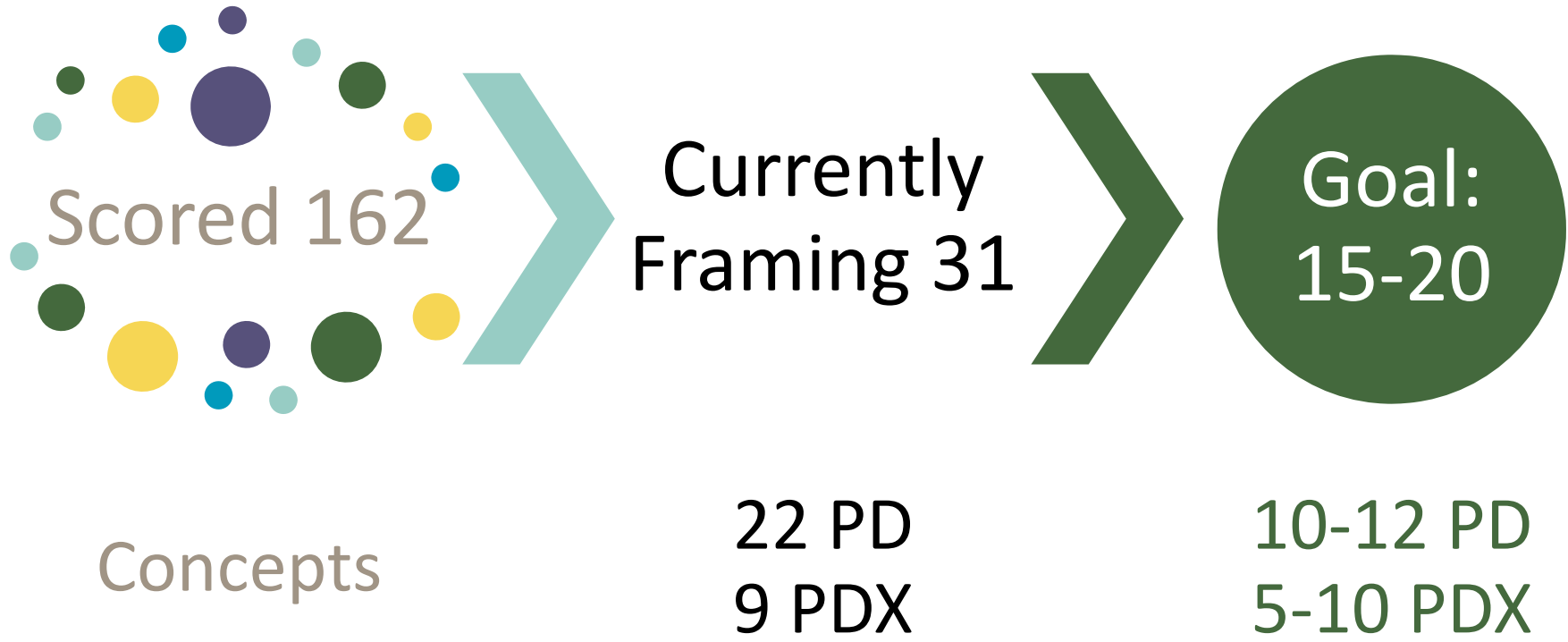
- Networking Break -





DSM PRODUCT DEVELOPMENT Q2-2015 HIGHLIGHTS

LEE HAMILTON
Product Developer



Final Framing Results – Traditional PD

Framed Concept Scoring - 2015		
Concept	GWh	Dth
C&I Holistic Refrigeration	10.6	-
HE CRAC Units	7.9	-
Mini-Split AC	10.1	-
Comprehensive Data Center Design Assistance	7.6	-
Computer Tablets	6.5	-
Upstream Electronics	8.2	-
Advanced RTU Controllers	6.9	715
Dehumidifiers	0.9	-
Efficient Process/Commercial Dehumidification	8.9	-
Set top boxes	9.4	-

Final Framing Results – PD Express

Framed Concept Scoring - 2015	
Concept	Estimated Impact (GWh)
LED Bays (high, low, aisle)	1.45
LED Linear Tubes	1.25
Close The Case Refrigeration	2.48
Static Head Pressure Pump VFDs	1.51
Commercial Furnace ECMs	0.03

1. Energy Efficient Shade Window Coverings via Hunter Douglas

2. EE SHADE WINDOW COVERINGS



Received May 22, 2015

- **Description:**
 - Cellular or “honeycomb” window shades reduce energy losses
 - Reflective coating reduces unwanted solar heat gain
 - Air pockets create layer of insulation that reduce heat loss
- **Evaluation Result:**
 - Used submitted assumptions to determine potential energy savings and cost-effectiveness
 - Estimated Energy Savings:
 - 1,650 kWh/window for new homes; 4,200 kWh/window for existing homes
 - 4 Dth/window for new homes; 15 Dth/window for existing homes
 - *Looks to be cost-effective based on submission, but natural gas case is marginal*
 - *Potential inclusion in PD Process*

New Easy Link to Share Product Ideas:

www.xcelenergy.com/productideas



DSM PILOT UPDATES Q2-2015 HIGHLIGHTS

LEE HAMILTON
Product Developer

DSM PILOT HIGHLIGHTS



	PILOT	STATUS	
1	Online Energy Feedback	In Progress	
2	Business Energy Feedback	In Progress	
3	Smart Thermostat Pilot	In Progress	
4	Small Business Smart Thermostat	Filed	
5	Building Optimization	In Progress	
6	Multifamily Buildings	In Progress	



ENERGY FEEDBACK

DSM PILOT UPDATES RESIDENTIAL ENERGY FEEDBACK



UPDATE

- 1 Moved from Pilot to Program in 2015/16 DSM Plan
- 2 Final customer expansion = 380,000 new participants
- 3 Evaluating customizable modules on reports to promote other DSM programs



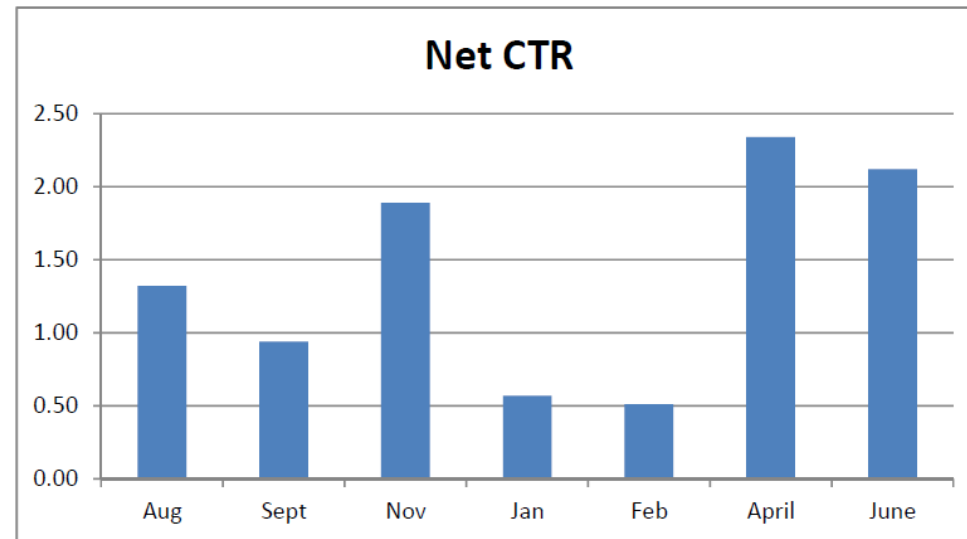
DSM PILOT UPDATES ONLINE ENERGY FEEDBACK MEASURE



RESIDENTIAL PANEL SURVEY

- 1 The most effective My Energy email is straightforward, factual, and emphasizes saving both energy and money.
- 2 The biggest barriers to usage are perceived lack of time to use the tools and small savings are not worth the effort.

- ✓ **Measure within Residential Energy Feedback program**
- ✓ **Emails at 6-week intervals**
- ✓ **Determine if My Energy users save more energy from using the tools**



DSM PILOT UPDATES BUSINESS ENERGY FEEDBACK MEASURE



UPDATE

- 1 2.9+ GWh (113% of goal)
- 2 Customers saving ~0.8%
- 3 No energy savings claimed starting Sept. 1 (when 2015/16 DSM Plan is in effect)

- ✓ **2-year pilot**
- ✓ **10,000 small business customers**
- ✓ **Budget: \$250,000 (E & G)**





SMART THERMOSTAT

DSM PILOT HIGHLIGHTS

RESIDENTIAL SMART THERMOSTAT



UPDATE

- 1 Pilot is live!
- 2 Targeted marketing continues via promoted social posts & targeted emails
- 3 Online enrollment portals live by mid-August
- 4 DR capabilities still being tested



- ✓ **60-Day Notice filed Aug 2014**
- ✓ **2-year pilot**
- ✓ **Budget \$1,158,500 (2 yrs – E & G)**
- ✓ **\$50 rebate**
- ✓ **\$25 DR incentive**
- ✓ **\$2.50 or \$5 bill credit**

DSM PILOT HIGHLIGHTS

SMALL BUSINESS DR SMART THERMOSTAT



UPDATE

- 1 Launching Sept. (when 2015/16 DSM Plan is in effect)
- 2 RFP proposals received from 3 manufacturers for devices, training, etc.
- 3 Discussing installation strategy
- 4 DR testing summer 2015, full-scale events summer 2016

- ✓ **Filed in 2015/16 DSM Plan**
- ✓ **2-year pilot, 100 bldgs.**
- ✓ **Budget: \$561,976 (2-yr)**
- ✓ **Tie in with Res Smart T-stat pilot**





BUILDING OPTIMIZATION

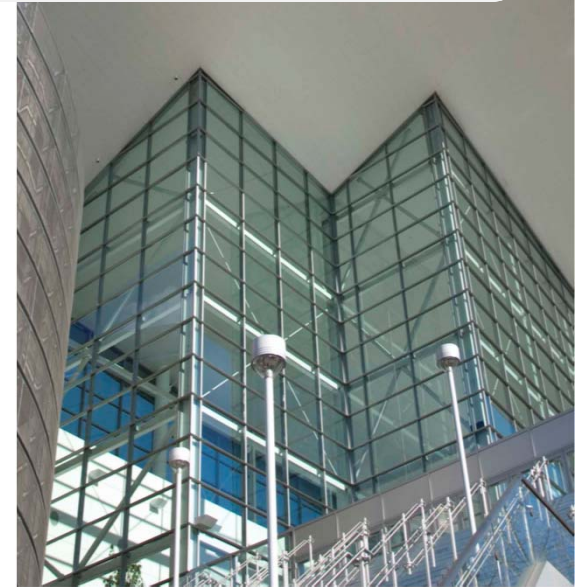
DSM PILOT HIGHLIGHTS BUILDING OPTIMIZATION



UPDATE

- 1 Early prep work will enable DR events in time for summer control season
- 2 823,000 square feet enrolled (4 buildings)
- 3 Software installation complete at 1 building
- 4 260 kW of Demand Response projected for 2015*

- ✓ **Filed in 2015/16 DSM Plan**
- ✓ **2- year pilot, 10 bldgs.**
- ✓ **Budget: \$257,598 (2-yr)**





MULTIFAMILY BUILDINGS

DSM PILOT UPDATES MULTIFAMILY BUILDINGS



UPDATE

- 1 Franklin Energy Services selected via RFP process as Program Administrator
- 2 Launching to customers in August



- ✓ **60-Day Notice – Aug 2014**
- ✓ **2-year pilot**
- ✓ **0.55 GWh, 8,400 Dth (2015)**
- ✓ **2015 Budget: \$225,028 (E & G)**

THANK YOU

