



ComEd® Energy Efficiency Program

SMART THERMOSTATS – WHERE WE’VE BEEN AND WHERE WE’RE HEADED

JACOB STOLL



ACEEE Market Transformation Symposium

**Baltimore, MD
March 21, 2016**



An Exelon Company

Utility Overview

Electric only distribution utility

3.85 million customers (70% of Illinois Population)

Single-family = ~1.9 million

Multi-family = ~1 million

Service Territory: 11,428 square miles



Energy Efficiency Portfolio

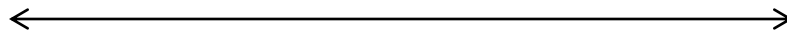
- Part of Illinois energy legislation passed in 2007
- Ratepayer funded
- Currently in Program Year 8: June 1, 2015 – May 31, 2016

Home Savings

Assessments
Rebates
Discounts
Recycling

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ComEd® Energy Efficiency Program



Business Savings

Small Business
Standard and Custom
New Construction
Mid-stream Lighting
Retro-commissioning
Industrial Systems

Why are we here?

As we look toward the future, we see and anticipate a significant disruption to our 130-year old industry. Three trends in what customers want are driving that disruption.

Growing Environmental Concerns



Changing Consumer Demands & Increasing Digitization



Technological Advances



Evolving
Consumer
Needs



The Energy Future our Customers Want

Clean, lean, custom, reliable, resilient, and secure, while retaining the foundational policy goals of the electric system: **accessible, affordable, and fair**

-9-

Why Smart Thermostats?

- Wasted Energy Study

“Cooling has the greatest opportunities to reduce behavioral waste, which accounts for 38% of current usage, mainly by increasing temperature setpoints.”

- Additional savings beyond programmable, without sacrificing comfort
- Shifting Demographics = a fundamentally different customer
- Customers want more control and to save money
- Entry point for the “Smart Energy Home” concept
- Creates more opportunities for customers to participate in demand response and energy efficiency programs

Demand Response

- Pilot Phase 1 = June 1, 2014 – May 31, 2015
- Pilot Phase 2 = June 1, 2015 – May 31, 2016
- 3,250 customers signed up for ComEd's Nest Thermostat Pilot from during each pilot phase. Customers who signed up received a \$100 sign up rebate per thermostat registered plus a \$40 curtailment rebate for agreeing to participate in curtailment events during the summer.
- Goals
 - Determine the cost effectiveness of future demand response and energy efficiency applications
 - Quantify demand (kW) and energy (kWh) savings



Energy Efficiency - Where are we now?

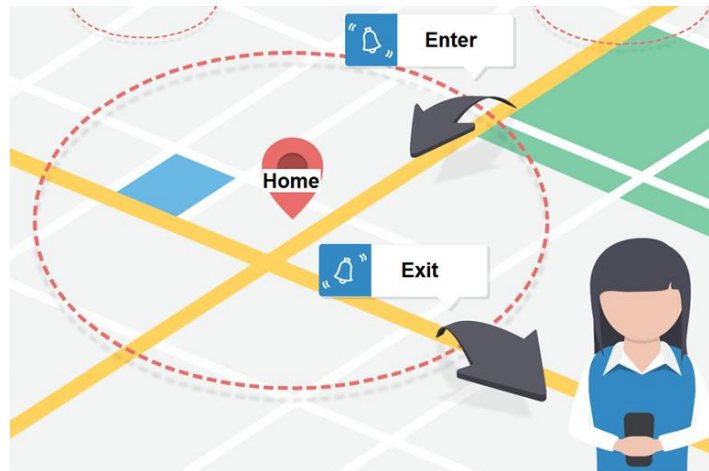
- Group effort with regular meetings since March 2015 to develop ways to advance smart thermostat adoption in Northern Illinois
 - Utilities: ComEd, Peoples Gas / North Shore Gas, Nicor Gas
 - Stakeholders: ELPC, CUB
 - Additional Members: CLEAResult, ICC, DCEO, Franklin Energy
 - Manufacturers: Nest Labs, Ecobee, Honeywell, Schneider Electric
- Goals
 1. Set definitions and requirements for smart thermostats
 2. Incorporate energy savings into the Illinois Technical Reference Manual ("TRM")
 3. Identify the best utility energy efficiency offering distribution channels



Energy Efficiency - Where are we now?

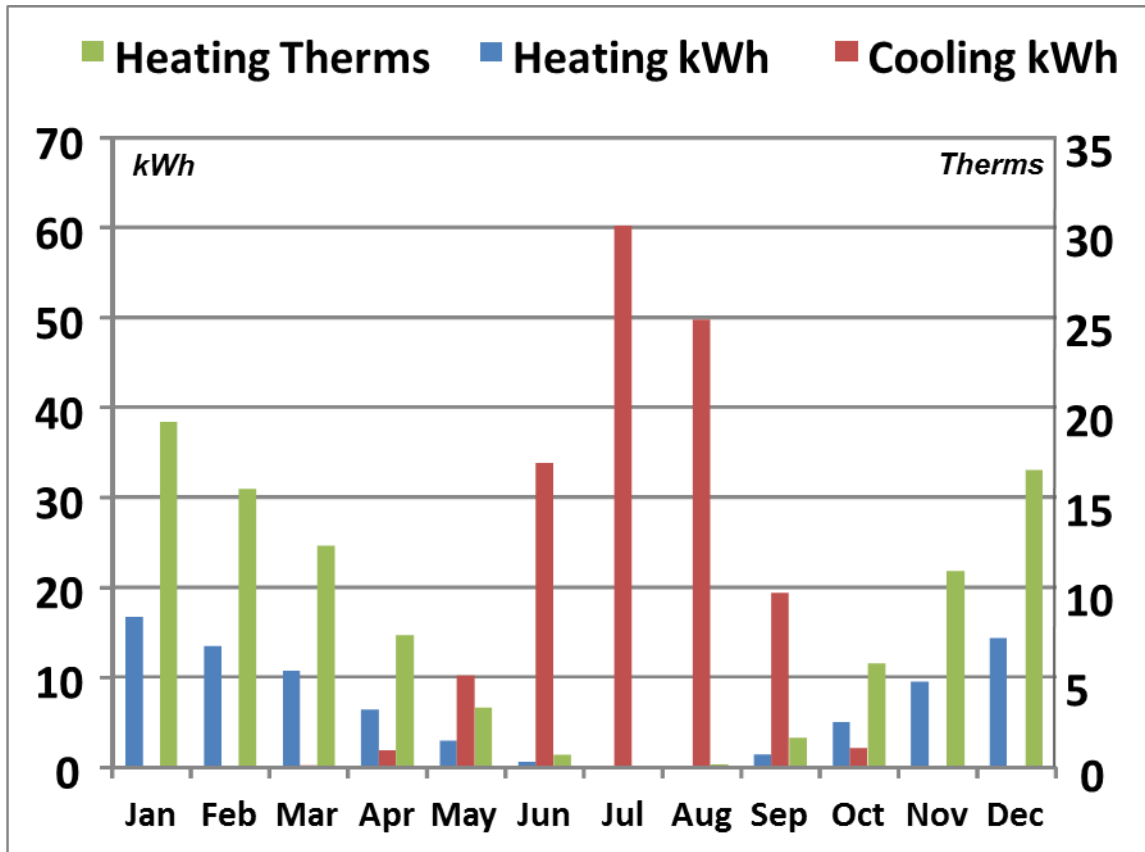
Smart Thermostat Requirements

- Wi-Fi enabled and controllable through a remote device.
- Connected to continuous 24 volt power supply source (through common wire or adapter).
- Incorporates occupancy based controls.
- Compatible with multi-stage heating and cooling units.
- Two year product warranty.



Smart Thermostat Energy Savings

From Illinois TRM 5.0:



Total Annual Smart Thermostat Energy Savings

Heating Therms: 88.4
 Heating kWh: 81.3
 Cooling kWh: 177.7

*Single-family home with central AC and natural gas furnace

Energy Efficiency - Target Customers

Residential Customers

- Single Family Homeowners
- Condo & Townhome Owners
- 2-flat Owners (Peoples Gas and North Shore Gas Territory)
- 2-, 3-, 4-flat Owners (Nicor Gas Territory)

Equipment

- Central air conditioner and furnace
- Electric resistance heating (with or without a central air conditioner)
- Electric heat pump

Energy Efficiency - Where are we now?



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ComEd® Energy Efficiency Program

THREE WAYS TO GET YOUR SMART THERMOSTAT

ComEd Smart Ideas® Energy Efficiency Program offers rebates and discounts on smart thermostats.*

SMART THERMOSTATS

Self-installed Purchase and install your qualifying smart thermostat and receive a \$100 rebate from ComEd.	ecobee3, Nest Learning Thermostat \$100 rebate
Contractor-installed Use a professional contractor to install your qualifying smart thermostat and receive a \$125 rebate from ComEd.	ecobee3, Honeywell Lyric, Nest Learning Thermostat \$125 rebate
Utility-installed Receive a smart thermostat at the discounted price of \$150, including free installation during your Home Energy Assessment.	ecobee3 \$150 discounted price

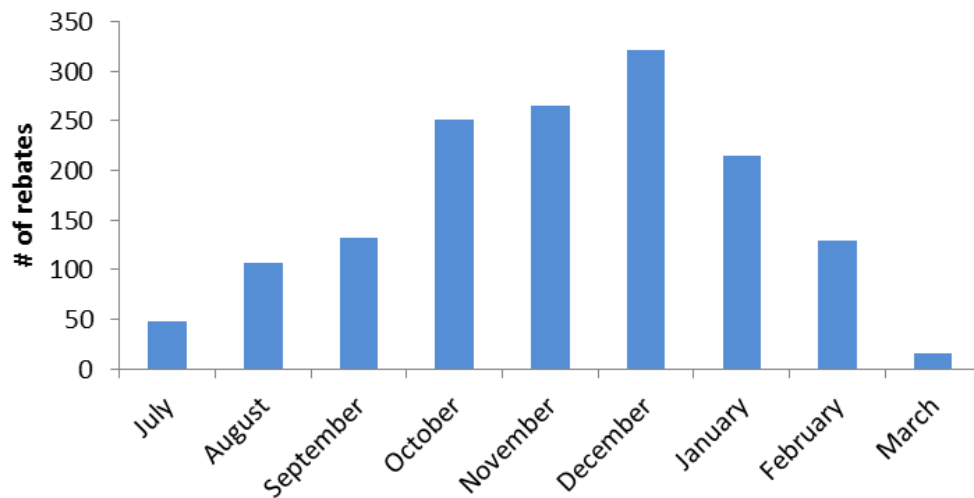
*Some restrictions may apply.
Additional rebates may be available from Nicor Gas, North Shore Gas and Peoples Gas. Visit gas utility websites for details.

For more information call 855-433-2700 or visit ComEd.com/Rebates or ComEd.com/Assessment

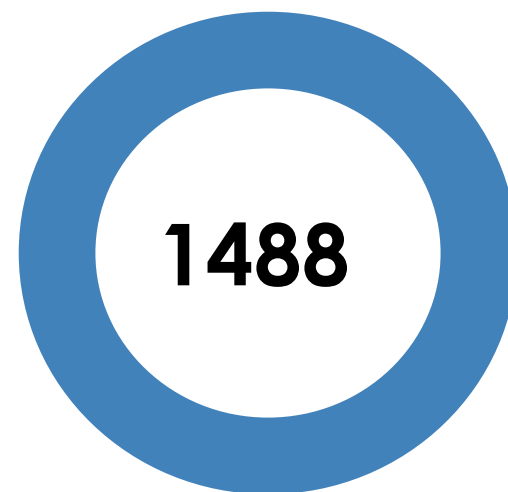
Energy Efficiency - “Contractor-installed”

- Launched 7/6/2015
- \$125 rebate
- Nest Learning Thermostat, ecobee3, Honeywell Lyric
- Lessons learned to date

Participation



Total

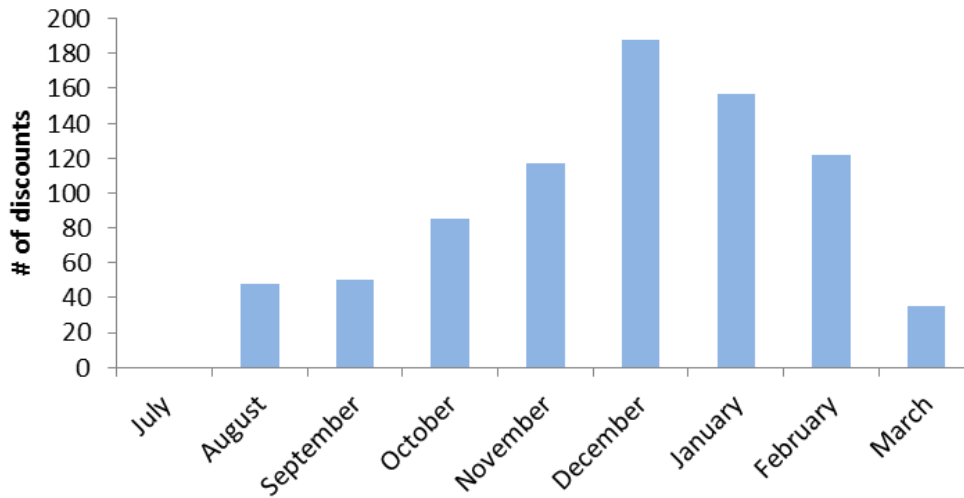


Energy Efficiency - "Utility Installed"

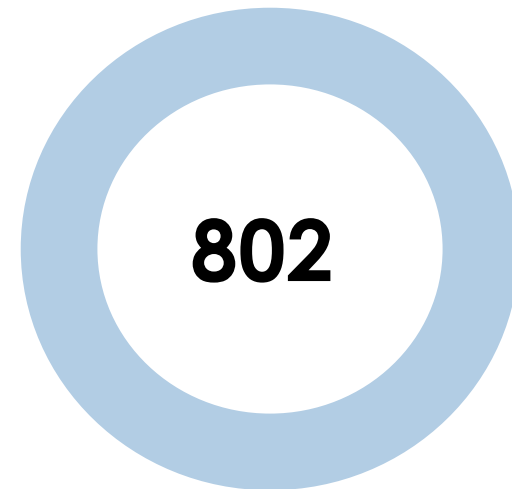
- Launched 8/3/2015
- \$100 discount (\$150 customer co-pay)
- ecobee3 only
- Free Installation



Participation



Total

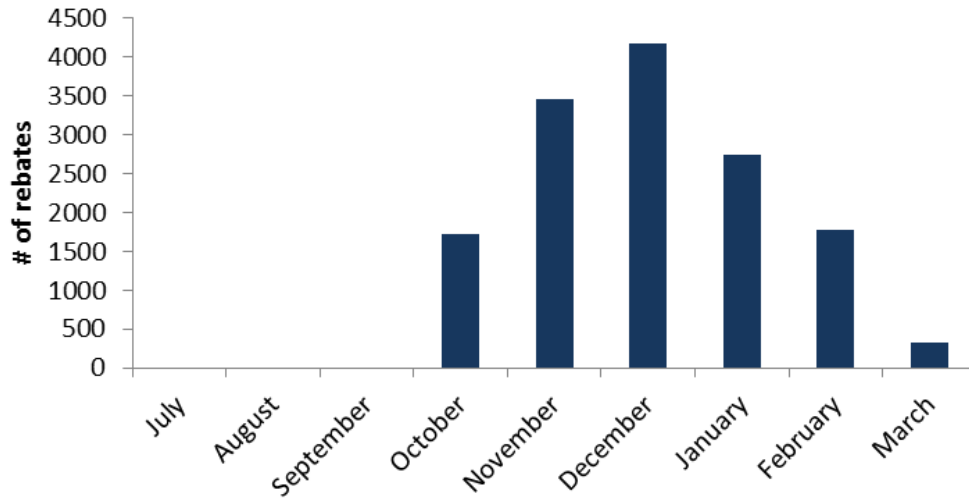


Energy Efficiency - “Self-Installed”

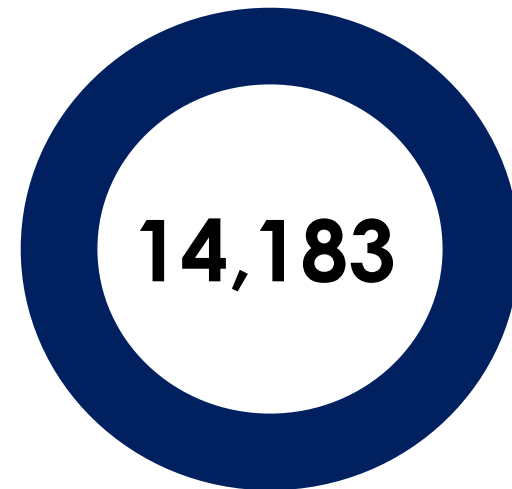
- Launched 10/5/2015
- \$100 rebate
- Nest Learning Thermostat, ecobee3



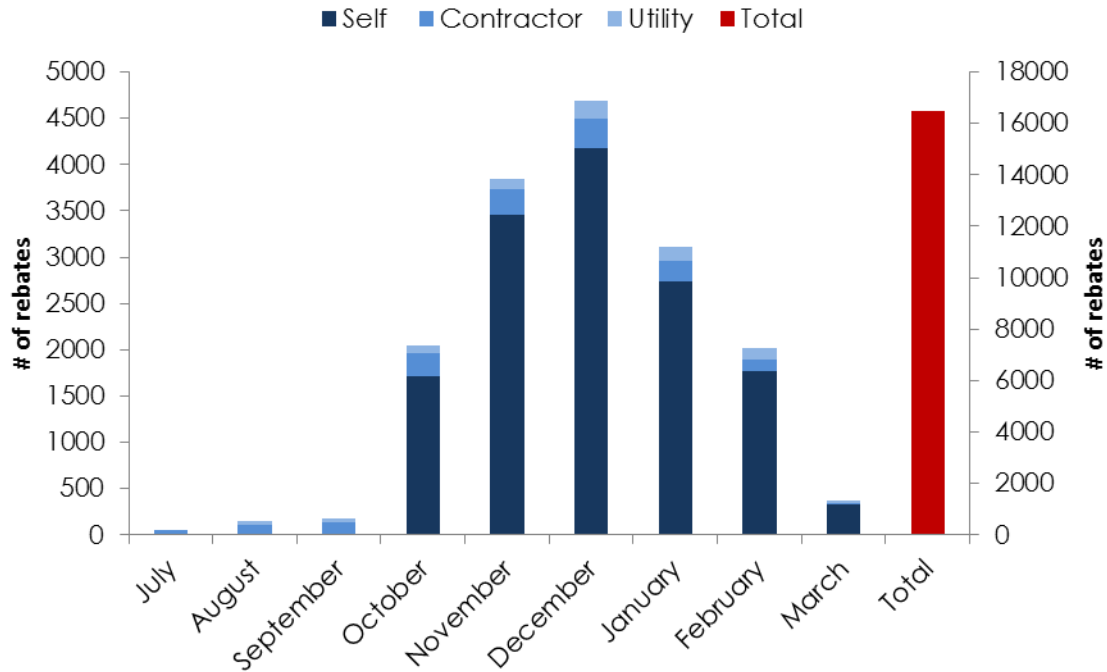
Participation



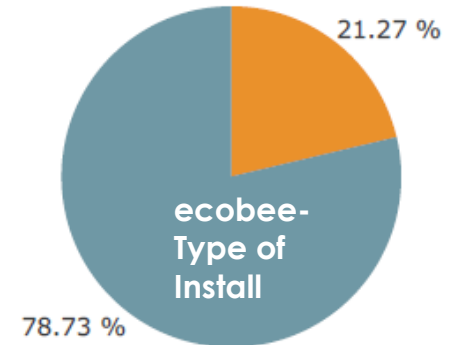
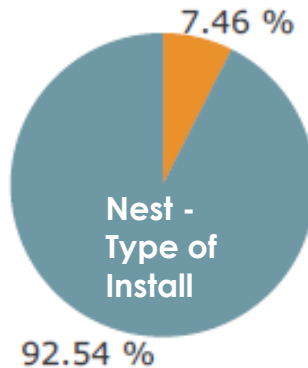
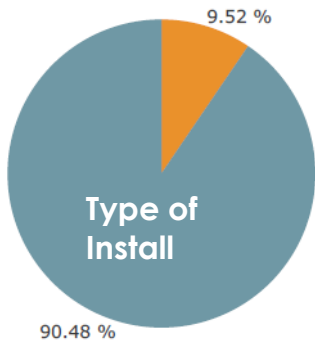
Total



Energy Efficiency - Participation



Professional (orange)
Self (teal)



Marketing – ComEd

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QUESTIONS? Call 855-433-2700

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\$100 ComEd REBATE

on a Nest Learning Thermostat
See store associate for details.

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\$100 ComEd REBATE

on the Nest Learning Thermostat or ecobee3

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ALIGN WITH PRODUCTS SIGN

Temp Part # BCOMED6

Valid Dates: 10/05/15 - 05/31/16

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\$100 ComEd REBATE

on the Nest Learning Thermostat or ecobee3

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Marketing – Nest



Marketing - ecobee

ComEd.

Get Smart. Get \$120 back.

Get \$100 - \$120 in rebates when you buy an ecobee3.

BUY NOW

ecobee₃

The smarter wi-fi thermostat with remote sensors

ComEd.

Cash in while saving energy.

Get \$100 - \$120 in rebates when you buy an ecobee3.

BUY NOW

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Added incentive for your ecobee3 purchase.

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\$100 REBATE

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Utility of the Future Customer Strategy

Build upon our investments to deliver value, in a agile way, for **all** of our customers bringing them choice, control and customization.

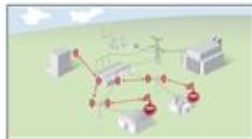
NON-EXHAUSTIVE

Innovation Pipeline



Voice of the Customer and Employee

Strategic Assets & Capabilities



Advanced Grid and Smart Meter Infrastructure



Business Intelligence and Data Analytics



Enhanced Digital Channels

Programs & Pilots



Peak Time Savings



Smart Connected Devices



Expanded Energy Platform



Energy Efficiency – Where we're headed

- Leverage existing partnerships (Opower, Nest, ecobee etc.)
 - Analytics and segmentation
- Test/pilot alternative program design strategies
 - Retail “opt-in” model
- Evaluate and test new products
- Inclusion of measure in IL TRM – Program Year 9 and beyond
- Synchronizing product eligibility with ENERGY STAR Connected Thermostat specification
- Coordination with Demand Response offerings
- Quantify non-energy benefits



Thank you!

Jacob Stoll

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www.ComEd.com/rebates