

Smart Meters and Dynamic Pricing Need Each Other

David Becker

Director of Dynamic Pricing

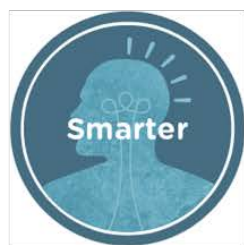
Elevate Energy

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Great Lakes Symposium on Smart Grid And The New Energy Economy

Elevate Energy – About Us

We promote smarter energy use for all.



We give people the resources they need to make informed energy choices.



We design and implement efficiency programs that lower costs, and protect the environment.



We ensure the benefits of energy efficiency reach those who need them most.

Smart Meter Confusion

Illinois Electricity Customers Forced to Get 'Smart Meters' or...

www.weeklystandard.com/.../deferring-inevitable_... ▼ The Weekly Standard ▼
Feb 13, 2014 - In the early days of the Obama administration, "smart power" was all the rage—and not just on the foreign policy scene. In April 2009, National ...

Smart Grid/Meter | Illinois Tea Party

illinoisteaparty.net/smart-gridmeter/ ▼

For to most up-to-date information about Smart Meters and the Smart Grid in Illinois, click to visit Naperville Smart Meter Awareness. April 26, 2014 : The Smart ...

The facts on smart meters - Citizens Utility Board

www.citizensutilityboard.org/ciElectric_cubfacts_S... ▼ Citizens Utility Board ▼
ComEd and Ameren aim to replace old analog electric meters with "smart meters," ...
Utilities are mandated by Illinois law to "secure the privacy of the customer's ...

ComEd Rolling Out 'Smart' Meters, Ameren To Follow « CBS ...

chicago.cbslocal.com/.../comed-rolling-out-smart-meters-am... ▼ WBBM-TV ▼
Sep 8, 2013 - CHICAGO (AP) — The days of the meter reader are numbered in most of Illinois with the advent of new digital "smart" meters — wireless ...

Smart Meter | ComEd - An Exelon Company

<https://www.comed.com/.../smart-meter-smart.../s...> ▼ Commonwealth Edison ▼
Smart meters are a key component of the smart grid. ... plans to install approximately 4 million smart meters in all homes and businesses across northern Illinois.

Thorner: Say NO! Smart Meters violate our basic rights ...

illinoisreview.typepad.com/illinoisreview/.../say-no-smart-... ▼ Illinois Review ▼
Jun 4, 2014 - A "Smart Meter" is a wireless or hard-wired two-way communication device that ... ComEd Accelerating Smart Meter Deployment in Illinois.

Articles about Smart Meters - Chicago Tribune

Smart Meters Need Dynamic Rates

- Illinois residential customer pays ~\$3/month for smart meters
- Illinois default rate: Fixed/flat rate
 - Low-use households subsidize high-use households capacity charges
- 3rd Party Suppliers – Many flat rate offerings
 - MC² Smart Value Power program – Time of use (TOU) rate
- Smart meters need dynamic rates to deliver **immediate consumer benefits** (savings) from the smart grid



Residential Dynamic Pricing in Illinois

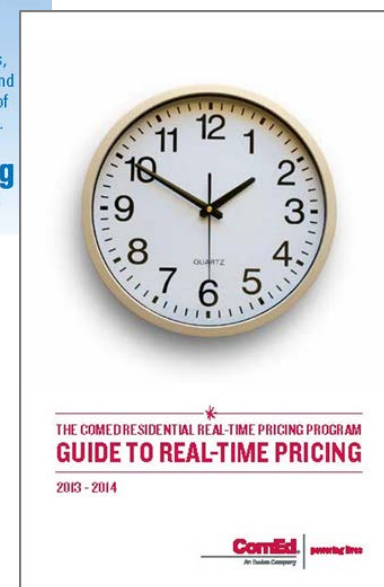
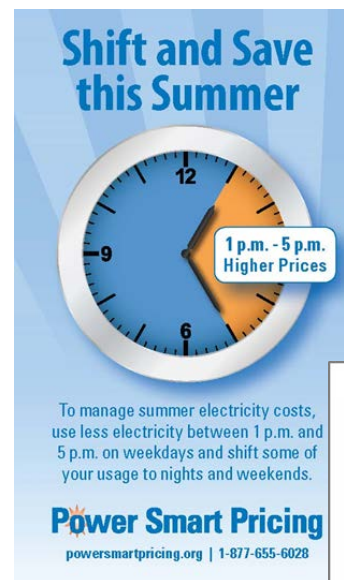
Energy Smart Pricing Plan (2003 – 2006)

Ameren Illinois Power Smart Pricing (2007-present)

- 12,500 households
- PTD: \$8.1 million saved (20%)
- Day-ahead hourly pricing

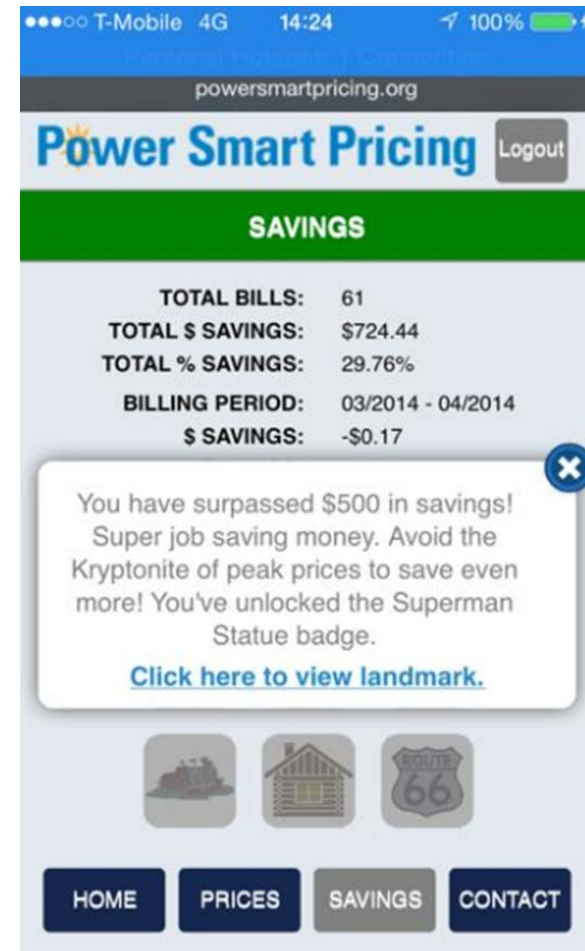
ComEd Residential Real Time Pricing (RRTP) (2007-present)

- 9,500 households
- PTD: \$13.2 million saved (25%)
- Real-time hourly pricing

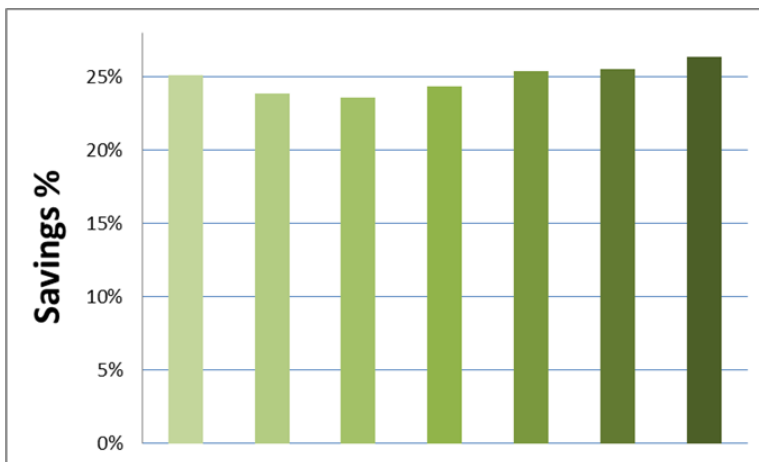


Hourly Pricing Made Easy

- **Smart phone app** provides current prices, bill comparison data and ability to collect 'savings badges' for participants
- **Bill comparison tool** provides savings information to track success
- **High price alerts** are delivered by phone, e-mail and text when prices reach a certain threshold
- **Dedicated customer support** by highly trained staff available by phone, email and live chat



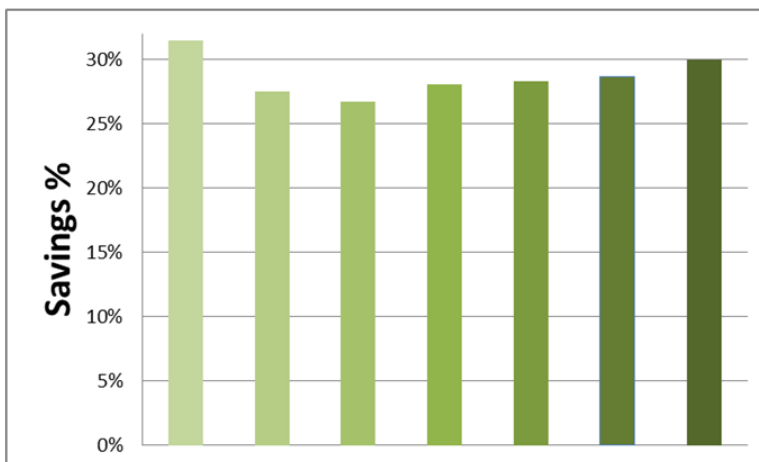
Bill Savings: Low Income Success



Low Income → High Income

Power Smart Pricing

24% - 26% Average
Electric Supply Savings



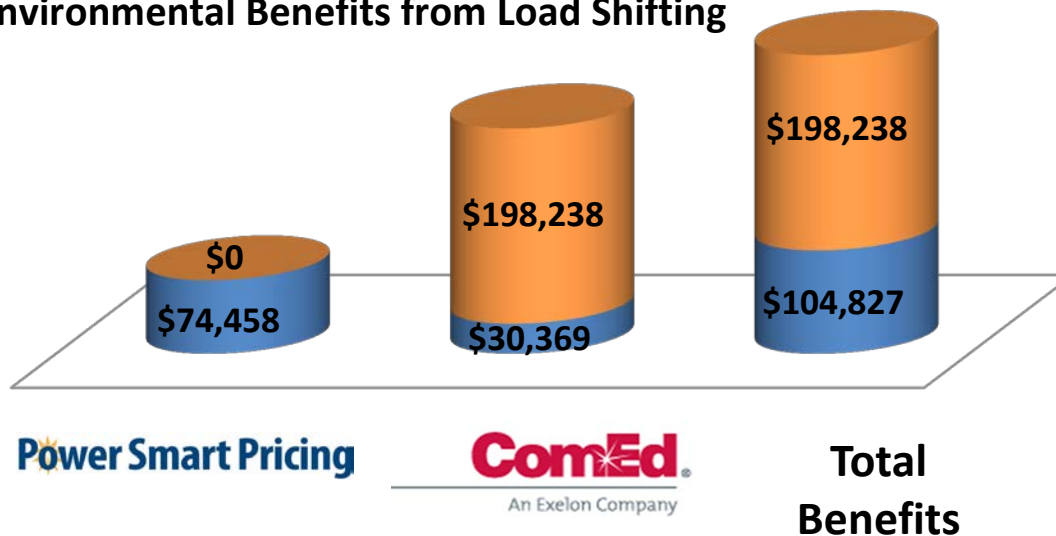
ComEd
An Exelon Company

powering lives

27% - 31% Average
Electric Supply Savings

Environmental Benefits

- Environmental Benefits from Conservation
- Environmental Benefits from Load Shifting



	Reduction in Within-day Load Variance	Annual Conservation Savings (MWH)	CO ₂ Benefits	SO ₂ & NO _x Benefits
Power Smart Pricing	25%	0	\$11,458	\$63,000
ComEd RRTP	12%	5,000	\$117,396	\$111,211

*Data analysis courtesy of Klos Energy Consulting – www.KlosEnergy.com

Environmental Benefits

**20,000
participants in
hourly pricing
reduce the need
for one 10 MW
peak power plant**

Engaged & Satisfied Customers

- Utilities increase focus on customer engagement & satisfaction
- Hourly customers are:
 - More willing to adopt new technologies
 - **33% of ComEd RRTP participants are enrolled in A/C Cycling** demand response program – compared with 1.8% of all ComEd customers
 - More educated about electricity markets (peak and off-peak)
 - More engaged with their electricity service and usage
 - Really, really **satisfied!**
 - **98% Satisfaction** with dedicated call center for Power Smart Pricing
 - **91%** report the program is “**Quick and Easy**”
 - **88% Overall Satisfaction** with ComEd RRTP program

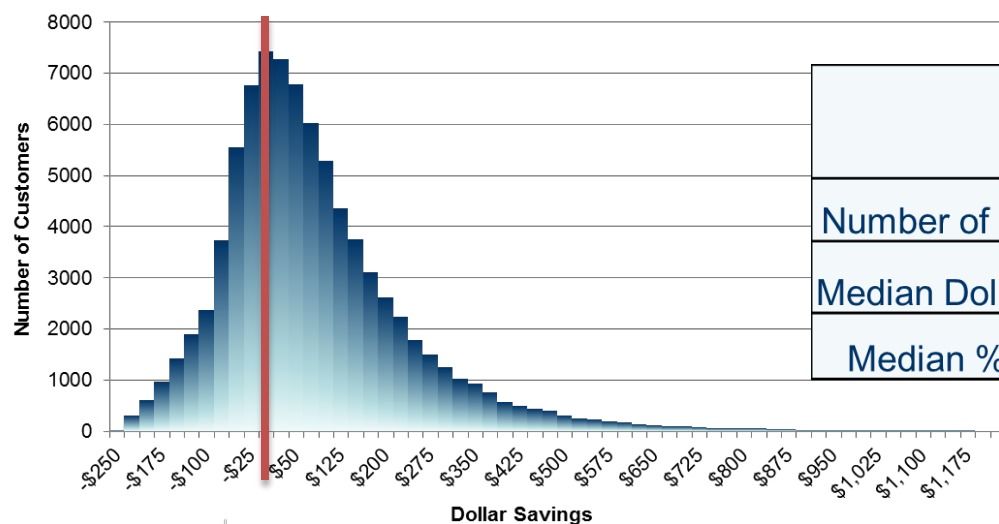


What if Hourly Pricing Were the Default Rate?

Hourly Pricing as the Default Rate

- Included ComEd customers with 12 months of reported usage between June 1, 2010 and May 31, 2011
- No awareness of hourly rates
- Sample size: 83,891 customers
- **Total Savings \$8.6 Million**

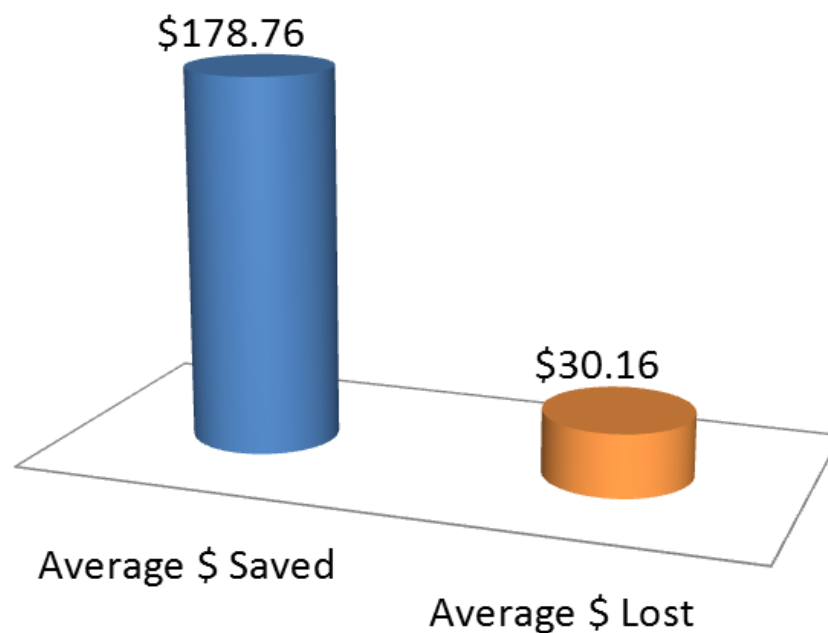
Dollar Savings



	Less than 300 kWh/month	Greater than 300 kWh/month
Number of Customers	18,329 (22%)	65,562 (78%)
Median Dollar Savings	(\$29)	\$87
Median % Savings	-18%	15%

Hourly Pricing as the Default Rate

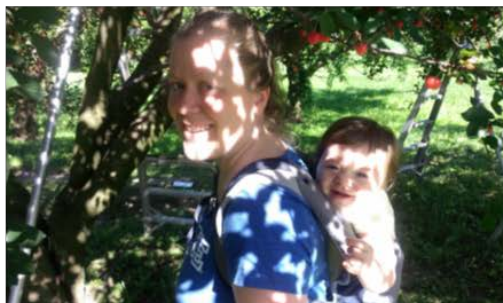
- Included ComEd customers with 12 months of reported usage between December 1, 2011 and November 30, 2012
- No awareness of hourly rates
- Sample size: 97,938 customers
- **Total savings: \$15 million**



What Participants Are Saying



"Power Smart Pricing saves us money because my family uses a programmable timer on our pool filter, using energy when it is least expensive."



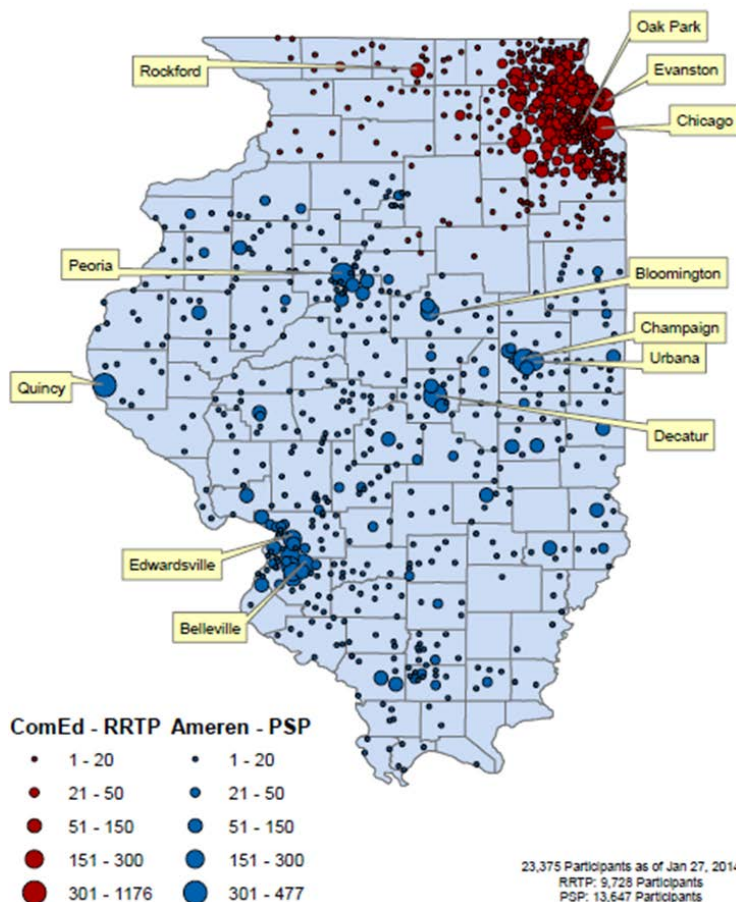
"I can save money by washing diapers late at night."



"Power Smart Pricing combined with the Chevrolet Volt save me and my family considerably in daily transportation costs."

Dynamic Pricing And Smart Meters Need Each Other

Dynamic Pricing Participants in Illinois



Illinois Smart Meter Deployment Schedule

- **ComEd: 4,029,000 smart meters by 2018**
- **Ameren Illinois: 780,000 smart meters by 2019 (62%)**

Questions? -- Stay in Touch

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