

Reporting from the Front Lines: Time-Variant Pricing in Illinois

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Director of Dynamic Pricing

April 20, 2016



ELEVATE ENERGY

Smarter energy use for all



Our Mission

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.



TVP in Illinois: Pilot Programs

Energy Smart Pricing Plan (2003 – 2006)

- 1,500 households, Hourly pricing



ComEd Customer Applications Pilot (2010)

- 8,500 households; Tested five different rates

		Enabling Technology Type					
		None	Removed	Enhanced Web (eWeb)	eWeb+ Basic IHD (BIHD)	eWeb+ Advanced IHD (AIHD)	eWeb+PCT /IHD (AIHD/PCT)
Flat Rate Type N = 1,650	Flat Rate Existing Meter No Education	Control F1 N=450					
	Flat Rate Existing Meter Education			Application F2 N=225			
	Flat Rate AMI Meter Basic AMI Education			Control F3 N=225			
	Flat Rate AMI Meter Education		Application F4 N=0	Application F5 N=225	Application F6 N=300	Application F7 N=225	
Energy Efficiency Rate Type N = 750	IBR Rate AMI Meter Education			Application E1 N=225	Application E2 N=300	Application E3 N=225	
Demand Response Rate Type N = 3,525	CPP/DA-RTP Rate AMI Meter Education			Application D1 N(a)=525 N(b)=225	Application D2 N=525	Application D3 N=525	Application D4 N=525
	PTR/DA-RTP Rate AMI Meter Education			Application D5 N=225	Application D6 N=525	Application D7 N=225	Application D8 N=225
Load Shifting Rate Type N = 2,625	DA-RTP Rate AMI Meter Education			Application L1 N(a)=225 N(b)=225	Application L2 N=525	Application L3 N=225	
	TOU Rate AMI Meter Education			Application L4 N=225	Application L5 N(a)=525 N(b)=225	Application L6 N(a)=225 N(b)=225	
N = 8,550		N = 450	N = 0	N = 2,550	N = 2,925	N = 1,875	N = 750
		Primary Application Not Used					



TVP in Illinois: ComEd

ComEd Hourly Pricing (2007 – Present)

- Opt-in
- 10,750 households; Real-time hourly pricing
- 20% average electricity supply savings (\$15M)

ComEd Peak Time Savings (2014 – Present)

- Opt-in
- Over 120,000 households
- Credit: \$1/kWh reduced
- Average 2016 savings: \$7/participant



HOURLY PRICING PROGRAM GUIDE

2015 – 2016



TVP in Illinois: Ameren Illinois

Ameren Illinois Power Smart Pricing *(2007 - Present)*

- Opt-in
- 10,550 households; Day-ahead hourly pricing
- 17% average electricity supply savings (\$9M)

Ameren Peak Time Rewards *(2015 – Present)*

- Opt-in
- 10,455 participating households
- First events scheduled for 2016

**Shift and Save
this Summer**

1 p.m. - 5 p.m.
Higher Prices

To manage summer electricity costs,
use less electricity between 1 p.m. and
5 p.m. on weekdays and shift some of
your usage to nights and weekends.

Power Smart Pricing

powersmartpricing.org | 1-877-655-6028



Our Role – Customer Service Support





Our Role – Marketing



PICK THE ELECTRICITY RATE THAT'S TO YOUR TASTE. **GET A SWEET DEAL WITH HOURLY PRICING**

You can choose to take control
of your electric costs with
ComEd's Hourly Pricing Program.

Thousands of households have saved by paying
the hourly, market-based prices for electricity,
rather than the fixed-rate.

ENROLL OR CALL

ComEd.com/HourlyPricing
888-202-7787

MORE OPTIONS, MORE SAVINGS, MORE YUM

Savings cannot be guaranteed. Individual bills will vary month to month based on market rates, weather, and individual electricity usage.

© Commonwealth Edison Company, 2016

ComEd | powering lives
An Exelon Company



Our Role – Education





Our Role – Customer Communications



**SHIFT AND SAVE
THIS SUMMER**

WITH COMED'S HOURLY PRICING PROGRAM

ComEd | **power2move**
an Ameren Company





Our Role – High Price Notifications

2.7¢ per kWh Real-Time Hourly Price 12-1 PM CT

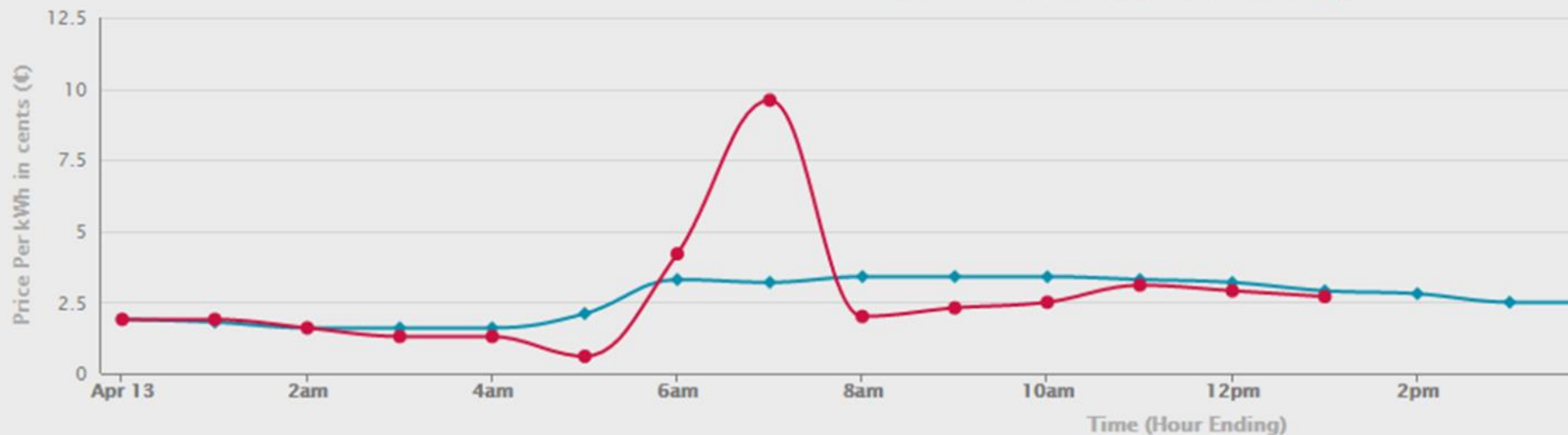
2.5¢ per kWh Day-Ahead Hourly Price 3-4 PM CT

2.5¢ per kWh

Today Week Month Year

5 Minute Prices

REAL-TIME HOURLY PRICES FOR APRIL 13TH, 2016



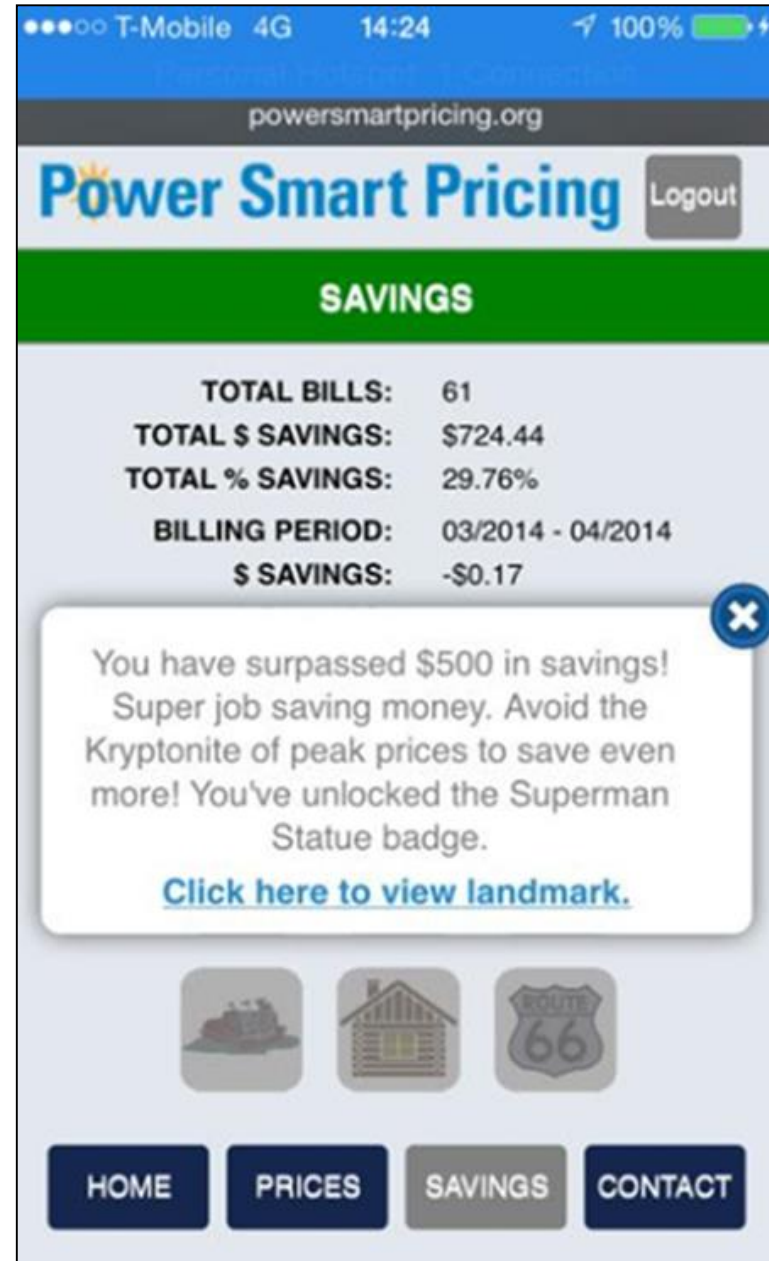
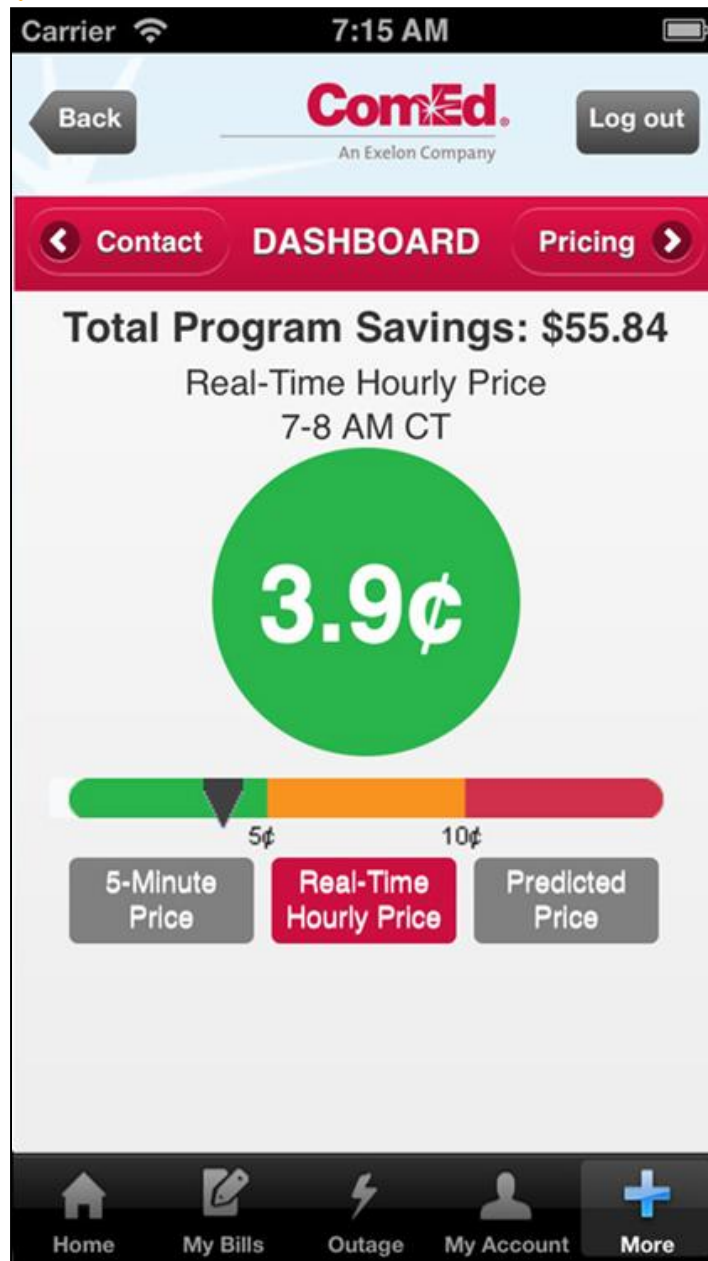
The kWh prices above do not include your personal [capacity charge](#).

← PREVIOUS DAY

◆ Day-Ahead Hourly Price ◆ Real-Time Hourly Price



Our Role – Performance Tracking





Successes

- Increase Energy Efficiency
 - Consistent 4-6% annual electricity use reduction for ComEd customers
- Environmental Benefits
 - Energy reduction and load shifting (2015: \$300k – ComEd only)
- Bill Savings
 - 15-20% average electricity supply savings (over \$24M saved!)
- Demand Response
 - Consistent 0.5 kW reduction during peak times
- High Satisfaction
 - 75-90% satisfaction rate (even after Polar Vortex)
- Engaged Customers
 - 33% adoption rate to ComEd's AC Cycling program
 - 45% response rate to Ameren Illinois Peak Time Rewards program



Challenges

- Stagnant Enrollments
 - 10% churn rate
 - Limited program awareness
 - 3rd party supplier choice and municipal aggregation
- Marketing Limitations
 - Unlike 3rd party suppliers, our marketing and communication methods require utility approval
- Program Design
 - Risky – no guaranteed savings
 - Monthly fee (PSP: \$2.25; ComEd Hourly: \$0.39)
 - 12 month commitment
 - Real-time prices – current hour price isn't known until it's over
 - We take something historically simple (the flat rate), and are adding a layer of complexity, without providing a guaranteed benefit



Going Forward

- Integrate with other technologies
- Develop rate shopping tools to help consumers choose best option
- Position as tangible Smart Grid benefit for consumers



"We set our vehicle to charge at midnight and most times we pay next to nothing to fully charge."

—Michael M., Hourly Pricing participant since 2015



Questions? -- Stay in Touch

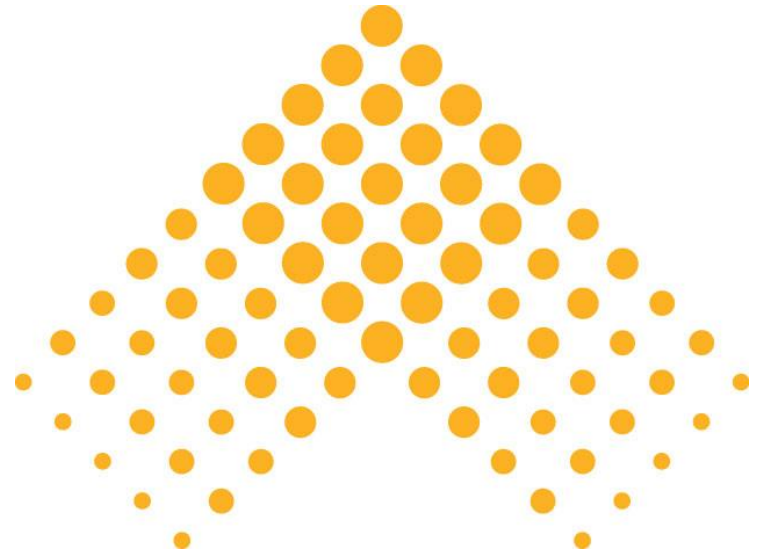
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Appendix



ELEVATE ENERGY
Smarter energy use for all



Default Rates in Illinois

Default Supply Rates for Residential Customers:

- Utilities are default supplier with a fixed per-kWh rate
- Alternative retail electric suppliers are active
- Municipal aggregation

Benefits of Hourly Pricing to the Utility:

- Better utilization of distribution resources
- Less peaky
- Flatter load shape

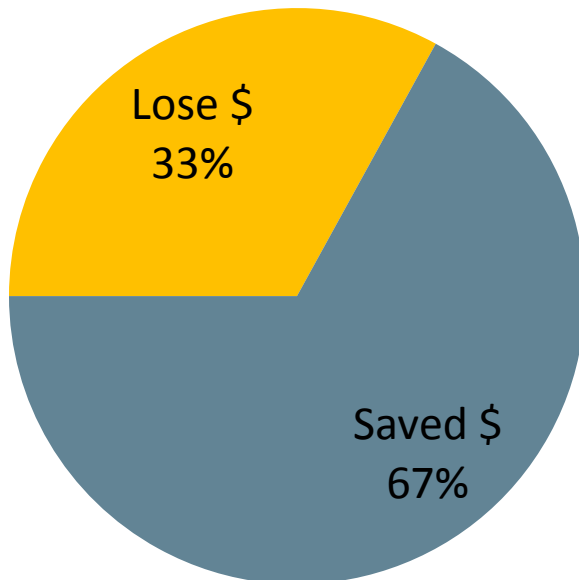
Costs of Hourly Pricing to the Utility:

- Administrative cost of procuring hourly supply separately from default supply



Hourly Pricing as the Default Rate – Study #1

- 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**

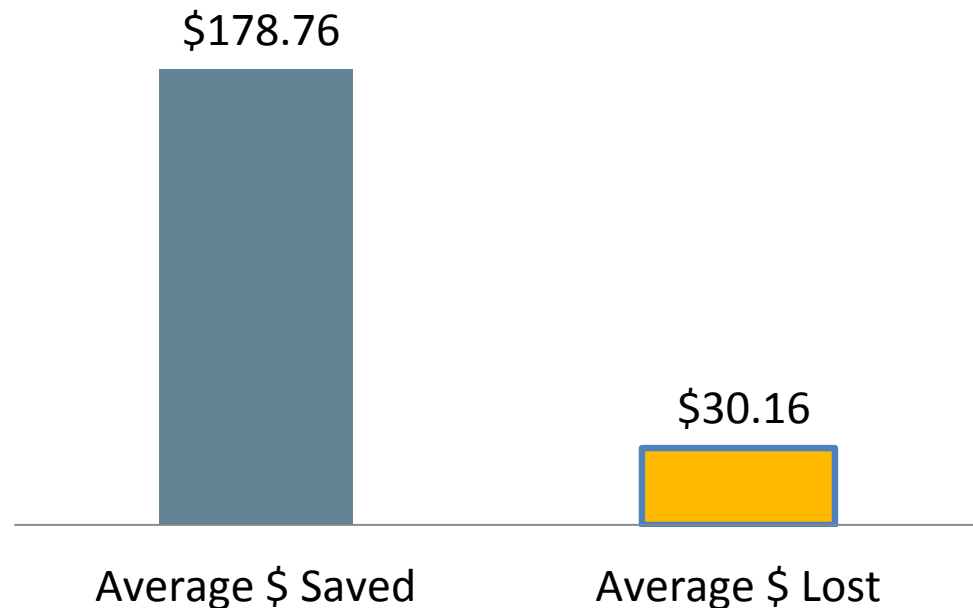
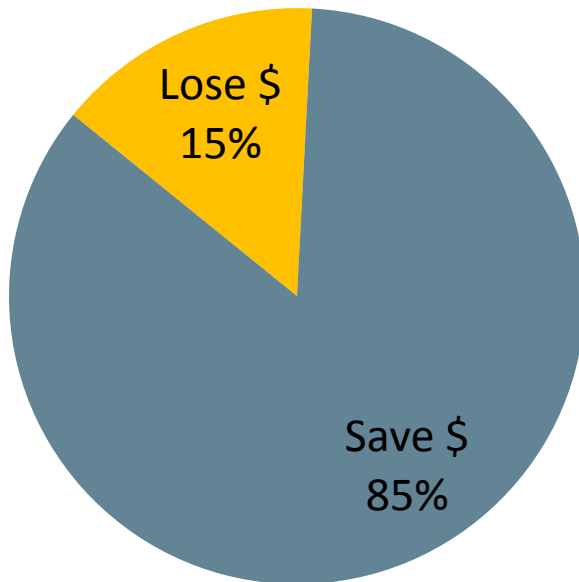


	Less than 300 kWh/month	Gr 300
Number of Customers	18,329 (22%)	65
Median Dollar Savings	(\$29)	
Median % Savings	-18%	



Hourly Pricing as the Default Rate – Study #2

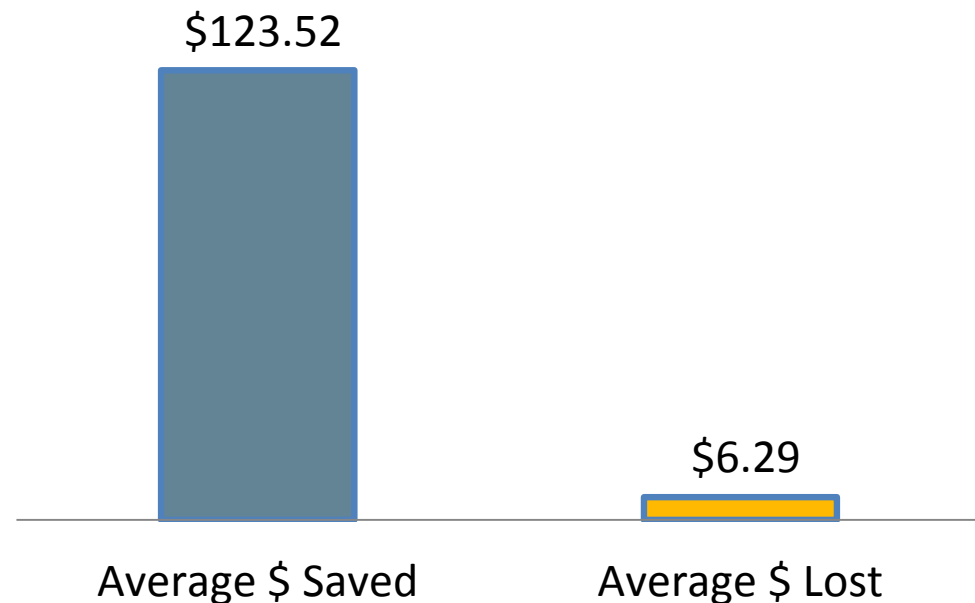
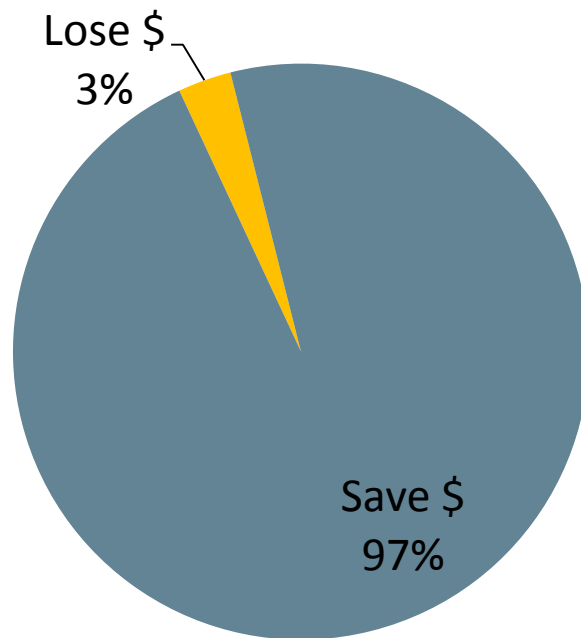
- Included ComEd customers with 12 months of reported usage between December 1, 2011 and November 30, 2012
- No awareness of hourly rates
- Sample size: 97,938 customers
- **Total savings: \$15 million**





Hourly Pricing as the Default Rate – Study #3

- Included ComEd customers with 12 months of reported usage between December 1, 2012 and November 30, 2013
- No awareness of hourly rates
- Sample size: 108,417 customers
- **Total savings: \$13.4 million**



ComEd's Hourly Pricing Program

Benefits



MAKING A DIFFERENCE WITH HOURLY PRICING

Together, Hourly Pricing participants
have helped to:

Reduce over
22 million kWh
in energy use

Avoid over
46 million lbs.
in greenhouse gas emissions





What does that mean for your community?

That's like preventing the same emissions
from a road trip that stretches:

49,853,571 miles

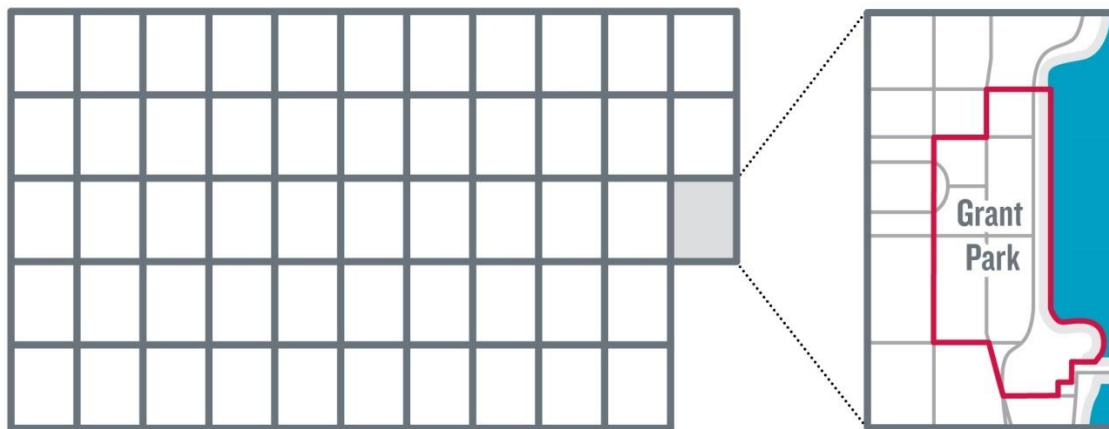


Which is equivalent to driving the length of Illinois:





That's the same size as
53 Grant Parks



Your pocketbook benefits, too.

Hourly Pricing participants have saved more than

\$15 million

since the program began in 2007



Power Smart Pricing Program

Benefits



Making a Difference with Power Smart Pricing

Together, Power Smart Pricing participants
like you have helped to:

Reduce over
1 million kWh
in energy use

And helped avoid over
2.2 million lbs.
in greenhouse gas emissions



What does that mean for your community?

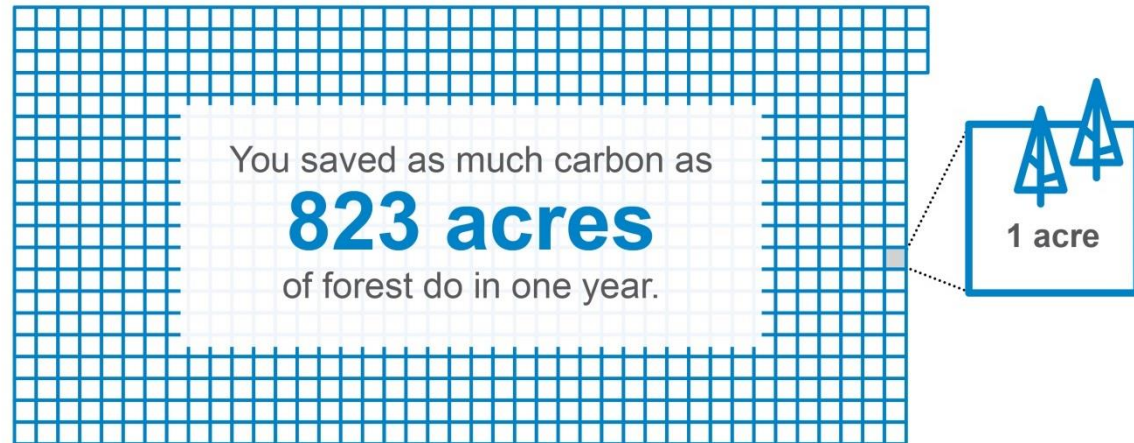
That's like preventing the same emissions
from a road trip that stretches:

2,389,524 miles



Which is equivalent to driving the length of Illinois:







Your pocketbook benefits, too.

Power Smart Pricing participants have saved more than

\$8 million

since the program began in 2007

