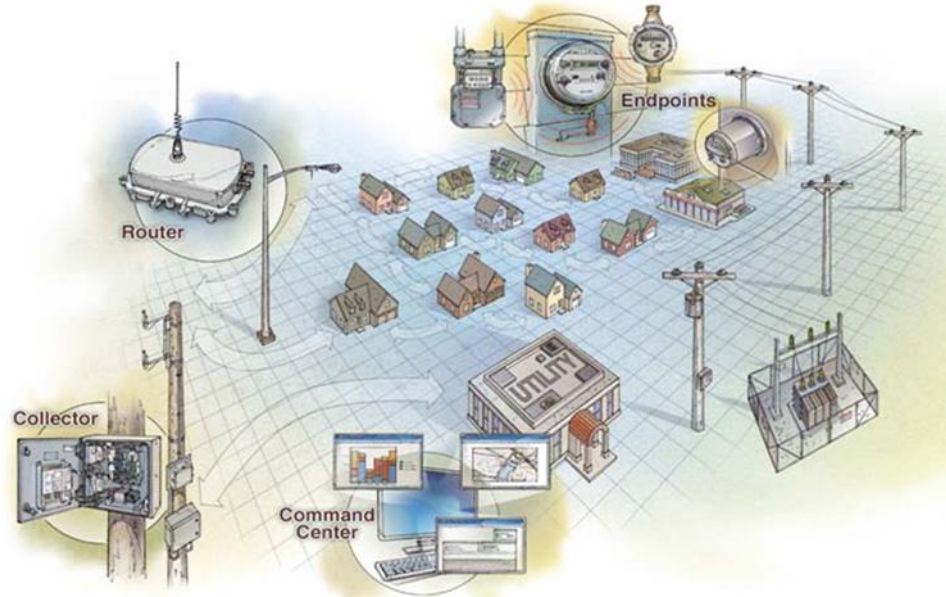


Ameren Illinois Advanced Metering Infrastructure (AMI)

2021 Annual Update



Agenda

- AMI Program Overview
- 2019 Accomplishments
- 2020 Accomplishments
- Electric AMI Capital Expenditures
- Appendices
 - EIMA Metrics



AMI Meter Deployment Overview

Draft and Confidential



AMI deployment target expanded to 100% by Illinois Commerce Commission order on September 22, 2016

- 1.2M electric (100%)

Deployment Schedule

- Complete 100% Electric AMI by the end of 2019

	2014	2015	2016	2017	2018	2019
Electric	4%	17%	32%	56%	80%	100%
Natural Gas	3%	11%	25%	42%	68%	100%






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Note: 100% complete excludes Non-Standard metering customers and customer premise access issues.



Original Functionality Implementation Plan


Draft and Confidential

Stage 0	Stage 1	Stage 2	Stage 3
Install foundational meter data management system and AMI system	Process and Bill Residential and Commercial/Industrial customers	Upgrade processes and system to support remote connect/disconnect	Peak Time Rewards Program
Prepare systems and processes for installation of 2-way communication network	Integrate AMI and MDM systems and prepare for billing Transfer AMI interval data to Retail Energy Suppliers	Revenue Protection Analytics	Event processing such as outage notification
Manage Asset Information	Customer Web Portal 	Provide Non Billing Interval Data to RES	
Q2 2014 - Complete 	Q4 2014 - Complete 	Q2 2015 - Complete 	Q4 2015 - Complete 




2017 Additional AMI Functionality Implementation Plan

Draft and Confidential

2016 Release #1	2016 Release #2	2017 Release #1	2017 Release #2
Manual Registration of Home Area Network (HAN) Devices	Automated Registration of HAN Devices	Provide Bill Quality Interval Data to Retail Electric Suppliers	 Residential Only
Q1 2016 ✓	Q2 2016 ✓	Q2 2017 ✓	Q3 2017 ✓

2018 Additional AMI Functionality Implementation Plan

Draft and Confidential

2018 Release #1	2019 Release #1
 Small Commercial & Industrial	Residential Web Portal Upgrade
Voltage Data Collection from AMI	
Q4 2018 ✓	Q4 2019 ✓

2019 Accomplishments



Achieved 2019 AMI Meter Deployment Target

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	2019 Cumulative Total Commitment	2019 Cumulative Total Installed	Difference
AMI Electric Meters	1,244,865	1,242,017	(2,848)

Note: The variance for electric meter installs are due to two reasons: Non-standard metering customers and access issues.



Achieved Planned Route Conversion to AMI

Draft and Confidential

2019 Route Cutover		
Operating Center	Division	Total Routes
Eastern	1	96
Pekin	1	91
Alton	5	123
Mattoon	3	123
Paris	1	59
Carbondale	6	113
Springfield	3	<u>79</u>
	Total	684



2020 Accomplishments



Realized Operational Benefits from Data Analytics Compared to 2014 Baseline

Reduction of Nuisance Truck Rolls:

Unnecessary service orders generated to check issues that are not truly issues

Reduced Back Office: Analytics leads which reduce human interaction in solving billing exceptions

Theft: Improve Ameren Illinois identification of theft and diversion.

Faster Identification of Dead Meters: Analytic leads which identify meters that are no longer communicating to the network or are not effectively metering the electric or gas service.

2020 BENEFITS/COST SAVINGS	
Reduction of Nuisance Truck Rolls	(\$66,710)*
Reduced Back Office Work	\$272,841
Faster ID of Dead Meters	\$511,287
Theft Detection and Reduction	(\$171,595)*
Total	\$545,823

**Impacted by ICC COVID customer moratoriums*



Continued the Peak Time Rewards (PTR) Program

Draft and Confidential

September 16, 2020	
Active Participants	123,085
Participants Receiving Credit	114,401
Percentage Successful	93%
Total Credits Earned	\$40,887
Average Credit per Participant	\$0.33
Average Credit per Successful Participant	\$0.36
Total Gross Savings (kWh)	340,736
Participants > \$5 Credit	1
Maximum Credit	\$8.45



Turn up AC
thermostat



Unplug unused
electronics



Delay laundry



Delay cooking or
using the oven



Tested and Enhanced AMI Architecture for Cybersecurity Draft and Confidential

- Conducted two enterprise wide tabletop cybersecurity controls assessments which included the AMI solution
- Performed a third party compromise assessment of the enterprise
 - No indicators of breach on any control or corporate system were identified
- Continued to monitor additional threat prevention for viruses and malware, as well as, Host Intrusion Prevention System (HIPS) to detect and alert Ameren IT of any suspicious events within the Ameren IT environments.



Attained 2020 Remote Service Order Goals

Draft and Confidential

	Forecasted for 2020	Actuals for 2020
Remote Service Orders	337,000	327,000*

*2020 had a moratorium on cut for non-payment in ICC Docket 20-0309

Remote Service Orders:

- Operate Switch for Cut Out/Cut In
- Operate Switch for Move Out/Move In
- Off Cycle Meter Reads for Same Day Move Out/Move In
- Off Cycle Meter Reads to address billing exceptions and customer issues



Integrating Smart Meter Benefits

- We no longer need to isolate messages based on the progression of deployment.
- In 2020, communicating the benefits are now integrated to how we educate customers on the various ways to save.
- Using a cross mix of media / platforms like TV, radio, social media, digital banner ads, You Tube, etc.



Integrating Smart Meter Benefits: Lifestyle

Draft and Confidential

Audience (1-5)	Lifestyle Description	Key Benefits
1	Busy is a way of life for on-the-go families and having lots to juggle is their normal. Small things that can save them time and give them even just a few more minutes of quality time together is a huge win.	Control, Convenience, Energy Efficiency
2	Less extreme couponing and more brilliant budgeters. These engaged savers are regularly evaluating where their money is going and finding new opportunities to save. For them, a dollar saved means one more dollar that can go toward the things that really matter.	Predictability > Control, Financial Savings, Energy Savings
3	Budgeting for this group isn't about saving for a rainy day, it's about making sure everything's covered from one paycheck to the next. Cutting energy costs for a struggling saver is simple: avoid being disconnected.	Predictability > Control, Energy Savings
4	The unpredictable days of raising kids and putting out work fires is old news for our routine retirees. And while their retirement hobbies may differ, they can all agree on the value of a routine. They know just what they like and don't need any surprises messing with their well-established habits.	Predictability > Control, Energy Savings
5	The green this group is saving doesn't have any dead presidents on the front. They're committed to doing whatever they can to help the environment regardless of whether there's an incentive attached. For a go greener, saving energy is about saving the world.	Control, Convenient Conservation, Energy Savings



Integrating Smart Benefits

- Using them to make life easier.

The screenshot shows the Ameren Illinois website's sign-up page for smart benefits. The main heading is "Your Energy Made Simple". Below this, there's a "SIGN UP > FOR SIMPLICITY" banner with an image of a hand holding a smartphone displaying the Ameren app. To the right of the banner, it says "Get Energy Updates From Ameren Illinois" and "Learn More >".

The sign-up form is divided into four sections, each with a "Receive Texts" checkbox:

- Outage Alerts**: Receive alerts when power may be off in your area, as well as estimated restoration updates and power restoration confirmation. Receive Texts
- Billing & Payment Alerts**: Includes bill reminders, payment confirmations, Payment Agreement notifications, Energy Assistance pledges, and other important account status updates. Receive Texts
- Energy Usage Alerts**: Includes alerts for Usage and Cost Thresholds as well as Weekly Cost Summary. Receive Texts
- Service Order Alerts**: Receive alerts when your request to start or stop service has been completed. Receive Texts

At the bottom right of the form, there are two buttons: "Save Enrollment" and "Cancel".

When smart technology is used in everyday life, it makes life easier to manage. Managing energy and costs is more simple. Therefore, we encourage customers to:

- Sign up for Cost and Usage Alerts to manage at home or on-the-go

Social Media: The Saver's Mindset

Facebook, Audience 2

Ameren Illinois
Sponsored

Ameren Illinois has many energy management options that are suited just for you.

TAKE CONTROL OF YOUR ENERGY
Choose the Right Fit for You
We Have Options for You [Sign Up](#)

OUTAGE NOTIFICATIONS
Stay in the Know
Sign Up for Alerts [Sign Up](#)

PICK A DUE DATE
Payment Convenience
Choose a Date [Sign Up](#)

BUDGET BILLING
No More Monthly Surprises
Even Out Your Monthly Payments [Sign Up](#)

PEAK TIME REWARDS
Get Rewarded for How You Save
Enroll Today [Sign Up](#)

POWER SMART PRICING
Your Energy, Your Savings
Maximize Your Savings [Sign Up](#)

Ameren ILLINOIS
Find the Options Right for You [Learn More](#)

20 Likes 562 Comments 2.4K Shares

Like Comment Share

Less extreme couponing and more brilliant budgeters. These engaged savers are regularly evaluating where their money is going and finding new opportunities to save. For them, a dollar saved means one more dollar that can go toward the things that really matter.

Key Benefits Include: Predictability > Control, Financial Savings, Energy Savings

Digital Options: The Saver's Mindset

Your Life, Your Energy



GDN

Audience 2, Message B
Impressions: 18.5M
CTR: 0.24%

Audience 5, Message B
Impressions: 15.6M
CTR: 0.31%

Geofencing

Audience 2, Message B
Impressions: 1.4M
CTR: 0.23%

Audience 5, Message B
Impressions: 1.2M
CTR: 0.23%

Digital Options: The Saver's Mindset

Your Life, Your Energy

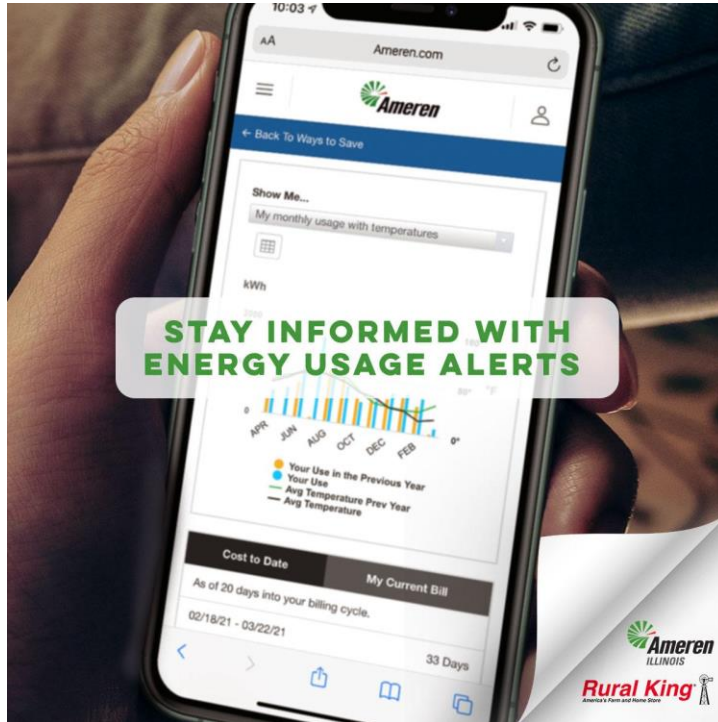


Production Date:
11/2019

In-Market Date:
11/2020 and 12/2020

Link:
https://youtu.be/jKx-Mrmx_1A

Digital Options: “Share it, Post it, Like it, and even Pin it...”:



Pinterest

- Pinterest has a strong interaction rate (IRate) of 3.09% at year-end 2020.
- We gained an additional 2,776,646 customer impressions via Pinterest by year-end 2020.
- 52% of millennials are using Pinterest.
- It's a platform where the audience is in a very unique savings and DIY mindset which could make them more responsive to messages to help them save.

Internal Collaboration: Targeting Peak Time Reward Customers

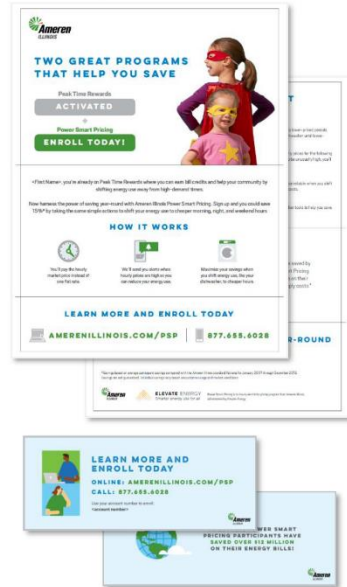
airz Email



A, B, Control Emails



Direct Mailer



Over 1,000 new Power Smart Pricing enrollments, highest yet.

Metric	2020 Gateway	Benchmarks
Delivery Rate	97.4%*	98.8%
Unique Open Rate	45.6%*	24.6%
Unique CTR	9.5%*	1.5%
CTOR	20.8%*	6.2%

*Represents totals from Email A, Email B, and airz. Email metrics for the Control email are incomplete due to an unknown error with the email sending platform.

Non Standard Metering (NSM) (1/2)

Draft and Confidential

At the end of December 2020, 1,843 Ameren Illinois customers received charges for non standard metering.

Type	Count
AMI Customers Charged for NSM	1,843
AMI Customers Requesting NSM But Not Yet Eligible for Charges	<u>1,258</u>
Total Customers Enrolled in NSM	3,101



Non Standard Metering (NSM) (2/2)

Draft and Confidential

Customer Enrollment Method	Count
Enrolled After Meter Installation	246
AMI Refusal During Deployment	652
Customer Contact Center	747
Unable to Complete Meter Exchange	<u>1,456</u>
Total	3,101



Electric AMI Capital Expenditures (1/2)

Draft and Confidential

Category	Budget	2020 Actual Costs	Variance
AMI Meters	\$0.0	\$7.6	(\$7.6)
Communication Network	\$0.1	\$2.0	(\$1.9)
Information Technology	\$3.7	\$0.0	\$3.7
Program Management	\$0.0	\$0.3	(\$0.3)
AMI Operations	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
Total	\$0.0	\$10.0	(\$6.2)
*Filed in ICC Docket 12-0244 Re-Opening			



Electric AMI Capital Expenditures (2/2)

Draft and Confidential

Electric AMI	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
100% Electric Allocated Budget*	\$2.9	\$18.1	\$32.9	\$46.1	\$37.4	\$60.0	\$56.5	\$47.9	\$3.8	\$0.1	\$305.7
100% Electric Allocated Actuals / Forecast	<u>\$2.9</u>	<u>\$18.1</u>	<u>\$32.9</u>	<u>\$46.1</u>	<u>\$37.9</u>	<u>\$66.5</u>	<u>\$56.2</u>	<u>\$34.8</u>	<u>\$10.0</u>	<u>\$0.1</u>	<u>\$305.7</u>
Difference	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.5)	(\$6.5)	\$0.3	\$13.1	(\$6.2)	\$0.0	\$0.0

*Filed in ICC Docket 12-0244 Re-Opening



Appendices



2020 Year End AMI Related EIMA Metrics

Metric	2019	2020
Estimated Bills	84,018	66,462
Consumption On Inactive Meters	3.8M kWh	2.3M kWh
Uncollectibles	\$11.3M	\$20.0M

Ameren Illinois satisfied the 2020 performance year goals for all three metrics. These metrics will be explained in more detail in Ameren Illinois' Modernization Action Plan Multi-Year Performance Metrics 2020 Annual Report to be filed pursuant to 220 ILCS 5/16-108.5(f).





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